

# **The Influence of CEO Narratives in Organizational Path Dependence**

Gwyneth Edwards

A Thesis

In the

John Molson School of Business

Presented in Partial Fulfillment of the Requirements

For the Degree of

Doctor of Philosophy (Business Administration) at

Concordia University

Montreal, Quebec, Canada

August 2013

© Gwyneth Edwards, 2013

**CONCORDIA UNIVERSITY**

**School of Graduate Studies**

This is to certify that the thesis prepared

By: Gwyneth Edwards

Entitled: The Influence of CEO Narratives in Organizational Path Dependence  
and submitted in partial fulfillment of the requirements for the degree of

**Doctor of Philosophy (Business Administration)**

complies with the regulations of the University and meets the accepted standards with respect to the originality and quality.

Signed by the final Examining Committee:

\_\_\_\_\_ Chair  
Dr. Peter Darlington

\_\_\_\_\_ External Examiner  
Dr. Georg Schreyögg

\_\_\_\_\_ External to Program  
Dr. Govind Gopakumar

\_\_\_\_\_ Examiner  
Dr. Isabelle Dostaler

\_\_\_\_\_ Examiner  
Dr. Ann Langley

\_\_\_\_\_ Thesis Supervisor  
Dr. Rick Molz

Approved by \_\_\_\_\_  
Dr. Harjeet Bhabra, Graduate Program Director

\_\_\_\_\_, 2013

\_\_\_\_\_  
Dr. Steve Harvey, Dean, John Molson School of Business

## ABSTRACT

### **The Influence of CEO Narratives in Organizational Path Dependence**

**Gwyneth Edwards, Ph.D.**

**Concordia University, 2013**

CEOs have long been considered the grand architects of firm strategy. Research not only supports their pivotal role in strategy making, but also suggests that CEOs directly influence outcomes of strategy. CEOs are often blamed for corporate failure and credited for corporate success. What is less clear is how CEOs influence strategy. Although research attributes the CEO's influence on performance to demographics, personality and previous experience, how a CEO influences the firm's strategic trajectory over time is less clear.

This research investigates the role of CEO strategy narratives on the firm's trajectory. Grounded in organizational path dependence theory, the thesis analyzes how CEO narratives, produced for both internal and external consumption, influence strategic direction.

Organizational path dependence theory argues that the future is influenced by the past and that, over time, through a series of incremental decisions, options are reduced and outcomes are constrained. Core to the argument is the theorized existence of rent-seeking self-reinforcing social processes that may eventually lead the organization towards rigidity and an inefficient locked-in organizational state.

Narrative in strategy is considered a primary means of sensemaking for organizational stakeholders. Narratives both represent and construct organizational reality by giving meaning to the past and setting expectations of the future, while creating and reinforcing organizational identity through the communication of norms, values, and beliefs. Strategy narratives focus on creating a discourse of direction to represent the past and influence the behaviour of organizational members.

This thesis joins theory on organizational path dependence and strategy narratives to investigate the influence of CEO narratives on strategic lock-in. Through a historical document analysis, the thesis presents a case study of a Canadian-based multinational firm (Nortel) using strategy texts authored by the company's four Chief Executive Officers from 2002 to 2010. The texts include public documents (shareholder letters, news releases, media articles, and analyst conference calls) along with a unique data set consisting of 168 CEO all-employee emails.

Findings indicate that, collectively, CEO narratives act as a self-reinforcing process that encourages the adoption of other firm-level processes. CEO narratives represent a discourse of direction and a discourse of behaviour, to encourage both the understanding of firm strategy and the implementation of associated processes. Although the CEO narratives initially create benefits, over time they are constrained by what was said in the past and contribute toward the persistence of the firm's organizational path.

## Acknowledgements

Thank you to Marc, Siân, and Brynne for welcoming a third child into our home and helping me nurture it over the years. I could always count on them, each in their own way, to support me through the hard parts.

Thank you to Dr. Rick Molz, my supervisor, for his thoughtful mentorship throughout the *entire* PhD program. Regardless of my emotional state, Rick always had sound advice. Although our conversations were numerous, two stand out: the first, when discussing my initial (completed) proposal and Rick said, “It’s OK to change your topic if it means a lot to you,” which immediately led to this research; and the second, when, as I grappled with theory, Rick casually said, “This sounds like path dependence.”

Thank you to my two committee members, Dr. Isabelle Dostaler and Dr. Ann Langley, for their insight. Isabelle prodded me to think beyond the research itself and consider my own beliefs, helping me grow as a scholar. Ann pushed me to think critically about my arguments, which led to a study of greater depth and breadth (for which I am very grateful).

Thank you to four other groups that took this journey with me. First, my parents, Moira and Richard, who offered help of any sort and, although they did not ask many questions, were surely thinking, *You better get that PhD after we have told all of our friends*. Second, my sister, Jane, and her family, and my brother, Ian, who always offered words of encouragement, even if they weren’t so sure of what I was doing or where I was headed. I would also like to thank my friends in the PhD program: Wela Dohmen, for enlightening conversation; Cătă Ratiu, who let me follow in his wake; Abdul Chikhouni, a co-author who I hope will stick with me; and, Manely Sharifian, who moved away but always felt close by. Last but not least, I would like to thank my West Island friends for showing their support, from one sport season to the next.

Thank you again to Marc, who made this pursuit possible. From serving me tea, to taking care of the world around me, he endured (with a smile) my daily musings of *when I grow up I want to be...* and is surely worried that I may be tempted to do it all over again.

## TABLE OF CONTENTS

|   |            |
|---|------------|
| <b>LIST OF FIGURES .....</b>  | <b>X</b>   |
| <b>LIST OF TABLES .....</b>   | <b>XII</b> |
| <b>CHAPTER 1. SUMMARY OF THESIS.....</b>  | <b>1</b>   |
| 1.1 BACKGROUND ON PATH DEPENDENCE .....   | 1          |
| 1.2 THEORY AND RESEARCH QUESTIONS .....   | 2          |
| 1.2.1 CEOs and Strategy.....  | 2          |
| 1.2.2 Organizational Path Dependence.....                                       | 3          |
| 1.2.3 Strategy-as-Narrative .....   | 4          |
| 1.2.4 CEO Narratives in Organizational Path Dependence.....                     | 4          |
| 1.3 METHODOLOGY .....   | 5          |
| 1.4 RESULTS .....   | 6          |
| 1.5 CONTRIBUTIONS .....   | 7          |
| 1.5.1 Academic .....  | 7          |
| 1.5.2 Practitioner.....   | 8          |
| 1.6 THESIS LAYOUT .....   | 8          |
| <b>CHAPTER 2. THEORY AND CONCEPTUAL FRAMEWORK .....</b>                         | <b>10</b>  |
| 2.1 INTRODUCTION .....  | 10         |
| 2.2 THE ROLE OF THE CEO IN FIRM PERFORMANCE .....                               | 11         |
| 2.3 QWERTY AND THE EMERGENCE OF PATH DEPENDENCE .....                           | 15         |
| 2.4 PATH DEPENDENCE IN ORGANIZATIONAL SCIENCES.....                             | 18         |
| 2.5 ORGANIZATIONAL PATH DEPENDENCE.....   | 22         |
| 2.5.1 Phase I – Preformation and Initial Conditions.....                        | 23         |
| 2.5.2 Phase II – Formation through Self-Reinforcing Processes .....             | 24         |
| 2.5.3 Phase III – Lock-in .....   | 27         |
| 2.6 THE ROLE OF CONTEXT IN ORGANIZATIONAL PATH DEPENDENCE .....                 | 28         |
| 2.7 STRATEGY-AS-NARRATIVE .....   | 30         |
| 2.8 NARRATIVE INFRASTRUCTURE AND INTERTEXTUALITY.....                           | 33         |
| 2.9 CEO NARRATIVES .....  | 38         |
| 2.10 CONCEPTUAL FRAMEWORK .....   | 40         |
| 2.10.1 Intertextuality and Narrative Infrastructure .....                       | 42         |
| 2.10.2 Self-Reinforcing Processes, Initial Conditions and Critical Events ..... | 43         |
| 2.10.3 Self-Reinforcing Processes in CEO Narratives .....                       | 44         |
| <b>CHAPTER 3. RESEARCH METHODS.....</b>   | <b>47</b>  |
| 3.1 INTRODUCTION .....  | 47         |

|        |  |           |
|--------|--|-----------|
| 3.2    | CURRENT METHODS IN ORGANIZATIONAL PATH DEPENDENCE AND NARRATIVE ANALYSIS ..... | 47        |
| 3.2.1  | Organizational Path Dependence: Path Constitution Analysis .....               | 48        |
| 3.2.2  | Narrative Infrastructure and Intertextuality: Content Analysis .....           | 53        |
| 3.3    | RESEARCH DESIGN.....   | 55        |
| 3.3.1  | Case Study Design.....   | 55        |
| 3.3.2  | Research Design .....  | 59        |
| 3.4    | STEP 1A: EVENT DATA FOR PATH CONSTITUTION ANALYSIS (PCA).....                  | 60        |
| 3.4.1  | Nortel Securities Documents.....   | 62        |
| 3.4.2  | Media Articles .....   | 63        |
| 3.4.3  | Industry Reports .....   | 66        |
| 3.4.4  | Analyst Ratings and Reports .....  | 66        |
| 3.4.5  | Financial Data and Stock Price.....  | 67        |
| 3.5    | STEP 1B: CEO NARRATIVE DATA .....  | 67        |
| 3.5.1  | CEO Analyst Calls.....   | 68        |
| 3.5.2  | CEO Letters to Shareholders.....   | 71        |
| 3.5.3  | CEO News Releases .....  | 72        |
| 3.5.4  | CEO Media Interviews.....  | 73        |
| 3.5.5  | CEO All-Employee Emails.....   | 74        |
| 3.5.6  | Supplemental CEO and Top Management Team Narratives .....                      | 77        |
| 3.6    | STEP 2: EVENT HISTORY AND DISCOURSE EVENT HISTORY DATABASE .....               | 78        |
| 3.7    | STEP 3: CASE HISTORY.....  | 80        |
| 3.8    | STEP 4: PATH CONSTITUTION ANALYSIS .....                                       | 80        |
| 3.9    | STEP 5: CEO NARRATIVE ANALYSIS .....   | 82        |
| 3.10   | STEP 6: CEO NARRATIVES IN ORGANIZATIONAL PATH DEPENDENCE.....                  | 84        |
| 3.11   | PILOT STUDIES.....   | 85        |
| 3.11.1 | Pilot Study 1: CEO Emails as a Source of Narrative .....                       | 85        |
| 3.11.2 | Pilot Study 2: Evidence of Strategy Narrative in the CEO Emails .....          | 86        |
| 3.11.3 | Pilot Study 3: Evidence of Intertextuality in the CEO Emails.....              | 87        |
| 3.11.4 | Pilot Study Conclusions.....   | 88        |
| 3.12   | TRUSTWORTHINESS AND ETHICAL CONSIDERATIONS .....                               | 89        |
| 3.12.1 | Author's Experience .....  | 89        |
| 3.12.2 | Credibility .....  | 90        |
| 3.12.3 | Transferability .....  | 90        |
| 3.12.4 | Dependability and Confirmability .....   | 91        |
| 3.12.5 | Ethical Considerations .....   | 91        |
|        | <b>CHAPTER 4. NORTEL CASE HISTORY .....</b>                                    | <b>93</b> |
| 4.1    | INTRODUCTION .....   | 93        |
| 4.2    | BEGINNINGS .....   | 93        |
| 4.3    | NORTEL HISTORY .....   | 95        |
| 4.4    | THE TELECOMMUNICATIONS INDUSTRY AT THE TURN OF THE CENTURY.....                | 98        |
| 4.5    | FRANK DUNN: NOVEMBER 1, 2001, TO APRIL 28, 2004.....                           | 101       |

|   |   |            |
|---|---|------------|
| 4.6   | WILLIAM (BILL) OWENS: APRIL 27, 2004, TO NOVEMBER 15, 2005 .....              | 107        |
| 4.7   | MIKE ZAFIROVSKI: NOVEMBER 15, 2005, TO AUGUST 10, 2009 .....                  | 113        |
| 4.8   | PAVITER BINNING: AUGUST 10, 2009, TO MARCH 21, 2010 .....                     | 133        |
| 4.9   | EPILOGUE .....  | 135        |
| <b>CHAPTER 5. ORGANIZATIONAL PATH DEPENDENCE AT NORTEL .....</b>        |   | <b>138</b> |
| 5.1   | INTRODUCTION .....  | 138        |
| 5.2   | LEVEL INTERRELATEDNESS AND MULTIPLE ACTORS.....                               | 143        |
| 5.2.1   | Macroeconomic (geo-political) Environmental Level .....                       | 145        |
| 5.2.2   | Industry – Product Markets Level.....   | 146        |
| 5.2.3   | Industry – Financial Markets Level .....                                      | 153        |
| 5.2.4   | Organizational Level.....   | 156        |
| 5.2.5   | Intraorganizational Level .....   | 158        |
| 5.2.6   | Conclusion .....  | 162        |
| 5.3   | TRIGGERING EVENTS .....   | 164        |
| 5.3.1   | Dot.Com Bust (2001).....  | 167        |
| 5.3.2   | Financial Restatement #1 (October 2003).....                                  | 169        |
| 5.3.3   | Firing of Frank Dunn and Ongoing Financial Restatement (#2) (April 2004)..... | 171        |
| 5.3.4   | Daichendt’s Hiring and Departure (February and June 2005) .....               | 172        |
| 5.3.5   | Zafirovski’s Hiring (October 2005) .....                                      | 174        |
| 5.3.6   | Class Action Settlements (February 2006).....                                 | 176        |
| 5.3.7   | Financial Restatements #3 (March 2006).....                                   | 177        |
| 5.3.8   | Financial Restatement #4 (March 2007) .....                                   | 178        |
| 5.3.9   | Economic Meltdown (September 2008).....                                       | 179        |
| 5.3.10  | Bankruptcy Protection (January 2009).....                                     | 181        |
| 5.3.11  | Conclusions.....  | 183        |
| 5.4   | NON-ERGODIC PROCESS: THE ROLE OF TRIGGERING EVENTS.....                       | 186        |
| 5.4.1   | Non-ergodicity .....  | 186        |
| 5.4.2   | A Critical Juncture.....  | 187        |
| 5.4.3   | Lock-in.....  | 190        |
| 5.4.4   | Summary.....  | 191        |
| 5.5   | SELF-REINFORCING PROCESSES .....  | 192        |
| 5.5.1   | Cultivation of Core Assets: Innovation, R&D and Technology Leadership.....    | 193        |
| 5.5.2   | Market Model .....  | 196        |
| 5.5.3   | Financial Model.....  | 199        |
| 5.5.4   | Growth Modes.....   | 202        |
| 5.5.5   | A Deep Structure of Embedded Processes .....                                  | 203        |
| 5.6   | ORGANIZATIONAL PATH DEPENDENCE AND STRATEGIC LOCK-IN AT NORTEL.....           | 204        |
| <b>CHAPTER 6. CEO NARRATIVE INFRASTRUCTURE AND INTERTEXTUALITY.....</b> |   | <b>208</b> |
| 6.1   | INTRODUCTION .....  | 208        |
| 6.2   | STRUCTURAL TEXTUALITY .....   | 209        |
| 6.2.1   | Paratextuality and Architextuality .....                                      | 211        |
| 6.2.2   | Metatextuality and Hypertextuality .....                                      | 216        |
| 6.2.3   | CEO Narrative Infrastructure .....  | 218        |
| 6.3   | DISCURSIVE THEMES .....   | 222        |

|   |  |            |
|---|--|------------|
| 6.3.1   | The Centrality of Actors.....  | 222        |
| 6.3.2   | Major Discursive Themes and Primary Narratives .....                             | 224        |
| 6.3.3   | The Dominant Narrative .....   | 227        |
| 6.3.4   | Mechanisms as Self-Reinforcing Processes .....                                   | 231        |
| 6.4   | SUMMARY.....   | 244        |
| <b>CHAPTER 7. CEO NARRATIVES AND ORGANIZATIONAL PATH DEPENDENCE .....</b> |  | <b>247</b> |
| 7.1   | INTRODUCTION .....   | 247        |
| 7.2   | SUMMARY OF FINDINGS FROM PATH CONSTITUTION ANALYSIS AND NARRATIVE ANALYSIS ..... | 248        |
| 7.3   | SELF-REINFORCING PROCESSES, DOMINANT THEMES AND CEO MECHANISMS .....             | 251        |
| 7.4   | THE INFLUENCE OF MATERIAL FILINGS.....   | 252        |
| 7.5   | THE INFLUENCE OF CEO NARRATIVES IN ORGANIZATIONAL PATH DEPENDENCE.....           | 255        |
| 7.6   | CEO NARRATIVES AS A SELF-REINFORCING PROCESS.....                                | 257        |
| 7.7   | INITIAL CONDITIONS AND RHETORICAL HISTORY .....                                  | 259        |
| 7.8   | CRITICAL EVENTS .....  | 262        |
| 7.9   | ACTORS AND PATH CONSTITUTION ANALYSIS .....                                      | 263        |
| <b>CHAPTER 8. CONCLUSION .....</b>  |  | <b>267</b> |
| 8.1   | SUMMARY OF FINDINGS .....  | 267        |
| 8.2   | ACADEMIC CONTRIBUTIONS .....   | 270        |
| 8.2.1   | CEO Strategizing and Firm Trajectory .....                                       | 270        |
| 8.2.2   | Narratives, Intertextuality and Narrative Infrastructures in Strategizing.....   | 271        |
| 8.2.3   | Sources of CEO Narratives as Part of the Strategy “Genre” .....                  | 272        |
| 8.2.4   | Organizational Path Dependence.....  | 274        |
| 8.2.5   | An Elaborated Model of the Constitution of an Organizational Path.....           | 276        |
| 8.2.6   | Rhetorical History.....  | 277        |
| 8.3   | LIMITATIONS .....  | 278        |
| 8.4   | FURTHER RESEARCH.....  | 280        |
| 8.5   | IMPLICATIONS FOR MANAGERS .....  | 282        |
| <b>REFERENCES .....</b>   |  | <b>286</b> |
| <b>APPENDIX A. CEO EMAIL LIST .....</b>                                   |  | <b>298</b> |
| <b>APPENDIX B. CEO EMAIL SAMPLES.....</b>                                 |  | <b>305</b> |
| <b>APPENDIX C. CEO NARRATIVES FIRST ORDER CONCEPTS .....</b>              |  | <b>314</b> |
| <b>APPENDIX D. PILOT STUDY WORKSHOP LETTER.....</b>                       |  | <b>316</b> |
| <b>APPENDIX E. NORTEL EVENT HISTORY 2002-2010 .....</b>                   |  | <b>317</b> |



|   |            |
|---|------------|
| <b>APPENDIX F. NORTEL SELF-REPORTED HISTORY .....</b>         | <b>330</b> |
| <b>APPENDIX G. CEO EMAIL TEXTUAL ANALYSIS.....</b>            | <b>332</b> |
| 1.1 INTRODUCTION .....  | 332        |
| 1.2 THEORETICAL BACKGROUND.....                               | 333        |
| 1.3 METHODOLOGY .....   | 334        |
| 1.3.1 Data Sample.....  | 334        |
| 1.3.2 Types of Emails.....                                    | 336        |
| 1.3.3 Analytical Methods – Tone.....                          | 337        |
| 1.3.4 Analytical Methods – Macrostructure.....                | 340        |
| 1.4 RESULTS – VERIFYING FOR INDIVIDUAL LEVEL DIFFERENCES..... | 341        |
| 1.5 RESULTS – TONE.....                                       | 344        |
| 1.5.1 Temporal and Spatial Awareness .....                    | 347        |
| 1.5.2 Monological Tone.....                                   | 349        |
| 1.5.3 Optimism .....  | 350        |
| 1.5.4 Commonality.....  | 353        |
| 1.5.5 Activity .....  | 356        |
| 1.5.6 Certainty.....  | 358        |
| 1.5.7 Realism .....   | 360        |
| 1.5.8 Summary.....  | 362        |
| 1.6 RESULTS – MACROSTRUCTURE .....                            | 364        |
| 1.6.1 Descriptive Results .....                               | 364        |
| 1.6.2 The Macrostructure.....                                 | 367        |
| 1.6.3 Move ‘Email Title’ – Passivity.....                     | 368        |
| 1.6.4 Move ‘Salutation’ – Inconsistent.....                   | 368        |
| 1.6.5 Move ‘Opening Paragraph(s)’ – Heroes and Villains ..... | 369        |
| 1.6.6 Move ‘Body’ – The Story .....                           | 371        |
| 1.6.7 Move ‘Background Paragraphs’ – Rhetorical History ..... | 373        |
| 1.6.8 Move ‘Closing Paragraph’ – The Ask.....                 | 374        |
| 1.6.9 Move ‘Complementary Close’ – Levelling .....            | 375        |
| 1.7 SUMMARY OF FINDINGS (FOR THE PURPOSE OF THE THESIS) ..... | 376        |

## LIST OF FIGURES

|  |     |
|--|-----|
| FIGURE 1: RESEARCH DESIGN .....  | 5   |
| FIGURE 2: THE CONSTITUTION OF AN ORGANIZATIONAL PATH .....                           | 23  |
| FIGURE 3: CONCEPTUAL FRAMEWORK .....   | 42  |
| FIGURE 4: CASE STUDY DESIGNS (YIN, 2003: 40).....                                    | 56  |
| FIGURE 5: RESEARCH DESIGN .....  | 59  |
| FIGURE 6: PROPOSED CEO NARRATIVE INFRASTRUCTURE.....                                 | 83  |
| FIGURE 7: CASE HISTORY (STEP 3).....   | 93  |
| FIGURE 8: NORTEL STOCK PRICE (CANADIAN DOLLARS).....                                 | 94  |
| FIGURE 9: NORTEL AND COMPETITOR MARKET CAPITALIZATION .....                          | 100 |
| FIGURE 10: NORTEL AND COMPETITOR CHANGE IN MARKET CAPITALIZATION.....                | 101 |
| FIGURE 11: NORTEL AND COMPETITOR STOCK PRICE .....                                   | 101 |
| FIGURE 12: PATH CONSTITUTION ANALYSIS (STEP 4) .....                                 | 139 |
| FIGURE 13: NORTEL EVENT MAP .....  | 142 |
| FIGURE 14: LEVEL INTERRELATEDNESS AND ACTORS .....                                   | 144 |
| FIGURE 15: LEVEL INTERRELATEDNESS AT NORTEL .....                                    | 163 |
| FIGURE 16: TRIGGERING EVENTS – FROM EVENT HISTORY ANALYSIS .....                     | 165 |
| FIGURE 17: TRIGGERING EVENTS – FROM CEO NARRATIVE ANALYSIS .....                     | 165 |
| FIGURE 18: TRIGGERING EVENTS ON NORTEL’S PATH .....                                  | 185 |
| FIGURE 19: CONSTITUTION OF NORTEL'S ORGANIZATIONAL PATH .....                        | 206 |
| FIGURE 20: CEO NARRATIVE ANALYSIS (STEP 5) .....                                     | 209 |
| FIGURE 21: NORTEL CEO NARRATIVE INFRASTRUCTURE (DESCRIPTIVE).....                    | 211 |
| FIGURE 22: CEO NARRATIVE INFRASTRUCTURE - LEVELS & ACTORS.....                       | 220 |
| FIGURE 23: EVENT-INITIATED CEO NARRATIVES .....                                      | 221 |
| FIGURE 24: NARRATIVE INFRASTRUCTURE AT NORTEL .....                                  | 245 |
| FIGURE 25: CONCEPTUAL FRAMEWORK (STEP 6).....  | 248 |
| FIGURE 26: CONSTITUTION OF NORTEL'S ORGANIZATIONAL PATH .....                        | 249 |
| FIGURE 27: NARRATIVE INFRASTRUCTURE AT NORTEL .....                                  | 251 |
| FIGURE 28: THE CONSTRAINING NATURE OF MATERIAL SOURCES OF NARRATIVES.....            | 255 |
| FIGURE 29: THE INFLUENCE OF CEO NARRATIVES ON ORGANIZATIONAL PATH<br>DEPENDENCE..... | 257 |

|   |     |
|---|-----|
| FIGURE 30: ELABORATED MODEL OF THE CONSTITUTION OF AN ORGANIZATIONAL PATH ..... | 265 |
| FIGURE 31: ELABORATED MODEL OF THE CONSTITUTION OF AN ORGANIZATIONAL PATH ..... | 276 |
| FIGURE G1: MEAN USAGE FREQUENCY BY CEO .....                                    | 342 |
| FIGURE G2: MEAN USAGE FREQUENCY BY EMAIL TYPE.....                              | 342 |
| FIGURE G3: CUMULATIVE CEO EMAILS WORD USAGE COMPARISON.....                     | 345 |
| FIGURE G4: TEMPORAL AWARENESS AND CONCERN .....                                 | 348 |
| FIGURE G5: TIME AND SPACE .....   | 349 |
| FIGURE G6: MONOLOGICAL AUTHORSHIP (SELF-REFERENCE).....                         | 350 |
| FIGURE G7: OPTIMISM AND NEGATIVITY .....  | 352 |
| FIGURE G8: NET OPTIMISM .....   | 353 |
| FIGURE G9: COMMONALITY AND IDIOSYNCRATIC ENGAGEMENT .....                       | 354 |
| FIGURE G10: NET COMMONALITY .....   | 355 |
| FIGURE G11: COMMONALITY AND OPTIMISM.....                                       | 356 |
| FIGURE G12: ACTIVITY .....  | 357 |
| FIGURE G13: NET ACTIVITY AND PRESENT CONCERN .....                              | 358 |
| FIGURE G14: CERTAINTY AND AMBIVALENCE.....                                      | 359 |
| FIGURE G15: NET CERTAINTY .....   | 360 |
| FIGURE G16: REALISM .....   | 361 |
| FIGURE G17: CEO EMAIL AS A UNIQUE TYPE OF STRATEGY NARRATIVE .....              | 364 |

## LIST OF TABLES

|   |     |
|---|-----|
| TABLE 1: GENETTE'S TYPES OF TRANSTEXTUALITY .....                             | 37  |
| TABLE 2: CONSTITUTIVE FEATURES AND POTENTIAL INDICATORS OF PATHS.....         | 51  |
| TABLE 3: NORTEL CEOs AND THEIR TENURE.....                                    | 57  |
| TABLE 4: ANALYTICAL APPROACH .....  | 60  |
| TABLE 5: SUMMARY OF DATA USED FOR PATH CONSTITUTION ANALYSIS .....            | 61  |
| TABLE 6: NORTEL CORPORATE DOCUMENTS FROM SEDAR .....                          | 62  |
| TABLE 7: MEDIA ARTICLES.....  | 64  |
| TABLE 8: INDUSTRY REPORTS.....  | 66  |
| TABLE 9: CEO NARRATIVES.....  | 68  |
| TABLE 10: CEO MEDIA INTERVIEWS .....  | 74  |
| TABLE 11: CEO ALL-EMPLOYEE EMAILS.....  | 75  |
| TABLE 12: CEO ALL-EMPLOYEE EMAIL CATEGORIES .....                             | 76  |
| TABLE 13: SUPPLEMENTAL NARRATIVES FROM TOP MANAGEMENT TEAM.....               | 78  |
| TABLE 14: OWENS' FIRST EMAIL TO EMPLOYEES (APRIL 29, 2004).....               | 109 |
| TABLE 15: NORTEL'S ATTRIBUTES (ZAFIROVSKI, CEO EMAIL, DECEMBER 20, 2005)..... | 117 |
| TABLE 16: ZAFIROVSKI'S 6-POINT PLAN.....                                      | 118 |
| TABLE 17: CLOSING PARAGRAPHS, ZAFIROVSKI'S CEO EMAILS.....                    | 125 |
| TABLE 18: ZAFIROVSKI'S EMAIL ON BANKRUPTCY PROTECTION (JANUARY 14, 2009)..... | 128 |
| TABLE 19: ZAFIROVSKI'S LAST EMAIL TO EMPLOYEES (AUGUST 9, 2009).....          | 131 |
| TABLE 20: BINNING'S CEO EMAIL ON ENTERPRISE SALE (DECEMBER 12, 2009).....     | 134 |
| TABLE 21: PATH CONSTITUTION ANALYSIS.....                                     | 141 |
| TABLE 22: REFERENCES TO ACTORS IN CEO NARRATIVES .....                        | 144 |
| TABLE 23: TRIGGERING EVENTS AND IMPACT ON STRATEGIC OPTIONS.....              | 166 |
| TABLE 24: LIST OF TRIGGER EVENTS FOR PATH DIAGRAM.....                        | 185 |
| TABLE 25: SELF-REINFORCING PROCESSES IN NORTEL'S PATH.....                    | 193 |
| TABLE 26: OUTCOMES OF NORTEL'S SELF-REINFORCING PROCESSES.....                | 204 |
| TABLE 27: GENETTE'S TYPES OF TRANSTEXTUALITY .....                            | 210 |
| TABLE 28: REFERENCES TO OTHER TEXTS .....                                     | 217 |
| TABLE 29: CEO NARRATIVES AND THE CENTRALITY OF ACTORS .....                   | 222 |
| TABLE 30: DISCURSIVE THEMES IN CEO NARRATIVES .....                           | 224 |

|   |     |
|---|-----|
| TABLE 31: CEO NARRATIVES AND THE DOMINANT THEME .....                                 | 227 |
| TABLE 32: MECHANISMS IN CEO EMAILS .....  | 233 |
| TABLE 33: THE EMBEDDEDNESS OF CEO NARRATIVES IN NORTEL'S ORGANIZATIONAL<br>PATH ..... | 252 |
| TABLE G1: SUMMARY OF CEO EMAILS .....   | 335 |
| TABLE G2: CEO EMAILS BY TYPE .....  | 337 |
| TABLE G3: DICTION Dictionaries (HART & CARROLL, 2012) .....                           | 338 |
| TABLE G4: CEO EMAIL TEXTUAL CHARACTERISTICS, BY CEO .....                             | 339 |
| TABLE G5: CUMULATIVE CEO EMAILS WORD USAGE COMPARISON .....                           | 346 |
| TABLE G6: CEO EMAILS AS A UNIQUE TYPE OF STRATEGY NARRATIVE .....                     | 363 |
| TABLE G7: CEO EMAILS MACROSTRUCTURE (MOVES) .....                                     | 367 |
| TABLE G8: MOVE 'OPENING PARAGRAPH' – HEROES AND VILLAINS .....                        | 369 |
| TABLE G9: MOVE 'BODY' – THE STORY .....   | 371 |
| TABLE G10: MOVE 'BACKGROUND PARAGRAPHS' – RHETORICAL HISTORY .....                    | 373 |
| TABLE G11: MOVE 'CLOSING PARAGRAPH' – THE ASK .....                                   | 375 |
| TABLE G12: MOVE 'COMPLEMENTARY CLOSE' – LEVELLING .....                               | 376 |

## **The Influence of CEO Narratives in Organizational Path Dependence**

### **CHAPTER 1. Summary of Thesis**

This chapter serves to provide a summary of the thesis, beyond the abstract. The theory and research questions of the thesis are presented, along with an overview of the methodology, results, and contributions.

#### **1.1 Background on Path Dependence**

History tells us that organizations get stuck; they get stuck in what they do, in the markets they serve, in the strategies they use (Carroll & Mui, 2008). In growing and prosperous industries, where there is plenty of market to share, some firms cannot escape themselves; they fail to meet customer needs, manage their resources, or find a competitive advantage. In shifting industries, where change is inevitable, many organizations manage to change their strategies and move with the times. But some, again, get stuck, locked-in by who they are, the decisions they have made, and the ways in which they work, such as Eastman Kodak, who resisted the transition to digital technology for years (Carroll & Mui, 2008).

‘Getting stuck’ on a particular path, in academic terms, refers to a body of research dealing with a concept known as path dependence. Path dependence theory was born from evolutionary economics and Paul David’s (1985) analysis of the persistence of the QWERTY keyboard. Although initially focused on the economics of why certain, albeit less effective, technologies may win out over other inventions (e.g. Arthur, 1989), the notion of path dependence has, over the years, been referenced throughout the field of

strategic management. The concept of path dependence is often used to explain the persistence of institutions, technology standards, and capabilities; path dependence is often referenced in areas such as institutional theory, the resource based view, the dynamic capability view, transaction cost economics, and theories of innovation (Vergne & Durand, 2010).

Recently, researchers have taken an interest in path dependence, specifically in the area of organization and strategy (Vergne & Durand, 2010). Research argues that path dependence can be applied to organizational becoming, influenced by not only history (initial conditions) but also positive self-reinforcing processes that lead to an increasingly narrower set of options (Sydow, Schreyögg & Koch, 2009). This thesis is grounded in and contributes to knowledge of organizational path dependence.

## **1.2 Theory and Research Questions**

### ***1.2.1 CEOs and Strategy***

Chief Executive Officers have long been considered to have a significant and distinct influence on strategy and strategic decision making (e.g. Andrews, 1971; Ackoff, 1970; Ansoff, 1965; Barnard, 1938; Child, 1972; Selznick, 1957). In a recent review article, Hutzschenreuter, Kleindienst and Greger (2012) state that “an increasing body of theoretical and empirical literature has since recognized the CEO as the principal leader and architect of the firm, as the individual ultimately responsible for the formulation and implementation of company strategy” (p. 730). With such a significant role in strategy

work, this thesis proposes that the CEO has a critical role in the development and persistence of the self-reinforcing processes attributed to organizational path dependence.

### ***1.2.2 Organizational Path Dependence***

Theory on organizational path dependence is relatively new. In an effort to move beyond the ‘history matters’ argument, recent research focuses on the processual nature of the phenomenon and, in particular, causality. Although earlier cases on technological path dependence identified how a series of decisions *may* lead to a particular outcome (e.g. David, 1985), they do not explain the conditions under which path dependence *will* occur. Scholars of organizational path dependence attempt to unravel the process that leads to lock-in, with a specific focus on the underlying temporal processes.

Organizational path dependence is defined “as a rigidified, potentially inefficient action pattern built up by the unintended consequences of former decisions and positive feedback processes” (Sydow et al., 2009: 696). It is considered a process that unfolds over time, through three phases: preformation, formation, and lock-in. During formation, positive self-reinforcing processes that involve the search for increasing rents lead to dominant solutions and an increasingly narrower set of options.

The rent-seeking characteristics of these processes lead the organization towards an ever-increasing rigid state, where alternative options are reduced, resulting in potential lock-in. At the centre of these processes are organizational actors who either explicitly carve out the path or implicitly participate in the path dependence without clear knowledge. However, who these actors are and how they influence the process has not been investigated empirically. This thesis is bounded by these ideas.



### ***1.2.3 Strategy-as-Narrative***

Barry and Elmes (1997) suggest that strategy can be interpreted through a narrative lens, where “organizational stakeholders create a discourse of direction (whether about becoming, being, or having been) to understand and influence one another's actions” (p. 432). Strategy discourse is used by organizational actors to persuade and legitimize change, and to ultimately influence the trajectory of the organization (Fenton & Langley, 2011). Texts, in particular, may shape the firm’s operations by representing intentions, mediating conversations, directing attention, disciplining behaviour, and linking disparate practices (Kuhn, 2008). This research looks at the role of narrative in organizational path dependence.

### ***1.2.4 CEO Narratives in Organizational Path Dependence***

Given the roles of both the CEO and narrative in strategy work, this thesis explores the role of CEO strategy narratives in organizational path dependence. More specifically, this thesis asks: *what is the influence of CEO narratives in the organizational path dependence process?* In particular, the research investigates CEO narratives for the presence of a narrative infrastructure – “The evolving aggregation of actors/narratives in their material and social settings that enables and constrains the possible stories, actions and interactions by actors” (Deuten & Rip, 2007: 75) – and analyzes the influence of this infrastructure on the organizational path. Additionally, the research investigates the role of initial conditions and self-reinforcing processes, along with the influence of multiple triggering events. The objective of the research is to understand how a CEO communicates strategy to organizational stakeholders and how

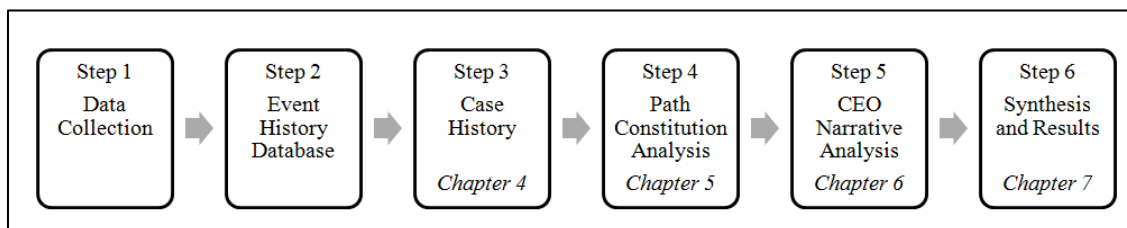
these texts participate in the firm's strategic path. Do CEO strategy narratives simply reflect the firm's strategy work or are they central to how strategy unfolds?

### 1.3 Methodology

Due to its temporal and processual nature, empirical research on organizational path dependence lends itself to qualitative methods (Bennett & Elman, 2006; Sydow, Windeler, Müller-Seitz & Lange, 2012). This thesis takes an historical approach through the use of a deductive embedded case study (Yin, 2003). The sample is taken from a large Canadian-based multinational firm (Nortel), over 8 years, from April 2002 to March 2010. The primary unit of analysis is the organization, with the CEO narratives as the embedded unit of analysis. The source of narrative data included 389 texts produced by the CEOs throughout their respective tenures, both interorganizational texts (Analysts Call Transcripts, Letters to Shareholders, News Releases, and Media Interviews) and intraorganizational texts (168 CEO Emails issued to all employees).

The research design is an elaborate process that first tests for path dependence and the existence of a narrative infrastructure, and then investigates the influence of the narrative infrastructure on the organizational path (see Figure 1).

**Figure 1: Research Design**



The design calls for an additional set of event data and the use of path constitution analysis to test for organizational path dependence and lock-in. Drawing on over 2000 documents (including material filings, industry reports and media articles), an event data base was constructed to write the case history and characterize the constitution of the organizational path. Following, a narrative analysis using grounded coding was performed to characterize the narratives and the narrative infrastructure. The two sets of results were brought together to investigate the role of CEO narratives in organizational path dependence.

As an adjunct to the research, a textual analysis was performed on the CEO Emails, given their unique nature. The findings of this analysis, which were used in the thesis, can be found in Appendix G.

#### **1.4 Results**

The investigation identifies CEO narratives as a self-reinforcing process in the organizational path dependence process. Through textual relationships, the CEO narratives form a narrative infrastructure, from which a dominant narrative emerges, encouraging the understanding and implementation of firm strategies. As a self-reinforcing process, the CEO narratives initially offer benefits through coordination, complementarity, learning, and adaptive expectation effects; through sensegiving they encourage the adoption of other self-reinforcing processes at work within the organization. Over time, however, the narrative infrastructure limits strategic options, as CEO narratives are constrained by earlier narratives and initial conditions. Although rhetorical history is available to the firm to disentangle the narratives from the past and

broaden strategic options, it must be positioned in context with the firm's larger strategy and firm resources and capabilities.

## **1.5 Contributions**

### ***1.5.1 Academic***

The research contributes to the literature on both strategy-as-narrative and organizational path dependence. First, in terms of strategy-as-narrative, the research demonstrates that the influence of narrative on the trajectory of the firm is related to the narrative infrastructure created through textual relationship between narratives. The narratives themselves are influenced by not only the ongoing persistence of this infrastructure but also firm resources and capabilities. This finding connects theory on the resource-based view (Barney, 1991) with narratives and, in particular, the role of narratives in strategy.

In the theory of organizational path dependence, this research provides an elaborated model of the constitution of an organizational path by emphasizing the recursive interaction between actors at multiple levels. The research also highlights the temporal role of self-reinforcing processes, specifically between those that exist initially and those that are created over time. Additionally, the research defines initial conditions in terms of resources and capabilities, thereby connecting the resource-based view with path dependence theory, and presents the necessity to consider both tangible and intangible resources, some of which are brokered with actors outside of the organization.

The thesis also tests a relatively new research methodology, path constitution analysis, using historical documents; a unique application of the method to date.

### **1.5.2 Practitioner**

The research highlights the need for managers to understand the relative importance of CEO narratives in the strategy process. The authoritative nature of CEO narratives leads to the persistence of the narratives over time and space. If CEO narratives are used to give sense to stakeholders in order to shape behaviour, marshal resources, and gain capital, then CEO narratives must be managed as a resource themselves. Managers, and in particular CEOs, need to consider how CEO narratives may influence and eventually constrain, in unproductive ways, the firm's strategic path. Additionally, CEOs need to consider the role of rhetorical history in their efforts to manage the influence of CEO narratives; as a strategic resource, rhetorical history can provide CEOs room to maneuver within their narratives, thereby generating strategic options and (if required) the ability to move off path.

## **1.6 Thesis Layout**

This thesis is laid out as follows. Chapter 2 presents a literature review of organizational path dependence and narratives in strategy research, followed by the presentation of the research questions and conceptual framework. Chapter 3 provides a detailed review of the research methods, including the data requirements, data collection and analytical methods. Chapter 4 covers the case history of Nortel from 2002 to 2010 and includes a biography of each CEO. Chapter 5, the first of two analytical chapters,

includes a comprehensive path constitution analysis to test for path dependence and strategic lock-in at Nortel. Chapter 6 is dedicated towards a narrative analysis of the CEO narratives including textual relationships and the narrative infrastructure. Chapter 7 brings together findings from Chapters 5 and 6 to investigate the influence of CEO narratives on organizational path dependence, and presents additional findings that stem from the research. Chapter 8 summarizes the research findings and academic contributions, discusses limitations and future research, and closes with practical implications. Appendix G, found at the end of this document, provides a detailed textual analysis on the CEO Emails.

## **CHAPTER 2. Theory and Conceptual Framework**

### **2.1 Introduction**

This chapter presents the context for the research by opening with a discussion and review of the literature on the role of CEOs in firm performance, specifically as it relates to the trajectory of the firm. The purpose of this first section is to argue that, although research suggests that CEOs influence performance, there is limited understanding of how a CEO may directly impact outcomes over time.

Following, the chapter provides a literature review on the evolution of path dependence, from its original beginnings in economics to its current application in the organization sciences. A detailed review of organizational path dependence is presented, along with a discussion on current gaps in the theory, specifically as it relates to the role of initial conditions, self-reinforcing processes and triggering events.

Following the review of organizational path dependence, the chapter broadly defines the role of discourse in strategizing activities to focus specifically on the role of narrative in strategy. This is a relatively new field of research in strategic management that takes a processual approach to strategy, arguing that narratives (and the greater narrative infrastructure) may influence the trajectory of the firm.

The chapter closes by connecting organizational path dependence theory with theory on strategy-as-narrative, to position the research questions and conceptual framework.

## 2.2 The Role of the CEO in Firm Performance

Classical management research argues that Chief Executive Officers (CEOs) have a significant and direct influence on strategy and strategic decision-making (Andrews, 1971; Ansoff, 1965; Barnard, 1938; Child, 1972; Selznick, 1957). With the formation of strategy as a distinct field, research on CEOs and strategy has persisted<sup>1</sup>. In a recent article on CEO succession and strategic change, Hutzschenreuter, Kleindienst, and Greger (2012) suggest that the CEO remains the “principle leader and architect of the firm, as the individual ultimately responsible for the formulation and implementation of company strategy” (p. 730). CEOs, as critical actors, are often the focus of study in research on strategy process (Hutzschenreuter & Kleindienst, 2006) and strategic decision-making (Hutzschenreuter et al., 2012), not to mention research on leadership.

In Upper Echelon Theory, Hambrick (2007) summarizes the influence of the CEO, along with the ‘mystery’ that shrouds the extent of the CEO’s influence.

---

<sup>1</sup> A search on “CEO” and “Strateg\*” in Web of Science lists over 757 articles published since 1984, in ever increasing numbers, with over 50% published since 2006.



The question—just as with the effect of exercise on body weight—is how much relative, or incremental, effect the CEO has after controlling for obvious contextual factors. The answer, from the same studies, is that CEOs (in the United States, at least) account for a considerable portion of the variance in firm profitability that remains unexplained by contextual conditions. Just as exercise matters greatly to how much you—a specific individual—weigh, evidence indicates that top executives have considerable influence over the form and fate of their specific companies. Granted, executives have more discretion in some settings than in others (Hambrick & Finkelstein, 1987), but, in general, we can conclude that CEOs affect organizational outcomes. (Hambrick, 2007: 341)

Although scholars seem to agree that CEOs have significant influence over firm performance, much of the research on this relationship has focused on demographic and psychological variables, in other words, within and between CEO characteristics. The state of Upper Echelon Theory was recently summarized by Hambrick (2007), explaining how the original focus on the influence of CEOs' experiences, values and personalities on strategic decision making has broadened in a number of areas: the influence of the Top Management Team in areas such as composition, characteristics and behaviour; and, moderators such as managerial discretion and executive job demands.

The focus on the influence of demographics and psychological characteristics, using proxy measures such as the size of CEO photographs in annual reports (e.g. Chatterjee & Hambrick, 2007, on CEO narcissism), is due, in part, due to limited access to CEOs (Hambrick, 2007). In addition, in an effort to move from research on 'who the CEO is' to 'what the CEO does,' longitudinal analysis is needed, which increases the difficulty of CEO access. In some cases, however, scholars have succeed in studying the

role of the CEO in strategy formulation and implementation (i.e. the process of strategy), and firm performance.

Burgelman (2002), for example, looked at the influence of Intel's CEO, Andy Grove, on the firm's strategy-making process. He argued that Grove shifted the firm's strategy-making process from one of internal-ecology to a classical rational-actor model. Through the creation of a focused strategy 'vector', Grove was able to steer Intel towards successful performance, but in so doing, the organization became locked into the PC product-market; a phenomenon that Burgelman labelled 'co-evolutionary lock-in' (Burgelman, 2002).

Although the Intel story was a complex situation that evolved over time, and with numerous actors, it highlights the potential influence of the CEO in the strategic decision-making process and lock-in.

[Grove] made Intel focus on a narrow business strategy and established an induced strategy process that tightly aligned strategy and action and produced extraordinary success. His deep understanding of the forces that gave rise to the strategy vector also gave him great confidence in dealing with several crises that challenged it. This study, however, also reveals the complex reciprocal causation between Grove's strategic intent and the structures and processes that he put in place and how the very success of the strategy vector resulted in the emergence of co-evolutionary lock-in and impeded new business development. (Burgelman, 2002: 349)

Burgelman's (2002) study highlighted Grove's degree of influence in the firm's strategy-making process; however, the research did not discuss how Grove enabled employees to make sense of the strategy. So although *what* Grove did was well understood, *how* he did it is less clear. The study did emphasize, however, the power of

the CEO on the trajectory of the firm and how a CEO's strategic options can be limited by the predecessor's decisions.

Hutzschenreuter et al. (2012) explore, in greater depth, the phenomenon of CEO-led strategic change post succession. Beyond intrinsic factors such as managerial cognition, affect, personality traits, and leadership styles, they propose that newly-appointed CEOs will see a greater need for strategic change under three possible conditions: (1) if the tenure of the previous CEO was short (and therefore the firm's alignment with the environment is lacking); (2) the more the firm has deviated from competitors' strategies; or (3) the greater the uncertainty in the environment (Hutzschenreuter et al., 2012). Although they do not test their propositions, the authors suggest that future research on CEO succession and strategic change could be investigated through the lens of organizational path dependence:

It is reasonable to assume that as new leaders take office, the scope of strategic change they will be able to initiate is to a large degree determined by their predecessors as well as other historical events within and outside the firm. Path-dependency will most likely restrict the scope of potential actions new leaders are able to initiate. (Hutzschenreuter et al., 2012: 745).

CEOs have long been held accountable for their public firm's performance, with poor results often ending with dismissal (see Crossland & Chen, 2013, for a review) and, although CEO access has always been difficult, gaining access will be increasingly more difficult. The internet and technology allow competitors to gain access to information, pushing CEOs to become ever more private. But with their significant influence over strategy, strategic-decision making, and the strategy process in general,

understanding how CEOs influence the trajectory of the firm continues to be a highly pertinent research endeavour.

To investigate how particular CEOs influence firm performance, and more specifically, the trajectory of the firm, two case study approaches can be taken: a study of the role of a CEO in a firm that has either successfully undergone strategic change (e.g. Intel; Burgelman, 2002) or, over the course of time, failed to succeed in a transitioning industry. This thesis investigates the latter, with a specific focus on how CEO narratives influence organizational path dependence and, consequently, strategic lock-in. Follows is a review of path dependence theory from its beginnings in economics to its current application in the organizational sciences.

### **2.3 QWERTY and the Emergence of Path Dependence**

In 1985, Paul David wrote a short story about the QWERTY<sup>2</sup> keyboard. His article was published in *Economic History* with the objective to illustrate how some process are stochastic, or non-ergodic, in that their outcomes cannot be predicted but do have some apparent determinacy to them.

---

<sup>2</sup> QWERTY refers to the first six letters, beginning at the top left, on the common computer keyboard (and, previously, typewriters).

*A path-dependent* sequence of economic changes is one of which important influences upon the eventual outcome can be exerted by temporally remote events, including happenings dominated by change elements rather than systematic forces. Stochastic processes like that do not converge automatically to a fixed-point distribution of outcomes, and are called *non-ergodic*. (David, 1985: 332) (Italics in the original)

David (1985) argued that not all problems can be easily explained using standard neoclassical economics; sometimes, “historical accidents” occur, whereby “one damn thing follows another” (p. 333). He tells the tale of how the QWERTY keyboard persisted throughout the evolution of the typewriter against economic logic. To position path dependence in the literature, a summary of David’s (1985) ideas is presented in the following paragraphs.

The placement of keys in the typewriter keyboard began with a decision made by Christopher Latham Sholes in the late 19<sup>th</sup> century. Although he had a patent in hand for his typewriting machine, Mr. Sholes was unable to commercialize his product; the mechanism used to strike the key onto paper was such that the typebars would often jam if the typist went too quickly. Thinking that the proximity of the typebars with one another was the main inhibitor, Sholes identified a sequence of keyboard lettering that would allow for quick typing without obstruction. In 1873, and with the help of his partner and venture capitalist, James Densmore, Sholes sold the rights to Remington and Sons, where mechanics made some final (and slight) modifications – modifications that would allow a salesman to easily punch out TYPEWRITER on the top row of the keyboard. Hence, the QWERTY keyboard was born.

The evolution of the QWERTY keyboard, however, or for that matter, the Sholes-Remington typewriter itself, was not guaranteed. Poor economic conditions in the late 19<sup>th</sup> century led to a conservative seven-year growth rate and a pool of about 5000 units. Then the market turned. By 1880, the economy was starting to recover and business was becoming task-oriented. Competitors to the Sholes-Remington typewriter began introducing products that, in some cases, were technically superior, replacing the typebars with cylindrical sleeves. The Ideal keyboard was introduced (the first of many superior layouts), with a top row of letters that allowed for the composition of over 70% of English words (i.e. DHIATENSOR).

As the typewriter market grew and new technology was introduced, the Ideal keyboard layout seemed like a logical evolution of technology with obvious benefits. However, while the market was booming, a curious thing happened. The more typists randomly gravitated towards the QWERTY keyboard (which had a slight head start), the more popular the keyboard became. Typists, a newly introduced soft asset into the business environment of the day, memorized the QWERTY layout to become faster touch typists. Business owners subsequently placed an economic value on the memory of a typist and, by extension, the QWERTY keyboard layout. As more typewriters were manufactured, and as typewriters and typists became more central to the administration of business, return on investment of the QWERTY keyboard increased (as the cost of the overall system dropped). The “lock in” of QWERTY, as David (1985) explains, resulted from a set of initial conditions (economic conditions, evolution of business routines, timing of technology introductions) followed by a temporal process that characteristically was represented by technical interrelatedness (typists, touch typing and keyboard layout),

economies of scale (ever increasing pool of touch typists that memorized the QWERTY layout) and quasi-irreversibility (sunk costs of training and equipment).

## **2.4 Path Dependence in Organizational Sciences**

David's (1985) story of the QWERTY keyboard marked the beginning of path dependence research within the field of economics. According to David (1985), path dependence (in economic theory) occurs when "important influences upon the eventual outcome can be exerted by temporally remote events, including happenings dominated by chance elements rather than systematic forces" (p. 332).

Since David's (1985) original article, the fields of economics and political science have systematically explored path dependence theory. Notably, debates on the notion of path dependence began early on, with some scholars questioning the actual existence of path dependence (Liebowitz & Margolis, 1990). These arguments, however, did not prevent the persistence of the theoretical construct, which slowly made its way into management.

Path dependence, as a concept, was introduced into the field of management in the early 1990s but has been most pervasive from 2000 onwards. A search of path dependence as a "Topic" in the Web of Science database discovered 178 published articles since 1990, with over 50% of the articles published in the last four years. Although many of the articles continue to focus on managerial economics and the management of technology, they illustrate the growing interest in the application of path dependence within the organizational sciences (i.e. many of the most recent articles on path dependence are published in top-tier management journals).

In addition to the articles dedicated to path dependence theory, management researchers also refer to the construct in relation to other theories. Vergne and Durand (2010) note that the concept of path dependence was referenced in over 323 top-tier academic management journal articles between 1998 and 2007 (with over 10% of all articles published between 2003 and 2007<sup>3</sup>). A search in the ABI Inform Global Database on management articles published in the past twenty years (i.e. 1992 and 2012) found 1675 articles (increasingly linearly over time) that referenced the concept of path dependence within the text.

The interest in path dependence theory is due, in part, to the theory's initial proposition that "history matters" (David, 2001). From a more complex perspective, path dependence theory has siblings. Hannan and Freeman (1977), for example, brought forth the idea that internal structural arrangements, established at the formation of the firm, restrict choices in strategic decision making and help to explain why organizations differ. DiMaggio and Powell (1983) explored the effect of isomorphic pressures, established early on in the creation of institutions, to help explain why organizations become locked in to similar ways of working. Stinchcombe's (1965) theory on imprinting argues that when and where a firm was created heavily influences the firm's structure. First-mover

---

<sup>3</sup> Academy of Management Journal, Academy of Management Review, Administrative Science Quarterly, Journal of Management Studies, Organization Science, Organization Studies, and Strategic Management Journal



advantage suggests that history matters; being first carries both risks and rewards (Lieberman & Montgomery, 1988).

Other theories also suggest that history matters: the resource-based view (Barney, 1991), whereby the accumulation of resources, in a particular order over time, will influence the capabilities (and therefore scope) of the organization; and, the contingency approach (Miller, 1981; Miller & Friesen, 1977; Miller & Friesen, 1978), which argues that only a small number of organizational forms exist (archetypes or gestalts), based on the interaction between environments (internal and external) and strategic decision making. Chaos theory (Baum & Silverman, 1999; 2001) and absorptive capacity (Cohen & Levinthal, 1990) also suggest that initial conditions are important, although the former significantly more than the latter. With so many similar theories suggesting that organizations are influenced by initial conditions, how does path dependence theory differ?

Path dependence was first explicitly discussed in relation to firm capabilities by Schreyögg and Kliesch-Eberl (2007). They state that path dependence includes both historical imprinting and, on a differentiating point, forceful dynamics:

...once successful combinatorial activities generate positive feedback loops, thereby emergently constituting self-reinforcing processes... such self-reinforcing processes may establish strategic paths which are prone to dramatically narrowing the scope of strategic management. In the worst case a specific orientation becomes locked, i.e., any other strategic alternative is excluded. (Schreyögg & Kliesch-Eberl, 2007: 916)

Although their main purpose was to shed light on how to monitor capabilities in order to prevent rigidities, Schreyögg and Kliesch-Eberl (2007) introduced the notion that

path dependence is not only influenced by initial conditions but also plays out over time, and that central to this process are organizational actors who interact with and influence the environment in which they are embedded (Giddens, 1984). In particular, they argue that the dynamic capabilities argument is incomplete: changing capabilities that have been rigidified through positive feedback loops, specifically once they bring in decreasing rents, is not as simple as theory suggests. In other words, organizations can become locked in to a detrimental strategic path by the very routines that had previously led to positive performance (Schreyögg & Kliesch-Eberl, 2007)<sup>4</sup>.

The evolution of path dependence research in the organizational sciences can be attributed to the movement from an implicit ‘history matters’ argument to an explicit study on path dependence as a process. Although David (1985) suggested that path dependence comes about through a combination of initial conditions and technical interrelatedness, economics of scale and quasi-irreversibility, and Arthur (1994) argued that the properties of the process included non-predictability, non-ergodicity, inflexibility,

---

<sup>4</sup> Soon after Schreyögg and Kliesch-Eberl’s (2007) article was published, the Freie University of Berlin created a Path Dependence research centre and doctoral program, led by Dr. Georg Schreyögg and his colleague, Dr. Jörg Sydow. Since 2010, the organization has run a sub-theme on path dependence at the European Group for Organizational Studies. <http://www.wiwiss.fu-berlin.de/en/forschung/pfadkolleg/index.html>

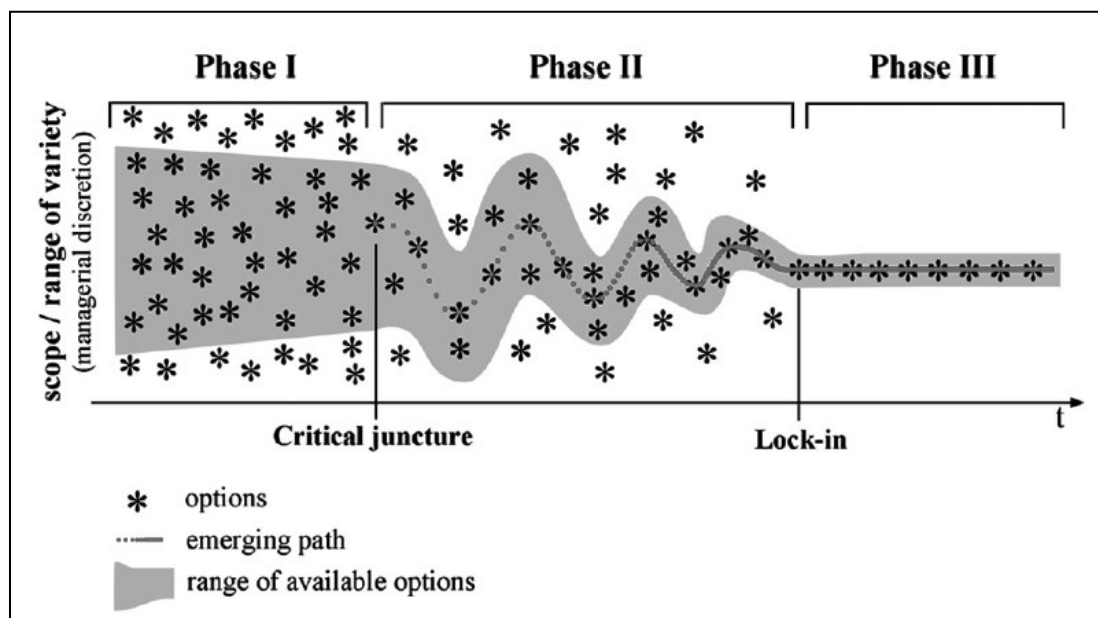
and inefficiency, they neither explored the underlying mechanisms nor suggested causality. It was not until organizational scholars began to investigate the process more closely that we gained a better understanding of how the process unfolds over time.

## **2.5 Organizational Path Dependence**

Organizational Path Dependence is defined by Sydow, Schreyögg and Koch (2009) as a “rigidified, potentially inefficient action pattern built up by the unintended consequences of former decisions and positive feedback processes” (p. 696). In their research, they move beyond technological path dependence by exploring the self-reinforcing processes that may contribute towards organizational lock-in. They propose a three-phased process – preformation, formation, and lock-in – that describes the constitution of an organizational path, and with a particular emphasis on organizational-level processes (see Figure 2). Sydow et al. (2009) argue that path dependence *may* come about over time as organizations develop processes, through positive feedback, that may initially benefit the organization but may eventually reduce the scope of action and result in strategic lock-in. These phases of path dependence, which represent the constitution of an organizational path, are described as follows.

**Figure 2: The Constitution of an Organizational Path**

(Sydow, Schreyögg & Koch, 2009: 692)



### 2.5.1 Phase I – Preformation and Initial Conditions

Unlike technological path dependence, where initial conditions are essentially wide open, Sydow et al. (2009) argue that history influences the constitution of an organizational path. Institutional imprinting must be accounted for; the organization's rules, culture, and historical-institutional influences will bind the initial set of choices. As indicated by the shading in Phase I, many options are available to the firm, but managers are influenced by the organization's institutional environment, which is created over time and reflected in routines and practices (David, 1994; Sydow et al., 2009). Options are thus reduced even at this phase of the process.

In the preformation phase, however, path dependence is still unknown. Although strategic options are limited by initial conditions, Sydow et al. (2009) argue that the further reduction of options is triggered by a critical juncture, such as a decision or event.

The theory does not stipulate either the type of decision or event, or its significance, suggesting that it is only possible to identify the triggering event once the process has been understood.

The theory is also less clear on which initial conditions influence organizational path dependence and under which circumstances. For example, which routines and practices constrain or limit strategic choice? Are there certain organizational characteristics that have a greater influence on an organizational path than others? Although the theory in organizational path dependence takes the past into account, it is less clear on which organizational attributes influence outcomes.

### ***2.5.2 Phase II – Formation through Self-Reinforcing Processes<sup>5</sup>***

This phase is triggered by a decision or event in Phase I that reduces options and initiates the formation of a particular path. The phase is characterized by positive, self-reinforcing processes that involve the search for increasing rents, resulting in dominant solutions and an increasingly narrower set of options. Sydow et al. (2009) argue that strategic decisions in this phase can be neither attributed solely to accidents nor deliberate

---

<sup>5</sup> There is some discrepancy in the literature on the use of “processes” versus “mechanisms” when discussing the self-reinforcing processes. Sydow et al. (2009) use “mechanisms” but in later research Sydow et al. (2012) use “processes.” For the sake of consistency, this thesis uses “processes” throughout when referring to the self-reinforcing processes as it pertains to organizational path dependence.

behaviour. The self-reinforcing processes encourage actors to stay on path (due to the processes' positive outcomes) but the organization is not, as of yet, locked in.

The self-reinforcing processes are core to the theory. Sydow et al. (2009) argue that their coordination effects, complementarity effects, learning effects and adaptive expectation effects may all contribute towards the emergence of an organizational path. These processes exist at multiple levels in the organization and, over time, due to their positive effects on performance, become embedded in the organization. Initially, as rent-seeking processes, they lead to positive outcomes, but embeddedness may also lead to a degree of inertia, encouraging certain strategic options over others. The effects of these processes are defined by Sydow et al. (2009) as follows.

***Coordination effects.*** Coordination effects relate to the efficiencies gained when organizational actors become proficient at following a set of rules and guidelines. Interactions between each other become more efficient such that coordinating costs are reduced. The rules are adopted by more and more people in an effort to seek greater efficiencies. The more the rules are adopted, the more efficiency is achieved and the less other routines are adopted or even considered (Sydow et al., 2009).

***Complementarity effects.*** Complementarity in activities occurs when organizational rules, resources, practices, and routines are combined to achieve synergy (Barney, 1991); in combination, the related activities are more efficient than they were as stand-alone activities. Not only do these interrelated activities and routines become dominant in the organization, they also become deeply embedded within the organizational structure. Sydow et al. (2012) suggest that these effects may also be related to interorganizational arrangements (e.g. alliances, joint ventures, outsourcing

agreements) that can initially be beneficial to the organization but may eventually lead to rigidities (Sydow et al., 2009).

*Learning effects.* Activities are learned as they are repeated. The more an activity is repeated, the greater the learning. As the activity is learned, fewer mistakes occur and productivity increases. As the activity becomes less costly and increases in quality, it also increases in attractiveness and the desire to learn something new, in its place, decreases. Learning effects encourage organizational actors to refine what they have learned, rather than learn something new, thus reinforcing a particular organizational path (Sydow et al., 2009).

*Adaptive expectation effects.* Adaptive expectation effects are realized when organizational actors gravitate towards practices that they believe are supported by other organizational members. In an effort to be accepted and included, actors adopt routines that are not necessarily in the best interest of the organization but, normatively, are the most accepted (Scott, 2008). By participating in the routines, actors reinforce the importance of the routines and, consequently, their persistence. These effects can be reflected in the firm's institutional environment, specifically practices and routines that are undertaken for normative and cognitive reasons (Sydow et al., 2012).

As in Phase I, it is still not clear the extent to which initial conditions (e.g. organizational characteristics, history, and identity) will influence outcomes. For example, are the self-reinforcing processes presumed to be created in this phase or could they (must they?) have existed previously? Do all types of effects (from the processes) need to exist in this phase or can a sub-set of processes entrench the organization down a particular path, thereby reducing strategic options? As with the preformation stage, the

processual nature of the organizational path (leading to lock-in) is clearer than the specific characteristics of the firm's organizational environment. Although Koch (2011) theorizes that only one self-reinforcing process needs to be present, research in this area is only just beginning.

The theory also provides minimal discussion on the role of subsequent triggering events. If a decision or event triggers an organizational path in Phase I, is it possible that a new decision or event (or multiple decisions and/or events) in Phase II may further reduce strategic options?

### **2.5.3 Phase III – Lock-in**

Phase III represents the portion of the organizational path where strategic lock-in occurs. Up until Phase III, options remain available to the firm, allowing it to deviate from its path into a different strategic direction. In Phase III, however, the organization is considered locked-in by the self-reinforcing processes that became inextricably linked and embedded within the organization. At this stage, actors are unable to deviate from the path. Sydow et al. (2009) also argue that, in this phase, organizational lock-in is so strong that even new members are forced to join the path.

The organizational path may be inefficient, specifically if it is unable to adapt to environmental shifts, however inefficiency is not particular to the theory. This phase simply suggests that the organization's options are so limited that it cannot move off path.

Another characteristic of lock-in is that there exists a degree of predictability of future outcomes (Sydow et al., 2012). At this phase in the process, strategic decisions



may be made without debate or argument, alternative competing options may be dismissed, and investments (or decisions not to invest) may go unquestioned; ultimately, very few or only one strategic option may seem viable to organizational members. Notably, actors may or may not be aware that this is taking place, and although other options may exist, organizational actors may believe there to be only one possible path (Sydow et al., 2012).

Although Sydow et al. (2009) argue that lock-in is not necessarily inevitable, in that actors ultimately have the power to change the organizational path, theorizing on when and how actors can move off path is less developed. Once an organizational path is established, are there certain conditions that will inevitably lead to lock-in, beyond the self-reinforcing processes? Are there structural conditions that eliminate all possible options, even when actors are seeking alternatives? These questions are particularly relevant in the case of CEO succession. If a CEO were to enter a firm in Phase III, what conditions must exist for the new leader to change the strategic path; is it even possible?

## **2.6 The Role of Context in Organizational Path Dependence**

Although research in path dependence has moved from a discussion on initial conditions and perfunctory events towards a focus on the self-reinforcing processes that lead to lock-in, organizational context has had minimal attention. Only recently, Koch (2011) explored the influence of organizational context on strategic paths. In his comparative study of two newspaper organizations, Koch (2011) argues that strategic paths are inscribed in organizations through self-reinforcing processes but that variability in strategic lock-in will also depend on the degree of alignment with the organization's

context. For example, issues that are both on-path and conform to context will be fast selling, while those that are either off-path conforming to context or on-path deviating from context will be contested or challenged, respectively. Off-path issues that deviate from the context will be excluded altogether. This finding suggests that firms that are locked in and outperforming competitors will continue to choose strategic options that reinforce the path, while firms that are locked in but underperforming will struggle not only to move off path but also move along the path; these firms may not only experience strategic inertia but also become so rigid that they become stuck where they are.

Koch's (2011) analysis suggests that context matters and highlights the role of actors in the path dependence process. In his study, he quotes Pierson (2000, 2004), who argues that context can trigger self-reinforcement. "Context, or various contextual factors such as power, complexity, or ambiguity, are perceived as path-driving forces, which means that they are part of positive feedback loops that contribute directly to path dependence" (Koch, 2011: 341). Organizational context is characterized by the governance and power structure, the formal structure, and the informal structure (Koch, 2011). Both governance and power structure emphasize the role of leadership and, by extension, the role of the CEO, in the path dependence process. If the CEO is the "company's preeminent executive leader, and as such can make a major impact on its strategy" (Hutzschenreuter et al., 2012: 730), then it's likely that the CEO has a direct influence on the firm's organizational path. But how? For the purpose of this research, it is proposed that the CEO influences organizational path dependence through strategy narratives, as a primary mean of giving sense to stakeholders and obtaining capital. Following is a discussion on the role of narratives in the strategy process.

## 2.7 Strategy-as-Narrative

Theory about strategy-as-narrative argues that texts play a central role in sensemaking activities (Barry & Elmes, 2007). Strategy is considered a form of forward-looking fiction; strategists employ narratives to convince readers to pursue specific outcomes:

A narrative view of strategy stresses how language is used to construct meaning; consequently, it explores ways in which organizational stakeholders create a discourse of direction (whether about becoming, being, or having been) to understand and influence one another's actions. Whereas authors of traditional strategy frameworks virtually ignore the role of language in strategic decision making, writers using a narrative approach assume that tellings of strategy fundamentally influence strategic choice and action, often in unconscious ways... (Barry & Elmes, 1997: 432)

Strategy narratives can be used to influence behaviour (Barry & Elmes, 1997; Fenton & Langley, 2011) of both internal and external stakeholders. Narratives are developed to communicate purpose to readers, with an expectation that the readers will consume the narrative and behave in a particular fashion. For example, Lounsbury and Glynn (2001) explain how entrepreneurs use narrative to help venture capitalists understand both the firm's sameness and the firm's distinctiveness within the industry. By drawing on firm resources and potential resources, entrepreneurs' stories connect their firm capabilities to the market needs, thereby gaining legitimacy while portraying a distinctive character (Lounsbury & Glynn, 2001). Similarly, Martens, Jennings, and Jennings (2007) refine this argument by demonstrating that entrepreneurs use narrative to

not only establish firm identity but also demonstrate how they will manage perceived risk.

Conversely, Barry and Elmes (1997) argue that, in order to achieve strategic effectiveness, narratives must seek acceptance, approval, and adoption by readers, through two means: credibility and defamiliarization (as opposed to sameness). When the proposed strategy is significantly different from the current strategy, authors will use these means to convince the reader of the truthfulness of the narrative. Using a third person point of view or non-emotive tone may suggest to readers that the strategy is not tied to any particular person but to the organization as an entity unto itself. Well-structured narratives that follow accepted management practices may suggest a formal approach to strategy, whereas a narrative with a story line (crisis, hero, and plot) may generate emotional involvement of the reader in the strategizing. Readers themselves influence the degree of credibility of the text, by the knowledge and understanding they bring to the interaction (Barry & Elmes, 1997).

The need for defamiliarization derives from the idea that narratives lose their effectiveness over time and, therefore, as new management ideas become fashionable (Abrahamson, 1996), authors need to refresh their narratives with different forms and frameworks. In this case, actors invoke practices from outside of the firm, seeking a new framework from accepted practices generated within the industry or by consultants and business schools (Barry & Elmes, 1997).

Barry and Elmes' (1997) conceptualization builds upon Fisher's (1987) argument that effectiveness of strategy texts can be measured in terms of narrative probability and narrative fidelity. Probability refers to the degree to which the reader is convinced of the

narrative, as it relates to other stories told within the organization, while fidelity is concerned with the degree to which the stories within the text are plausible, that is, the extent to which they accurately reflect social reality (Fisher, 1987). Both Fisher's (1987) and Barry and Elmes' (1997) theorizations suggest that present narratives are bound by what was said and done in the past.

In summary, narratives are used within and by organizations to influence behaviour (Barry & Elmes, 1997) and gain capital (Lounsbury & Glynn, 2001). Stories are influenced by the firm's resources and resource-picking capabilities, but narrators have leeway in how the stories can be constructed (Martens et al., 2007). The narrative, however, is constrained by not only firm resources and capabilities but also context (i.e. the external environment). Authors are challenged to use narrative to emphasize both sameness and distinctiveness, to gain legitimacy while seeking competitive advantage (Barry & Elmes, 1997; Fisher, 1987; Lounsbury & Glynn, 2001). Authors are also challenged to remain factual about the present while being creative about the future (Martens et al., 2007). Research therefore suggests interplay between the past, present and future: authors have leeway in the content of their narratives, but are constrained by their resources (tangible and intangible) and the environment in which they are embedded.

With the temporal constraints placed on narrative, this review suggests that narratives might play a role in organizational path dependence; if authors are constrained by the past, present and future, then narratives themselves may participate in the creation and persistence of organizational paths. Although narratives may be used within

organizations to influence behaviour and gain capital, they may, over time, constrain strategic choice. The following section discusses how this process may occur.

## **2.8 Narrative Infrastructure and Intertextuality**

Research on the use of narrative in strategy is rooted in literature on sensemaking and structuration theory (e.g. Giddens, 1984; Smircich & Stubbart, 1985; Weick, 1995). It is from this research that Fenton and Langley (2011) propose that narrative, as a distinct form of communication, can be used to provide direction to readers, build organizational identity and direct behaviour. This proposition is based on the argument that much of the doing of strategy in and between organizations takes place through either conversation (talking) or writing (text).

[Narrative] is a lens for examining how strategy is practiced and produced... and implies a particular focus on how narrative elements such as sequence, character and plot expressed in talk and text simultaneously reflect and structure people's understanding of what they are doing, of who they are, of what roles they do or can play, and what the organization is or should become. (Fenton & Langley, 2011: 9)

Texts, in this case, are considered concrete documents, produced through strategizing activities, authored by practitioners and reflective of practices. Fenton and Langley (2011), through this narrative perspective, propose that research into strategy texts can illuminate the strategizing that takes place in organizations and within their environment. By studying the content and form of narratives within strategy texts, the way in which they are written and how readers consume them, we may better understand

how strategy texts influence the behaviours of intra and interorganizational actors (Fenton & Langley, 2011).

Fenton and Langley (2011) argue that texts are produced through praxis, where practitioners interchange ideas and eventually produce texts for the consumption of organizational actors<sup>6</sup>. Actors make sense of texts individually and, in part, based on established archetypes (Golant & Sillince, 2007). The same actors consume the texts, resulting in individual (micro-level) behaviour but, in aggregate, both of these activities result in collective firm-level behaviour.

Kuhn's (2008) communicative theory of the firm argues that the role of text (of which narrative is included) in organizations is central to the trajectory of the firm:

---

<sup>6</sup> Fenton and Langley's (2011) ideas are grounded in strategy-as-practice (s-as-p) research, where researchers consider strategy as something that people do (Jarzabkowski, 2004) and study three main areas: (1) practitioners (who they are, what they are doing and what tools they use), (2) practices (how strategy is "done" in organizations), and (3) praxis (the activities that are generated by practitioners) (Whittington, 2006). Fenton and Langley (2011) argue that texts lie at the intersection of narratives of practice, praxis, and practitioners.

[Communication] is a process in which contextualized actors use symbols and make interpretations to coordinate, and control both their own and others' activity and knowledge, which are simultaneously mediated by, and productive of, 'texts'.. In other words, events, actions, agents, situations, systems, and even material/technological artifacts are constituted in discursive practice (Orlikowski, 1992), and these discursive practices are principal in constructing firms. (Kuhn, 2008: 1232)

Texts are subcategorized into concrete and figurative texts: concrete texts are inscribed into permanent form while figurative texts are abstract representations of organizational entities such as practice sites, communities, and firms (Kuhn, 2008). Concrete texts (the focus of this thesis), taken both individually and together, can be considered as a network of texts.

For Kuhn (2008), texts have four main attributes: they represent intentions of authors and previous authors; they mediate conversations and coordinate behaviour; they direct actors' attention and discipline their behaviour; and, they align disparate practices. Kuhn (2008) assumes that a firm's primary objective is to attract capital (i.e. economic, social, cultural and symbolic), and therefore texts are used to obtain consent from stakeholders, a process that begins at the point of the text's production. Embedded within the narrative is the implicit trajectory of the firm, which is shaped to influence stakeholders and, ultimately, obtain capital.

Kuhn's conceptualization builds upon ideas from the Montreal School of organizational communication (e.g. Taylor, 1999), which argues that communication, through a coorientation system, produces the concept of a collective actor and thereby is the genesis of organization. "Text is the product of conversational process, but it is also



its raw material and principal preoccupation. Together, then, conversation and text form a self-organizing loop” (Taylor & Van Every, 2000: 210–211).

In other words, narrative is constitutive of agency and encourages “multi-actor, multi-level processes” (Deuten & Rip, 2007: 71) through a narrative infrastructure. This narrative infrastructure, in an organizational sense, can be defined as:

The evolving aggregation of actors/narratives in their material and social settings that enables and constrains the possible stories, actions and interactions by actors. It can be seen as the ‘rails’ along which multi-actor and multi-level processes gain thrust and direction. (Deuten & Rip, 2007: 75)

What remains in question is the degree to which a narrative infrastructure can influence action and interaction. Should the narrative infrastructure be weak, that is, no clear stories evolve, what influence does the infrastructure have on action, if any at all? Fenton and Langley (2011) suggest that the degree of intertextuality will influence the strength of the framework; if intertextuality is high, the infrastructure may send the organization down a particular path (Fenton & Langley, 2011).

The term ‘intertextuality’ has, over time, taken on numerous meanings. From a linguistic perspective, Fairclough’s (1992) conceptualization is that texts are constructed within context and through other texts, and that texts are not only present in other texts, but also recontextualized through social processes and change over time. Intertextuality in the organizational sciences also refers to the way in which interpreters make sense of texts by drawing upon their knowledge of other texts, including the conventions that exist within particular textual forms (Leitch & Palmer, 2010). Riad, Vaara, and Zhang (2012) support the social constructivist nature of intertextuality, suggesting the following:

Whereas the superficial observation on intertextuality is that all texts contain traces of other texts, its analytical potential lies in the recognition of textuality as an ongoing process, wherein production also involves interaction between texts as well as the anticipation of reading and reader life experience (Boje, 2001; Boje et al., 2004; Meinhof & Smith, 2000). (Riad et al., 2012: 126)

Given its broad definition (and range of definitions), intertextuality has been subdivided into types. Fairclough (1992) considers two categories of intertextuality: the first, constitutive, which considers how texts share discursive features (i.e. themes); and, the second, manifest, which looks at intertextual similarities such as tone. Genette (1997, as explained by Allen, 2000) renames ‘intertextuality’ to ‘transtextuality,’ breaking it down into five categories, as listed in Table 1).

**Table 1: Genette's Types of Transtextuality**

(As summarized by Allen, 2000: 98-104)

| <b>Textual Characteristic</b> | <b>Genette’s (1997) definition, as quoted by Allen (2000)</b>  |
|-------------------------------|--|
| Intertextuality               | “a relationship of copresence between two texts of among several texts” (Genette, 1997: 1)   |
| Metatextuality                | When a text “unites a given text to another, of which it speaks without necessarily citing it (without summoning it), in fact sometimes even without naming it” (Genette, 1997: 4)       |
| Hypertextuality               | “any relationship uniting a text B... to an earlier text A... upon which it is grafted in a manner that is not that of commentary” (Genette, 1997: 5)                                    |
| Paratextuality                | “elements which lie on the threshold of the text and which help to direct and control the reception of a text by its readers” (Allen, 2000: 100) – e.g. titles, sub titles, book jackets |
| Architextuality               | “the reader’s expectations, and thus their reception of a work” (Genette, 1997: 5)   |

Although a debate on the different meanings of intertextuality (e.g. structuralism versus poststructuralist perspectives) is beyond the scope of this thesis, current application of intertextuality to the organizational sciences seems to agree that, within a

narrative infrastructure, the degree of intertextuality can be measured by the relationships between texts, and these relationships can be defined by both structural and discursive (thematic) means. For example, Riad et al. (2012) investigate intertextual relationships within media texts produced during the acquisition of IBM's Personal Computer Division by Lenovo to highlight the "ways in which international M&As are immersed in a seascape of intertextual international relations" (p. 121). Deuten and Rip (2007) undertake a similar approach; in their study of a product creation process, they demonstrate how "attributions and typifications in stories... link up and an overall plot emerges" (p. 69).

The above examples support the notion that texts and narrative, in particular, through intertextual relationships, can influence behaviour and direct action. Notably, Riad et al. (2012) defend their decision to use media texts as their study's unit of analysis, arguing that "intertextual inquiry is relevant for studying privileged forms of representation" (p. 126). Drawing on this argument, the following section discusses current research on CEO narratives, also a privileged type of text, given the strategic role of the CEO.

## **2.9 CEO Narratives**

As previously illustrated in the opening section of this chapter, the CEO is considered the firm's head strategy architect – a grand narrator. As quoted by Barry and Elmes' (1997), Gardner (1995) states:

The formidable challenge confronting the visionary leader is to offer a story, and an embodiment, that builds on the most credible of past syntheses, revisits them in light of present concerns, leaves open a space for future events, and allows individual contributions by the persons in the group. (Gardner, 1995: 56, in Barry & Elmes, 1997: 433)

The relationship between a CEO and his constituents, however, is different between himself and internal (i.e. employees) versus external stakeholders; in the case of the former, CEOs have relational-legal authority, whereas in the case of the latter, the relationship is non-hierarchical and unstructured (Fanelli, Misangyi & Tosi, 2009). These differences may lead to variance in the stories told by CEOs. For example, Palmer, King, and Kelleher (2004) found that change conversations differed between internal and external stakeholders: internally, narratives were characterized as operational change conversations; externally, narratives were characterized as support change conversations. Fanelli and Misangyi (2006) found that CEOs use symbolic management (e.g. strategic vision statements) when communicating through shareholder letters as a means to “buttress their relatively less powerful position” (p. 1052).

In studying the differences between external, public communications (using Letters to Shareholders) and internal, private communications (using planning documents), Fiol (1995) concluded that:

Executives preparing public statements may first engage in internal communications to develop ways of categorizing their worlds. They may then add or delete evaluative statements as part of impression management for external constituencies. (Fiol, 1995: 534)

Fiol (1995) suggested that future research in this area should focus on non-evaluative components of communication, such as orientation towards customers, services,

products, the past /future and internal/external, which are more believable and (more or less) consistently communicated both internally and externally.

Segars and Kohut (2001) extended research on the influence of CEO Letters to Shareholders with the advent of the World Wide Web, and summarized earlier research as follows.

[Research has] enhanced understanding of how the CEO's letter is structured in terms of content, how the CEOs themselves use the communication to rationalize corporate events, and how the letter may be used to predict the future performance of the organization. **These studies have also illustrated the utility of the CEO's letter as a strategic communication tool.** Given this state of affairs and the emergence of digital media for broadcast of the CEO's letter, senior management as well as corporate communications professionals are now charged with a higher level of responsibility in ensuring that the letter is a **strategically effective account of past and future events of the enterprise.** (Segars & Kohut, 2001: 536) (Emphasis added)

Suddaby, Foster, and Trank (2010) argue, however, that the rhetoric of corporate history is not simply an account of events; rather, the narrative created by the firm about its history can be considered a firm resource. By selectively reassembling the past, CEOs can shape history as a means to motivate and persuade stakeholders, and to establish strategic direction.

## 2.10 Conceptual Framework

The above literature review indicates that the CEO is the primary strategic architect in the firm, having both direct and indirect influence over firm performance. Although research exists on the relationship between firm performance and CEO

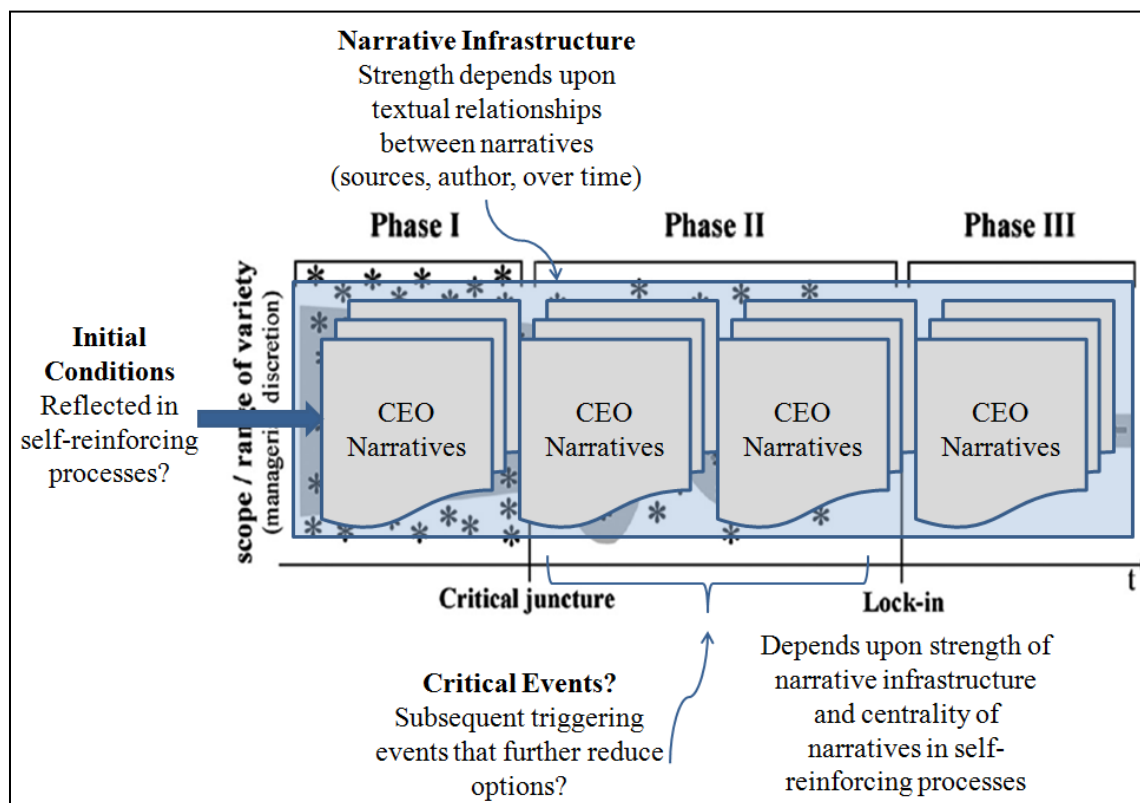
characteristics (i.e. demographics, personality and top management team relationships), there is less understanding on how CEOs participate in the strategy process over time. This research argues that the role of the CEO in the development of an organizational path is significant; however, given issues of access, studying how a CEO participates in the strategy process and the extent of the CEO's influence is challenging.

CEO narratives offer an interesting opportunity to study the influence of the CEO in strategizing, for two reasons: first, given the role of the CEO, the narratives can be considered of privileged and authoritative nature (i.e. they reach numerous stakeholders and can have an immediate impact on stakeholder behaviour); and, second, research suggests that narrative infrastructures can influence firm trajectory. If a set of organizational narratives has significant intertextual relationships, the resulting infrastructure may have a powerful influence in the process of organizational path dependence.

This thesis proposes that the collection of CEO narratives, developed over time, may create a narrative infrastructure that not only represents the firm's organizational path, but also participates in its development and persistence. If the intertextual relationships between CEO narratives are significant, then the narratives themselves may establish a strategic path upon which the organization becomes locked-in. This conceptualization is presented in Figure 3.

**Figure 3: Conceptual Framework**

Overlaid on Sydow et al.'s (2009: 692) Constitution of an Organizational Path



### 2.10.1 Intertextuality and Narrative Infrastructure

The conceptual framework suggests that the CEO narratives form a narrative infrastructure over time and space, through their intertextual relationships. It is proposed that what a CEO says and writes to one set of stakeholders will be linked, in some way, to narratives shared with other stakeholders. The degree of intertextuality, however, is expected to vary; CEOs may or may not stick to their stories. As research suggests, they have leeway in how they draw upon the firm's historical factors and use the unknown to either familiarize or defamiliarize the narrative. The CEO therefore has influence over the degree of intertextuality that exists within the infrastructure.

If the intertextual relationships are significant, the narrative infrastructure generated through the texts may be strong enough to directly influence the firm's trajectory. Given the strategic role of the CEO, their narratives are expected to contain strategic imperatives, with the objective of gaining capital (e.g. resources, legitimacy, or financial). If the intertextual characteristics of CEO narratives are significant, and the purpose of the narratives is to influence behaviour through strategy stories, then the narrative infrastructure may become more powerful than any one of the CEO's individual narratives. In such case, the CEO may be constrained by earlier CEO narratives, and moving off path through any future narrative may become difficult or even impossible. Strategic options may be limited by what they CEO has said in the past.

### ***2.10.2 Self-Reinforcing Processes, Initial Conditions and Critical Events***

The conceptual framework also suggests that, within organizational path dependence theory, the role of self-reinforcing processes, initial conditions, and critical events may be underdeveloped. First, although the effects of self-reinforcing processes have been categorized into four types, certain types of self-reinforcing processes may be more influential than others. Do processes that have longer organizational life pose a greater threat to strategic lock-in or are there other factors that enhance the influence of processes in path dependence?

Second, which initial conditions need to be considered in the organizational path dependence process? Is the influence of initial conditions always and only context dependent; that is, does it always 'depend' or are there certain initial conditions that have greater influence in path dependence than others? For example, are self-reinforcing



processes a type of initial condition? To what extent should organizations be cognisant of these processes and the influence of the processes over time? Are there other types of initial conditions, such as resources, both intangible and tangible, that may also influence strategic lock-in? Are the initial conditions firm-specific or can they be found at other levels? Is it possible that intangible resources, like corporate reputation, can limit (or broaden) a firm's strategic options? These questions suggest that, although there is common agreement that 'history matters,' the definition of 'history' is nebulous.

Third, there is an inherent difficulty from both a research and practical perspective in identifying events and critical junctures. How does one know when a critical event has occurred if it has just happened? If retrospective analysis is the only method, how far along the organizational path must one be to identify a past event that has significantly reduced strategic options? Could this process occur more than once in the creation of the path? Does strategic lock-in occur over a course of collective of events (David, 1985) or is it simply the severity of one singular event that indicates a path has been initiated? These questions suggest that an analysis into critical events and the way in which they reduce strategic options might illuminate how firms can be more cognisant of a critical juncture when it occurs, in lieu of retrospectively, thereby enhancing the value of organizational path dependence theory in practice.

### ***2.10.3 Self-Reinforcing Processes in CEO Narratives***

The conceptual framework argues that, if the narrative infrastructure is strong, CEO narratives may play a role in the organizational path dependence process. The strength of the infrastructure is defined by the textual relationship between the narratives,

which leads to the question: what do the narratives contain? Research suggests that CEO narratives may contain stories that ultimately seek to influence behaviour and gain capital, with a potentially different set of stories for each type of stakeholder. A strong relationship between texts (i.e. intertextuality) would suggest that although the stories may be told in a different way (such as tone), the discursive themes would be similar.

By drawing on organizational path dependence theory, this research proposes that rent-seeking self-reinforcing processes may be both evident and reinforced in the CEO's narratives and that, over time, these processes contribute towards strategic lock-in. How might these processes present themselves? Some ideas follow, using Sydow et al.'s (2009) categorization of the effects produced by these processes.

***Coordination effects.*** Narratives may be used by the CEO to coordinate activities, by identifying the rules and guidelines that organizational actors must follow in their daily activities. For example, CEO organizational announcements may explain roles and responsibilities of specific individuals and/or teams and how various groups are expected to work together. CEO narratives on strategic planning processes (i.e. management by objectives) and procedures of strategic decision-making may also enhance the organization's ability to coordinate activities, while, at the same time, lead the organization down a particular path.

***Complementarity effects.*** CEO narratives may be used to link resources and capabilities within the organization, in order to achieve synergies across functions, business units, or geographies. The CEO may promote specific industry groups or markets as important elements in the organization's strategy, directing employees and other stakeholders to pursue specific means. If CEO narratives focus on specific

resources and capabilities, the exclusion of others (by simply not mentioning them) may lead to missed opportunities (and a perception of decreased strategic options). The narratives may be exclusionary both in what they say (about what not to do) and in what they don't say.

*Learning effects.* CEO narratives may be repetitive in the types of activities they promote or in the work upon which they focus. By continually encouraging employee attention in specific areas of the business, the CEO, through the narrative, can build upon employee knowledge, leading the organization to become skilled or even experts. If CEO narratives promote the use of certain practices and routines, and publicly reward organizations and employees for using them, the organization (overall) might become increasingly proficient and resist learning new ways of working.

*Adaptive expectation effects.* Finally, CEO narratives may (either directly or subtly) emphasize the norms and values of the organization, and the accepted routines and practices that accompany them. The authoritative position of the CEO may provide licence to explicitly identify expected organizational behaviours, while discouraging others, either implicitly or through their absence.

In conclusion, the conceptual framework suggests that research on CEO narratives may provide insight into the influence of strategy narratives in organizational path dependence, as well as insight into the influence of initial conditions, self-reinforcing processes and critical events on strategic lock-in.

## **CHAPTER 3. Research Methods**

### **3.1 Introduction**

This chapter presents a detailed discussion of the research methods used to investigate the influence of CEO narratives in organizational path dependence. The chapter first reviews current research methods on organizational path dependence and narratives. The case study and research design are then presented, outlining the six steps undertaken in the research project: data collection, creation of the event data base, writing of the case history, analysis of the organizational path (and testing for lock-in), CEO narrative analysis, and integration of results. The requirements for each of these steps are discussed in detail within their own sections. The chapter closes with a review of the pilot studies undertaken prior to the research proposal, along with a discussion of trustworthiness and ethical considerations surrounding the qualitative research project.

In addition to the research methods above, the results of a textual analysis on the CEO Emails are summarized in this chapter (under data collection for CEO narratives), the detail of which is documented in Appendix G. Given that no research currently exists on CEO Emails, the objective of the analysis was to determine the content and form of CEO Emails and investigate their role in the strategy process.

### **3.2 Current Methods in Organizational Path Dependence and Narrative Analysis**

This section offers a review of current research methods in organizational path dependence and narrative analysis, to inform the methodological arguments for the research design. However, before outlining current methods, it's important to indicate

that the research requires a phased approach; before analyzing the role of CEO narratives in organizational path dependence, the existence of path dependence, and more specifically, strategic lock-in, must be substantiated. Therefore two specific methods are discussed: first, Path Constitution Analysis, which provides techniques to identify the constitution of an organizational path and test for strategic lock-in, and second, narrative analysis for the characterization of intertextuality. The findings from these two efforts can then be brought together to investigate the specific influence of CEO narratives in the process. Follows is a discussion on each of these methods.

### ***3.2.1 Organizational Path Dependence: Path Constitution Analysis***

Given the relative newness of path dependence research in organizational sciences, most empirical investigations have used qualitative methods, in particular, case studies, along with some simulation studies and experimental designs (Sydow et al., 2012). Vergne and Durand (2010) argue that to effectively test for the existence of path dependence, the only acceptable methods are controlled designs (i.e. computer-based simulations, experimental studies and counterfactual investigation), as case studies allow for researcher bias in the interpretation of results. In addition, they argue that the ex-post nature of the methodological approach does not allow for testing of contingency or long-run equilibrium. That is, case studies are often historical in nature (except ethnographic studies) and presume that path dependence has occurred based on a set of observable data and assumptions of randomness.

Garud, Kumaraswamy, and Karnøe (2009) counter argue that controlled designs are no more objective than case study research (or narrative analysis) and cannot

accurately represent the real world. Following suit, Sydow et al. (2012) put forth a specific methodology, Path Constitution Analysis (PCA), for analyzing the constitution of an organizational path and evidence of lock-in – a method grounded in both path dependence theory and path creation theory (Garud & Karnøe, 2001).

Drawing from Giddens' (1984) structuration theory, Sydow et al. (2012) propose that the analysis of path dependence must address the processual nature of the theory and the embeddedness of actors within the process. They argue that research methods on characterizing an organizational path and testing for strategic lock-in should use an “interpretative, social constructivist manner (Lincoln & Guba, 1985) without, on the one hand, sticking to methodological individualism or simply applying an institutional or structural analysis on the other” (p. 2). Thus, they propose Path Constitution Analysis (PCA) as a method that supports the investigation into the constitution of an organizational path.

As a methodological approach, PCA incorporates the potential agency of actors by encouraging the investigation into six constitutive features of the path: level

interrelatedness, triggering events, non-ergodic<sup>7</sup> process, self-reinforcing processes, lock-in, and multiple actors who “intentionally or unintentionally (re-)produce the path in time-space” using a longitudinal approach (Sydow et al., 2012:5) (see Table 2). Although in their example of the application of PCA they use only qualitative data, Sydow et al. (2012) encourage the use of both qualitative and quantitative data, and argue that a number of qualitative analytical methods (i.e. temporal bracketing, content analysis, and event analysis) can be employed. Most importantly, they argue in support of a qualitative case study approach, informed by theory, which considers the important role of actors in the process. The case would allow for the investigation into the six constitutive features, which are discussed as follows.

---

<sup>7</sup> Sydow et al. (2012) draw on David’s (1985, 2001, 2007) and Arthur (1989, 1994) to define non-ergodicity as follows:

...paths are non-ergodic (Arthur 1994; David 2001, 2007); while different outcomes are possible at the beginning, the range of options narrows down over time in the face of self-reinforcing processes, in the form of “increasing returns” (Arthur 1989, 1994; David 1985), for instance, which determine the outcome of the process and will most likely lead into a technological, institutional or organizational lock-in.”

**Table 2: Constitutive Features and Potential Indicators of Paths**

(Sydow et al., 2012: 2)

| Constitutive feature              | Definition  | Indicators   |
|-----------------------------------|---|--|
| <b>Level interrelatedness</b>     | A focal level of analysis that needs to be conceptualized in relation to surrounding levels of analyses that are more micro and macro.  | Actors and/or observers relate their activities (1) recurrently, (2) intensively, (3) and to an important extent not only to a focal, but at the same time to more micro and macro levels of analysis.   |
| <b>Triggering event</b>           | Incident that potentially induces the current and/or future trajectory of a path.   | Actors and/or observers assess an incident as being (1) decisive, (2) initiating self-reinforcing processes for an option's likelihood to be prevalent in the future ...   |
| <b>Non-ergodic process</b>        | Course of simultaneous and/or sequential events that lead to an outcome, which is not automatically determined from the onset but is not arbitrarily, either.   | From the onset, (1) options of equal potential are (2) narrowed down to (3) a final solution.  |
| <b>Self-reinforcing processes</b> | Course of interlocking simultaneous and/or sequential events that are progressively aligned to each other, thereby fostering the overall course of a path in an overall direction and potentially leading to a momentum; in this connection, certain initial conditions are connected with certain results. | Over time, (1) (interorganizational) overarching institutions that serve to formulate and pursue joint objectives are established, (2), the design and usage of complementary management systems with regard to organizational aspects, and operations, (3) learning effects reinforce ... |
| <b>Lock-in</b>                    | Situation or outcome where the trajectory of a path becomes confined to a single solution that does not need to be efficient.   | (1) investments are stable or increase with regard to the prevailing option, (2) investments in alternatives are reduced, (3) alternative options are considered to be niches ...  |
| <b>Multiple actors</b>            | Constellations of individual or collective agents.  | (1) number of actors (more than two), (2) properties of actors, (3) actors bound together by sets of relations ...   |

***Level interrelatedness.*** Sydow et al.'s (2012) model of Path Constitution Analysis is grounded in structuration theory. They argue that strategic behaviour is played out by powerful agents through recursive activities both within their level (e.g. the organization) and between levels (e.g. the industry, the media, and other stakeholders). PCA therefore implies that the researcher analyze the path from a focus level of analysis but within the context of a greater boundary. Evidence of interrelatedness must exist to characterize the constitution of the path.



**Actors.** At least two actors or actor groups are required in the development of the path, whereby the actors influence each other, the path, or both. Actors may exist at the upper or lower boundary levels, in addition to the focus level of analysis.

**Triggering events.** A triggering event is one that influences the strategic path in the long run. At the time, it may seem neither important nor relevant, but in retrospect, a triggering event is identified as a critical event in time that directly influenced the subsequent strategic choices at the level of analysis. The actors may or may not be aware of the triggering event but either they or a third party is able to retrospectively attribute the event as a direct cause to the path trajectory.

**Non-ergodic process.** Non-ergodicity suggests that the constitution of the path is not random, although initially the formation of the path (and associated lock-in) is not guaranteed. Strategic options are initially available, due to events occurring either simultaneous or sequentially, or both. A specific path emerges over time, as strategic options are reduced. Non-ergodicity also implies, however, that options are not eliminated; rather, many options are available, but the *likelihood* of their occurrence drops substantially, leaving only a few choices available in the end.

**Self-reinforcing processes.** The self-reinforcing processes that provide coordination, complementarity, learning, and adaptive expectation effects operate within the focal level of analysis and the upper and lower boundary levels). Through positive feedback, these processes initially are rent-seeking and, in combination, carve out a particular strategic path. Over time, due to the rent-seeking nature of the processes (and their degree of embeddedness), they may lead to rigidity, a form of strategic inertia that results in lock-in.

***Lock-in.*** Lock-in occurs as a likely outcome to the self-reinforcing processes previously discussed; that is, the outcome is predictable. Lock-in does not suggest or imply that options are eliminated; rather, lock-in occurs in spite of other options being available, due to the self-reinforcing processes and the cognitive and normative understanding of strategic decision makers. Although actors may have choices, only one strategic option may seem legitimate while other options may seem inferior.

### ***3.2.2 Narrative Infrastructure and Intertextuality: Content Analysis***

In their review of narrative research in organizational sciences, Rhodes and Brown (2005) argue that narrative methodologies are specifically adept at analyzing temporal issues:

[R]ather than viewing organizations as static, homogeneous and consistent entities, narrative approaches demonstrate the processual characteristics of organizations and can render both the paradoxes and complex causal relationships inherent in organizational change open to analysis. (Rhodes & Brown, 2005: 177)

Given that this research focuses on the role of CEO narratives in organizational path dependence, it is implied that narrative analysis will be undertaken. Rhodes and Brown's (2005) reflection, however, raises a potential problem. Although a narrative analysis to understand temporal issues can highlight evidence of path dependence, the conceptual framework for this research suggests that the narratives themselves are influencing that path. The narrative analysis, therefore, must focus specifically on the influence of CEO narratives in organizational path dependence and, as the conceptual framework suggests, narrative infrastructures and intertextuality.

Although narrative analysis in regards to narrative infrastructures and intertextuality is relatively sparse in the organizational sciences, existing studies have used content analysis to characterize the narratives, drawn either from retrospective interviews or in-vivo conversations. Two such studies are discussed to illustrate these methods: Deuten and Rip (2007) and Riad et al. (2012).

Deuten and Rip's (2007) research focuses on the narrative infrastructure created in product creation processes. In an effort to understand how narrative influences the development of a product over time, the researchers analyze not only the narratives produced through interviews, but also the documentation generated during the project, such as emails, memorandums and other formal written texts. With this large body of narratives, they reconstructed the sequence of events and illustrated how a meta-story emerges through the development of a narrative infrastructure.

Riad et al. (2012) studied the intertextual relationships between narratives produced during an international acquisition of IBM's personal computer division and Lenovo. In their study they argued that the texts produced by the media during the acquisition represented an ongoing authoritative dialogue that illustrated the relationship between "intertextuality, international relations and international management" (Riad et al, 2012: 142). They examined the relationships between texts including either direct reproduction or paraphrasing of ideas. In addition, to understand constitutive intertextuality (Fairclough, 1992), they performed a content analysis using open coding to identify and connect discursive themes within and between the individual texts. Using this approach, Riad et al. (2012) were able to support their argument that when

intertextual relationships between authoritative texts are significant, they not only represent but also contribute towards relationships through discursive means.

### **3.3 Research Design**

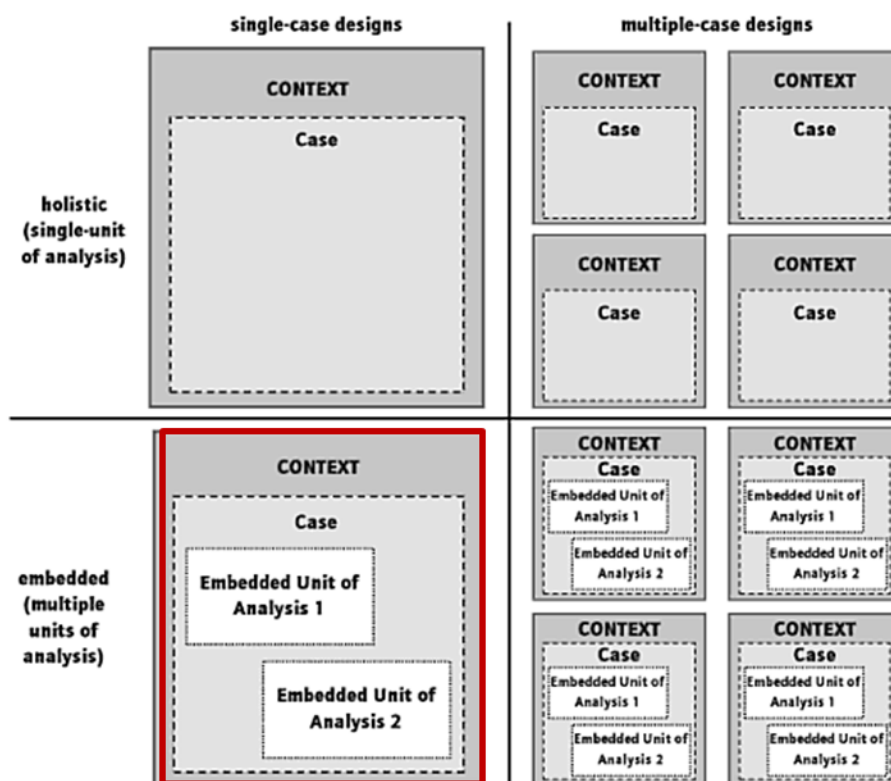
To test for organizational path dependence and the influence of CEO narratives in the process, a case study was undertaken. This section discusses the types of case studies available to researchers and the arguments for the choice of a single case study with embedded units of analysis (Yin, 2003). The section follows with an outline of the overall research design that supports investigation of the conceptual framework proposed in the previous chapter.

#### ***3.3.1 Case Study Design***

Yin (2003) presents four design types of case study research (see Figure 4). In all types, the case is embedded within the context, separated by a soft boundary, suggesting that the distinction between the case and context may be blurred (as is the case with organizational path dependence). Single case studies are appropriate for the study of critical cases (to test theory), an extreme case (to understand a serious disorder), a typical case (representative of the everyday), a revelatory case (unusual access), or a longitudinal case (over time). When there is only one unit of analysis in the case study (e.g. the organization), the study is holistic in nature; appropriate for organizational level phenomenon but can be highly abstract. Multiple units of analysis in a single case are called embedded case studies, and allow for a detailed level of investigation. Multiple

case studies use replication logic, as opposed to sampling logic, where the intention is to develop rich theoretical frameworks (Yin, 2003).

**Figure 4: Case Study Designs (Yin, 2003: 40)**



For this research, a single case study was chosen, using embedded units of analyses. The primary unit of analysis for the research was the organization itself, with CEO narratives as the embedded unit of analysis. The research design supported the exploration of the narratives within a given organization (single case) over time, between actors (CEOs) and between different sources of narratives.

As suggested by Bennett and Elman (2006), “It is appropriate to study a case in which the outcome is known if the purpose is to determine whether a purported necessary cause is operating it” (p. 462). To study the role of CEO narratives on path dependence it

was therefore important to select a research site where there was an intuition that strategic lock-in may have occurred. Although lock-in does not necessarily imply failure, an organization that failed during major industry shifts, while many of its peers did not, presents itself as a candidate. Nortel, a Canadian-based multinational enterprise, operating in the high technology industry of telecommunications equipment manufacturing was therefore chosen as the research site. The case covered the years between 2002 and 2010, a period when the organization moved from being an industry leader into bankruptcy protection (i.e. Chapter 11). In addition to having potentially experienced strategic lock-in, this research site also offered an additional opportunity of studying the influence of CEO succession within the process, as the firm was led by four different CEOs during the 8- year period, as outlined in Table 3.

**Table 3: Nortel CEOs and their Tenure**

| CEO                          | Start of Tenure | End of Tenure | Months of Tenure |
|------------------------------|-----------------|---------------|------------------|
| Frank Dunn                   | April 2002      | April 2004    | 24               |
| William Owens                | April 2004      | November 2005 | 20               |
| Mike Zafirovski              | November 2005   | August 2009   | 45               |
| Paviter Binning <sup>8</sup> | August 2009     | March 2010    | 8                |

---

<sup>8</sup> Paviter Binning held the official position of Chief Restructuring Officer (CRO), as Nortel abolished the position of CEO upon Zafirovski's departure and Binning's appointment; the CRO position held equivalent responsibilities.

In terms of research methodology, Nortel falls into the category of an exemplary single case (Yin, 2003). First, the case is *typical* of companies that suffered losses during the global economic crisis of 2008; many companies faced difficulty when the economy collapsed, due to the dramatic reduction in available capital.

Second, the case is *unique*, as dramatic events took place within the firm throughout the period of study. For example, Nortel's stock price reached an all-time high of CDN \$124.50 in 2000 (representing one third the market value of the Toronto Stock Exchange) to a low of less than \$2 about eighteen months later. In 2006, the firm earned a profit for the first time in seven years and then, a few years later, fell into bankruptcy protection. The firm also suffered from numerous financial restatements and experienced four CEO successions.

Third, the case is *revelatory*. Access is a major challenge when using narrative analysis for the study of strategy and strategizing. In this case, access to a private data set (i.e. the CEO Emails) provided a unique perspective on strategy texts within organizations.

Finally, the case is *longitudinal*. The study includes CEO narratives gathered from an 8-year period. The duration of the downfall, the major periods of change, and the CEO successions provide an ideal setting for a revealing longitudinal study (Pettigrew, 1990).

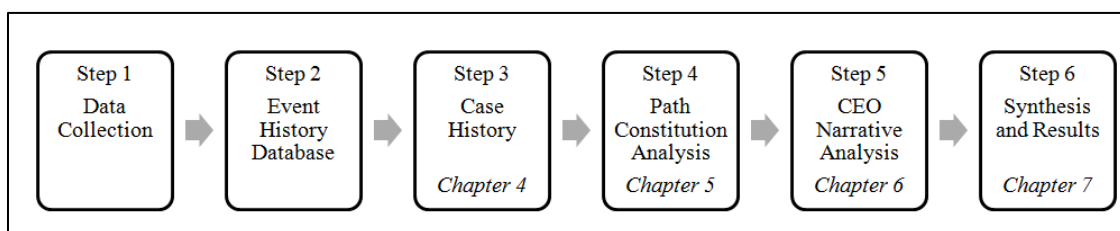
The case also carries *social significance* (Leitch & Palmer, 2010). When Nortel entered into bankruptcy protection, it was legally allowed to default on certain obligations, leaving a long list of creditors without payment. Additionally, thousands of employees lost their jobs and pensioners lost portions of their retirement, while top executives continued to receive bonus payments.

Finally, during the period of study, Nortel was a public company. According to Kuhn (2008), firms seek to gain consent from stakeholders in order to attract capital. Financial capital, for a public firm, is core to its existence. As a public company, Nortel provided an appropriate context for understanding the influence of strategy narratives on the firm's trajectory, given that the CEOs produced numerous texts for both internal and external stakeholders.

### 3.3.2 Research Design

Due to the complexity in the research program – that is, must first test for path dependence, then analyze the narratives for their role in the process – a six-step research design was established (as shown in Figure 5).

**Figure 5: Research Design**



Organizational path dependence theory suggests that the investigation of the influence of CEO narratives is a process research problem. Process research is defined as follows:

Process research is concerned with understanding how things evolve over time and why they evolve this way (see Van de Ven & Huber, 1990), and process data therefore consist largely of stories about what happened and who did what when – that is, events, activities, and choices ordered over time. (Langley, 1999: 692)



Using Langley's (1999) strategies for theorizing from process data, a 6-step analytical approach was undertaken (see Table 4). Each step in the analysis informed the following, such that, by the final step, it was possible to synthesize the results and theorize on the influence of CEO narratives in the organizational path dependence process. Each of these steps is discussed in detail in the following sections.

**Table 4: Analytical Approach**

| Step | Objective  | Methodology  |  |
|------|--|--|--|
| 1    | Data Collection                                    | Collect both event data (industry and firm level), along with CEO narratives   | Historical document search and quantitative gathering  |
| 2    | Event History and Discourse Event History Database | Create chronological listing of events and narratives  | Sequencing of incidents and events   |
| 3    | Case History                                       | Establish context of the case  | Narrative strategy   |
| 4    | Path Constitution Analysis                         | Characterize the organizational path and determine if strategic lock-in occurred   | Path Constitution Analysis; visual mapping and temporal bracketing of events, grounded coding                      |
| 5    | CEO Narrative Analysis                             | Identify the content and form of the narratives, characterize textual relationships, define the narrative infrastructure | Content analysis using grounded coding to identify meanings and patterns - within and between texts, and over time |
| 6    | Synthesis and Results                              | Determine the influence of CEO narratives in organizational path dependence  | Synthesis of results   |

### 3.4 Step 1A: Event Data for Path Constitution Analysis (PCA)

Path constitution analysis (PCA) relies on event data. To perform the PCA on Nortel, and the pre-requisite case study, event data was gathered not only for the period under analysis, but also for the years prior as a means to determine initial conditions. Various electronic sources were used to collect Nortel data and industry data. Over 2300 electronic documents (not including the CEO narratives) were collected, as outlined in

see Table 5. Follows is a description of each data set, including the characteristics of the data and how it was obtained.

**Table 5: Summary of Data used for Path Constitution Analysis**

| <b>Data Set</b>                                      | <b>Data Type</b>                | <b>Quantity</b> | <b>Source</b>                                    | <b>Purpose</b>             |
|--|---------------------------------|-----------------|--|----------------------------|
| Nortel Securities Documents                          | Narrative and quantitative data | 732             | SEDAR Database                                   | Nortel Events              |
| Media Articles                                       | Narrative                       | 1495            | ABI Global and Factiva Database                  | Nortel and Industry Events |
| Industry Reports - Competitors and market in general | Narrative and quantitative data | 51              | Firm websites                                    | Industry Events            |
| Industry Reports - Nortel                            | Narrative and quantitative data | 17              | Sources websites (through library subscriptions) | Nortel Events              |
| Analyst Ratings                                      | Quantitative data               | n/a             | Wharton Research Data Services                   | Nortel Events              |
| Analyst Reports                                      | Narrative                       | 50              | Thompson One                                     | Nortel and Industry Events |
| Financial data – Nortel and competitors              | Quantitative data               | 4               | Mergent  | Nortel and Industry Events |
| Stock price history – Nortel and competitors         | Quantitative data               | n/a             | Canadian Financial Markets Research Centre       | Nortel and Industry events |

### 3.4.1 *Nortel Securities Documents*

To identify significant corporate events, every document filed by Nortel on the System for Electronic Document Analysis and Retrieval (SEDAR<sup>9</sup>) was downloaded, manually in PDF format, reviewed, renamed (date, type and topic) and verified for duplication. After removing all duplications, 732 documents were categorized based on filing type (see Table 6). The documents ranged from standard financial reports, to material (8-K) filings on changes in business strategies, along with changes in executive personnel (and their associated compensation and benefits practise), letters from the securities commissions (re: financial restatements), press releases, prospectuses, purchase and sale agreements, and changes to corporate documents such as ethics and stock plans.

**Table 6: Nortel Corporate Documents from SEDAR**

| <b>SEDAR Document</b>                            | <b>Quantity</b> |
|--|-----------------|
| AGM Notices, proxy statements, forms, etc...     | 80              |
| Certificate of Amendment                         | 1               |
| Code of Ethics                                   | 4               |
| Credit/Equity Facilities, Agreements, Indentures | 9               |
| Disclosures                                      | 8               |
| EDC agreements and waivers                       | 9               |
| Form 10-K (Annual report)                        | 13              |
| Form 10-Q (Quarterly report)                     | 33              |
| Form 11-K (Investment plan report)               | 4               |

<sup>9</sup> SEDAR, the System for Electronic Document Analysis and Retrieval, is a publicly available website that includes all Canadian public company material information [www.sedar.com](http://www.sedar.com)

| <b>SEDAR Document</b>  | <b>Quantity</b> |
|--|-----------------|
| Form 12b-25 (request for late filing)                                  | 8               |
| Form 13-502 (Participation fees)                                       | 10              |
| Form 15 (Terminate reporting)  | 3               |
| Form 28 (Annual filing of reporting issuer)                            | 2               |
| Form 52 (CEO/CFO Report Certifications)                                | 69              |
| Form 8-K (Material event) no news release                              | 102             |
| Form 8-K (Material event) with news release                            | 153             |
| News Releases  | 149             |
| Nortel Corporate By Law No 1   | 1               |
| Notice of Withdrawal as issuer   | 1               |
| Prospectus, offerings  | 5               |
| Purchase Agreement   | 1               |
| Registration Rights Statements and Agreement                           | 8               |
| Restated certificate of incorporation                                  | 1               |
| Sale Documents   | 34              |
| Securities Exchange Commission / Ontario Securities Commission Letters | 3               |
| Security Agreements  | 2               |
| Settlements  | 6               |
| Stock Plans (all types)  | 12              |
| Undertaking 2004-2005  | 1               |
| <b>Total</b>   | <b>732</b>      |

### **3.4.2 Media Articles**

To identify external events and events that were considered newsworthy, a search on articles published about Nortel was performed in the ABI Global and Factiva databases. Search words included leadership, performance, organization, and strategy;

1495 documents were found (see Table 7)<sup>10</sup>. Each of these articles was downloaded electronically in text format, verified for duplication, converted to word, formatted for consistency, and labelled by date, type, and title.

**Table 7: Media Articles**

| <b>Media</b>                     | <b>Total Articles</b> | <b>Dunn Interviews</b> | <b>Owens Interview</b> | <b>Zafirovski Interview</b> | <b>Binning Interview</b> |
|----------------------------------|-----------------------|------------------------|------------------------|-----------------------------|--------------------------|
| Baud Telecom Company             | 1                     |                        |                        | 1                           |                          |
| Benefits Canada                  | 1                     |                        |                        |                             |                          |
| Bloomberg                        | 10                    |                        |                        |                             |                          |
| Broadband Business Forecast      | 1                     |                        |                        |                             |                          |
| Business Communication Review    | 8                     |                        |                        |                             |                          |
| Business Strategy Series         | 1                     |                        |                        |                             |                          |
| Business to Business             | 8                     |                        |                        |                             |                          |
| Business Today                   | 3                     |                        |                        |                             |                          |
| Business Week (including online) | 37                    |                        |                        | 3                           |                          |
| CA Magazine                      | 1                     |                        |                        |                             |                          |
| Canadian Business                | 29                    |                        |                        | 1                           |                          |
| Canadian Electronics             | 1                     |                        |                        |                             |                          |
| Canadian HR Reporter             | 1                     |                        |                        |                             |                          |
| CIO Canada                       | 1                     |                        |                        |                             |                          |
| Communications News              | 1                     |                        |                        |                             |                          |
| Computer Dealer News             | 4                     |                        |                        |                             |                          |
| Computer World                   | 9                     | 1                      |                        |                             |                          |

<sup>10</sup> Articles relating specifically to Nortel products and of a technical nature were not included in the data collection, as they were considered not directly applicable to the construction of the organizational path (i.e. they were not considered strategy narratives).

| <b>Media</b>                         | <b>Total<br/>Articles</b> | <b>Dunn<br/>Interviews</b> | <b>Owens<br/>Interview</b> | <b>Zafirovski<br/>Interview</b> | <b>Binning<br/>Interview</b> |
|--------------------------------------|---------------------------|----------------------------|----------------------------|---------------------------------|------------------------------|
| Computing Canada                     | 2                         |                            |                            |                                 |                              |
| CRN                                  | 11                        |                            | 1                          | 1                               |                              |
| Customer Relationship<br>Management  | 2                         |                            |                            |                                 |                              |
| Electronic News                      | 4                         |                            |                            | 1                               |                              |
| Embassy                              | 2                         |                            |                            |                                 |                              |
| eWeek                                | 20                        |                            |                            |                                 |                              |
| Financial Post                       | 2                         |                            |                            | 1                               |                              |
| Financial Times                      | 70                        | 1                          | 1                          | 5                               |                              |
| Financial Wire                       | 12                        |                            |                            |                                 |                              |
| Forbes                               | 2                         |                            |                            |                                 |                              |
| Global Telecoms Business             | 2                         |                            |                            |                                 |                              |
| Globe and Mail                       | 549                       |                            | 4                          | 15                              |                              |
| Hill Times                           | 3                         |                            |                            |                                 |                              |
| Industrial Engineer                  | 1                         |                            |                            |                                 |                              |
| Information Week                     | 15                        |                            |                            |                                 |                              |
| Ivey                                 | 1                         |                            |                            |                                 |                              |
| MacLean's                            | 5                         |                            |                            |                                 |                              |
| Manufacturing Business<br>Technology | 1                         |                            |                            |                                 |                              |
| Microscope                           | 1                         |                            |                            |                                 |                              |
| MRT Magazine                         | 1                         |                            |                            |                                 |                              |
| National Post                        | 394                       |                            | 2                          | 6                               |                              |
| Network Computing                    | 1                         |                            |                            |                                 |                              |
| Network World                        | 81                        | 1                          | 2                          | 3                               |                              |
| New York Times                       | 60                        |                            |                            | 1                               |                              |
| RCR Wireless News                    | 9                         |                            |                            | 3                               |                              |
| Report on Business                   | 5                         |                            |                            |                                 |                              |
| Research Money                       | 1                         |                            |                            |                                 |                              |
| Smart Money                          | 2                         |                            | 1                          |                                 |                              |
| Telecom Asia                         | 1                         |                            |                            | 1                               |                              |
| Telecom Web News Digest              | 10                        |                            |                            | 1                               |                              |
| Telephony                            | 13                        |                            |                            |                                 |                              |

| Media                      | Total Articles | Dunn Interviews | Owens Interview | Zafirovski Interview | Binning Interview |
|----------------------------|----------------|-----------------|-----------------|----------------------|-------------------|
| United Macedonian Diaspora | 1              |                 |                 |                      |                   |
| USA Today                  | 5              |                 |                 |                      |                   |
| Wall Street Journal        | 88             | 2               | 2               | 3                    |                   |
| Wireless Week              | 2              |                 |                 |                      |                   |
| <b>Total</b>               | <b>1495</b>    | <b>5</b>        | <b>13</b>       | <b>46</b>            | <b>0</b>          |

Note: Interview articles are included in this list to show the source of the articles; they are included in the total number of media articles.

### 3.4.3 Industry Reports

To compare Nortel's strategy to that of its competitors and to better understand the industry and market factors, 64 industry reports were obtained from Mergent, Datamonitor, Hoover, Financial Post and the International Telecommunications Union, a NATO organization (see Table 8).

**Table 8: Industry Reports**

| Report Type                            | Source  | Quantity | Period  |
|--|---|----------|---|
| Telecommunications Industry Analysis   | Mergent   | 47       | 2003-2010; Europe, Asia Pacific and North America |
| Nortel Reports                         | Hoover, Datamonitor, Financial Post, Mergent        | 17       | 1996-2010   |
| International Telecommunications Union | <a href="http://www.itu.int">http://www.itu.int</a> | website  | 1990-2010   |

### 3.4.4 Analyst Ratings and Reports

Quarterly analyst ratings and reports were included in the analysis, to investigate the interaction between Nortel and the financial markets. Analysts typically publish comments directly following a firm's earning call, in which financial results (or other major material matters, such as a new CEO) are discussed. Within these reports, the

analysts also publish a rating that serves as guidance on whether to buy, sell, or hold the stock. Analyst reports were obtained through Thompson One, while the ratings were obtained through the Wharton Research Data Services.

#### **3.4.5 *Financial Data and Stock Price***

To supplement the industry analysis (competitor and Nortel performance), financial data on Nortel and Nortel's direct competitors (i.e. Alcatel-Lucent, Cisco, Ericsson, and Siemens) was obtained through Mergent, while stock price data was obtained through the Canadian Financial Markets Research Centre.

### **3.5 Step 1B: CEO Narrative Data**

CEO strategy narratives are produced for both external (public) and internal (private) consumption. They can be in both written and verbal form. Public narratives can be found in sources that include Letters to Shareholders, CEO quotes in press releases, CEO interviews with the media, CEO speeches at events, annual general meetings, CEO analyst calls, and the associated presentation material that often accompanies the more formal events. Private narratives may be found in meeting minutes and internal memos, along with formal planning documents. These sources are more difficult to obtain, due to confidentiality issues and the time constraints placed on the CEO.

To investigate the role of CEO narratives on path dependence, variance in CEO narrative sources is helpful to not only confirm findings but also detect differences between types of narratives and identify the strength of the narrative infrastructure. Five sources of CEO narrative were included in this research (for a total of 389 documents),



based on both availability of the documents and theoretical reasoning, including: CEO Analyst Calls, CEO Letters to Shareholders, CEO News Releases, CEO Media Interviews, CEO All-employee Emails, and CEO Strategy presentations that accompanied formal CEO events (see Table 9). Each of these sources of narratives is discussed in turn; first, from a theoretical perspective and second, in terms of the data collection processes and sample size.

**Table 9: CEO Narratives**

| CEO Narratives (source)     | Dunn      | Owens     | Zafirovski | Binning   | Total      |
|-----------------------------|-----------|-----------|------------|-----------|------------|
| CEO Analyst Calls           | 8         | 11        | 18         | None held | 37         |
| CEO Letters to Shareholders | 2         | 2         | 3          | None held | 7          |
| CEO News Releases           | 20        | 23        | 43         | 5         | 91         |
| CEO Media Interviews        | 5         | 13        | 46         | -         | 63         |
| CEO All-Employee Emails     | 22        | 26        | 109        | 11        | 168        |
| <b>Total</b>                | <b>57</b> | <b>75</b> | <b>238</b> | <b>16</b> | <b>389</b> |

### 3.5.1 *CEO Analyst Calls*

Analyst calls are held by public companies to disclose earnings information and, on occasion, significant material events. Previously held in a face-to-face meeting format, the advent of information and communication technologies moved these calls to a telephone conference call format. The conference calls are usually hosted by the firm's director of Investor Relations and include the following: a financial overview by the

CEO, financial details by the CFO, wrap-up by the CEO, a question and answer period with the analysts in attendance, and a closing statement (Crawford Camiciottoli, 2010).

In October 2000, the United States Securities and Exchange Commission (SEC) adopted new rules in relation to “Selective Disclosure and Insider Trading.” One of these rules included Regulation FD (Fair Disclosure), which stipulated the following:

Regulation FD (Fair Disclosure) is a new issuer disclosure rule that addresses selective disclosure. The regulation provides that when an issuer, or person acting on its behalf, discloses material nonpublic information to certain enumerated persons (in general, securities market professionals and holders of the issuer's securities who may well trade on the basis of the information), it must make public disclosure of that information. The timing of the required public disclosure depends on whether the selective disclosure was intentional or non-intentional; for an intentional selective disclosure, the issuer must make public disclosure simultaneously; for a non-intentional disclosure, the issuer must make public disclosure promptly. (SEC, 2000, para 2 of Executive Summary, rule 17 CFR 243.100-243.103)

With the inclusion of analyst calls in the public domain, research on conference calls within the field of business has increased. For example, Larcker and Zakolyukina (2012) studied analyst calls for deceptive language, in part, because they are considered to contain spontaneous disclosures, unlike quarterly and annual reports (i.e. 10-Qs and 10-Ks). Crawford Camiciottoli (2010) found that analyst conference calls display characteristics of intertextuality with business meetings, academic conference presentations, and press releases; and move between monologic (presentations) and dialogic discourse (Q&A).

In finance, a separate stream of research studies the relationship between executives and analysts in conference calls (e.g. Mayew, 2008) and the influence of conference calls on analysts' forecast (e.g. Bowen, Davis & Matsumoto, 2002). Brown, Hillegeist, and Lo (2004) found that the conference call generally communicates material information to the market and that there is significant variance between calls over time. Research on analyst calls, although relatively new in the field of management (versus accounting), suggests that the calls contain CEO strategy narrative about both the present and future state of the firm.

Transcripts from every Nortel analyst call held during the period of study were obtained from the Fair Disclosure Wire, through the ABI/Inform Global database, for a total of 37 transcripts. Due to Regulation FD (SEC, 2000), analyst call transcripts must be made publicly available. With the exception of the first analyst call from Q1 2002, which only included the event brief, all earnings calls included a verbatim transcript of the entire event, including the question and answer period. Analyst calls run by Nortel that were not specific to earnings but were directed by the CEO (8 of the 37) were also included in the analysis. These included calls held in 2004 (restatement announcement, CEO change), 2005 (acquisition, CEO change, special project), 2006 (business update), 2007 (statement delay) and 2008 (revised financial outlook). All 37 transcripts were downloaded electronically in rich text and subsequently formatted so that the content analysis software could identify each verbatim quote by author. The files were named by date, type, and topic of the call.

### 3.5.2 *CEO Letters to Shareholders*

Since the late 20<sup>th</sup> century, Letters to Shareholders (Letters) have been used in numerous organizational studies to investigate psychological constructs such as risk taking attitude, cognitive maps, and attention patterns in CEOs (McClelland, Liang & Barker, 2010). Segars and Kohut's (2001) research indicates that the content of Letters represents the firm's strategy and can be used to predict future performance. They summarize Clapham and Schwenk (1991) as follows: "The CEO's letter provides an important cue to employees and prospective investors for the formation of cognitive impressions regarding the 'personality' of the enterprise in terms of performance" (p. 536).

Recently, McClelland et al. (2010) used Letters to understand CEO commitment to the status quo and Fanelli et al. (2009) used them to measure CEO charismatic visions. Craig and Amernic (2011) analyzed Letters for destructive narcissism, arguing that such language (regardless of the CEO personality) may suggest a dysfunctional corporate culture.

Fiol (1995) found that managers' internal communication was often similar to their external communication, especially in terms of non-evaluative statements. D'Aveni and MacMillan (1990) found that Letters of failing firms deny crisis while focusing on short-term goals, while Abrahamson and Park (1994) found that corporate officers may, at times, conceal negative organizational outcomes from shareholders.

Collectively, this research suggests that the Letter to Shareholders includes CEO strategy narrative, reflects managers' current understanding of the organization and its environment, and presents the CEO's vision of the future.

Nortel's CEO Letters to Shareholders from years 2001 to 2007 were included in the analysis. They were extracted from the company's annual reports, which were downloaded in PDF from the System for Electronic Document Analysis and Retrieval (SEDAR). For the years 2002 to 2007, the Letters were signed by only the CEO. For the 2001 Letter, both Frank Dunn and the Chairman of the Board, Lynton Red Wilson, signed the letter; it was treated as a CEO narrative like the Letters from the other years. There were no Letters from 2008 onwards, when Nortel was in bankruptcy protection. Each Letter was kept in PDF format and named by date and type.

### **3.5.3 *CEO News Releases***

Corporate news (press) releases are issued for a variety of newsworthy subjects: quarterly and annual earnings, management changes, product announcements, and shifts in business strategy. According to Chatterjee and Hambrick (2007), the CEO has the ultimate say in what the release says. Graffin, Carpenter, and Boivie (2011) argue that news releases can be used by firms to create strategic noise "to make an organizational situation less transparent and consequently more difficult to analyze" (p. 765). Given the materiality and influence of news releases, and the CEO's authority over its content and his/her own quotes, the release can be considered a valid source of CEO narrative.

All news releases issued by Nortel from April 2002 to March 2010 were downloaded from the SEDAR website, in PDF form. News releases were filed by Nortel either as separate documents or as exhibits in SEC Form 8-K. In some cases, duplicate news releases were filed; both as a separate document and as an exhibit in the 8-K. Over 400 8-K and standalone news release documents were downloaded from SEDAR. If

duplicate news releases were found, the news release embedded within the 8-K was retained (to preserve context), while the standalone copy was removed. In total, 299 news releases were retained for the purpose of the research, of which 91 contained CEO quotes. The news releases were kept in PDF format and named by date, source (i.e. SEDAR), type, and topic.

#### ***3.5.4 CEO Media Interviews***

Although media interviews with CEOs provide a fertile ground for narrative, no management studies were found in this area.

As indicated in the previous section, media articles on Nortel were collected to identify and corroborate both industry and Nortel events. During the data collection of the media articles, every media interview was identified and categorized within the event database. These media interviews were included as sources of CEO narratives. Of the 1495 media articles, 63 were found to either be full interviews or contain original CEO quotes (see Table 10). Some media articles included quotations drawn from the CEO analyst calls but were not included, as the quotes from the analyst calls were analysed as part of the complete call, in its original (verbatim) form. Most of the 63 articles were downloaded in rich text and formatted for the content analysis software; a select few were only available in PDF format and remained that way. Each article was named by date, type, source (media), and title.

**Table 10: CEO Media Interviews**

| <b>Media Source</b>              | <b>Dunn<br/>Interviews</b> | <b>Owens<br/>Interviews</b> | <b>Zafirovski<br/>Interviews</b> | <b>Binning<br/>Interviews</b> |
|----------------------------------|----------------------------|-----------------------------|----------------------------------|-------------------------------|
| Baud Telecom Company             |                            |                             | 1                                |                               |
| Business Week (including online) |                            |                             | 3                                |                               |
| Canadian Business                |                            |                             | 1                                |                               |
| Computer World                   | 1                          |                             |                                  |                               |
| CRN                              |                            | 1                           | 1                                |                               |
| Electronic News                  |                            |                             | 1                                |                               |
| Financial Post                   |                            |                             | 1                                |                               |
| Financial Times                  | 1                          | 1                           | 5                                |                               |
| Globe and Mail                   |                            | 4                           | 15                               |                               |
| National Post                    |                            | 2                           | 6                                |                               |
| Network World                    | 1                          | 2                           | 3                                |                               |
| New York Times                   |                            |                             | 1                                |                               |
| RCR Wireless News                |                            |                             | 3                                |                               |
| Smart Money                      |                            | 1                           |                                  |                               |
| Telecom Asia                     |                            |                             | 1                                |                               |
| Telecom Web News Digest          |                            |                             | 1                                |                               |
| Wall Street Journal              | 2                          | 2                           | 3                                |                               |
| <b>Total</b>                     | <b>5</b>                   | <b>13</b>                   | <b>46</b>                        | <b>0</b>                      |

### **3.5.5 CEO All-Employee Emails**

A CEO All-Employee Email (CEO Email) is defined here as an email issued by the CEO to all employees within the organization, sent from the CEO's email account to each employee's individual email account. Although CEO Emails are likely quite common, no research exists on this source of narrative. As organizational boundaries have blurred, due to dispersed work forces and global supply chains, the use of email has increased. "Employees are increasingly likely to use and prefer electronic mail (email) to communicate with coworkers, customers and other colleagues" (Byron, 2008: 309).

Through email, CEOs have the opportunity to directly communicate with each employee, on all matters that he/she deems important; but little is known on how executives, let alone the CEO, use email, probably due to the inability of researchers to gain access.

At Nortel, starting with Frank Dunn, it was common practice to issue all-employee emails on corporate performance, leadership, organization, and strategy. For this study, 168 CEO Emails were obtained from Nortel, as listed in Table 11. The emails were obtained in two ways: 148 emails were received directly by the researcher, while employed at Nortel. The remaining 20 emails were received electronically, from a Nortel employee, after Nortel had declared bankruptcy protection and liquidated its major business units. The full list of emails, by title, CEO, and date, can be found in Appendix A. Sample emails (one per CEO) can be found in Appendix B. All emails were received in HTML format, converted to rich text, formatted for content analysis and labelled by date, type, author, and title.

**Table 11: CEO All-Employee Emails**

| <b>Author</b>   | <b>Period</b>               | <b>Emails</b> | <b>Total Words (all emails)</b> |
|-----------------|-----------------------------|---------------|---------------------------------|
| Frank Dunn      | May 2002 – March 2004       | 22            | 14701                           |
| Bill Owens      | April 2004 – October 2005   | 26            | 12962                           |
| Mike Zafirovski | November 2005 – August 2009 | 109           | 69110                           |
| Paviter Binning | August 2009 – February 2010 | 11            | 3480                            |

As part of the data collection, each CEO Email was read in chronological order to determine the nature of the content. The emails were categorized into three descriptive groups: strategy, organizational announcement, and non-market event (see Table 12). Strategy emails contained specific references to the firms strategy and performance,



while organizational announcements not only discussed leadership appointments and restructuring but also the strategic reasons behind the changes. Non-market event emails were related to major external events such as natural disasters and 911 memorial events. Even though the latter group of emails were not directly related to strategy, they described Nortel's role in relation to the event (e.g. setting up telecommunication systems in the case of a natural disaster or the status of Nortel employees involved in the disaster), and therefore they were retained for the purpose of the narrative analysis.

**Table 12: CEO All-Employee Email Categories**

| <b>CEO</b>      | <b>Strategy</b> | <b>Organizational Announcement</b> | <b>Non-Market Event</b> |
|-----------------|-----------------|------------------------------------|-------------------------|
| Frank Dunn      | 19              | 2                                  | 1                       |
| William Owens   | 17              | 2                                  | 7                       |
| Mike Zafirovski | 85              | 21                                 | 3                       |
| Paviter Binning | 10              | 1                                  | 0                       |
| <b>Total</b>    | <b>131</b>      | <b>26</b>                          | <b>11</b>               |

Given that no research exists on CEO Emails and their role in strategy, a separate research project was undertaken to identify the uniqueness of the CEO Emails (in related to other narrative sources) and determine their validity for inclusion in the thesis. This research is included (in detail) in Appendix G. Using qualitative research methods, a textual analysis (using DICTION dictionaries) was performed on the emails to characterize tone, while a content analysis (using grounded coding) was used to characterize the macrostructure.

Findings of the research project suggest that the CEO Email can be considered a source of intraorganizational strategy narrative, whereby the CEO attempts to establish a

one-on-one discourse with every employee. Using rhetorical history, the Nortel CEOs defined, developed and confirmed organizational norms, values and beliefs, to shape employee behaviour, and reconstructed past events to legitimize executive decisions and actions.

The informal and personal nature of the CEO Email also allowed CEOs to develop their individual identity within the organization, in context to the organization's identity. However, with the communicative purpose being to shape employee thinking and behaviour, the CEO Email retained a monological tone that reaffirmed the CEO's role as the master architect of the firm's strategy, even with attempts at levelling.

The CEO Emails were found to have a temporal awareness and concern for the past, present and future. The emails were high on realism and were activity-based, with an emphasis on present action. They contained a tone of optimism and commonality and yet, although they were strategy narratives, were low on certainty.

### ***3.5.6 Supplemental CEO and Top Management Team Narratives***

In addition to the 389 CEO documents, the data set also included 62 supplemental documents for triangulation purposes, as follows: CEO and Top Management Team (TMT) analyst PowerPoint presentations, Annual General Meeting minutes and presentations, and internal (employee) strategy presentations presented during the annual global sales conferences (and made available to all employees) (see Table 13).

**Table 13: Supplemental Narratives from Top Management Team**

| <b>Strategy Presentations</b>  | <b>Dunn</b> | <b>Owens</b>   | <b>Zafirovski</b>                | <b>Binning</b> |
|--|-------------|----------------|----------------------------------|----------------|
| CEO PowerPoint presentations to analysts & employees                 |             |                | 18 to analysts<br>2 to employees |                |
| Chairman all-employee emails   |             | 1 (R Wilson)   | 1(H Pearce)                      |                |
| Annual General Meeting Minutes and PowerPoint presentations          |             |                | 3                                |                |
| Top Management Team PowerPoint presentations to analysts & employees |             | 2 to employees | 23 to analyst<br>12 to employees |                |

In a recent study, Kaplan (2011) presents case study findings on the pervasive use of PowerPoint in organizational life, arguing that PowerPoint not only reflects strategy making but also is central to its development. “PowerPoint is not just a static piece of technology but rather that it exists as enacted in the organization. Analogously, strategy culture is not static either but exists through discursive practices that are mediated by PowerPoint-in-use” (Kaplan, 2011: 342). Kaplan’s (2011) findings support Vaara’s (2010) argument that “Strategy documents should not be treated as just any texts, but understood as powerful devices through which specific objectives, values and ideologies – and not others – are promoted and legitimated” (p. 699). Strategy documents (and in this case PowerPoint presentations) can provide further insight into the strategy narrative supported by the CEO at a given point in time.

### **3.6 Step 2: Event History and Discourse Event History Database**

To organize the narrative data and to begin the process of constructing the case history, a chronology of events was developed using both the event data and the narrative data. A combined event history (Van de Ven & Poole, 1990) and a discursive event

history (Maguire, 2004) database was created in an excel workbook for this purpose, by reading each of the documents individually.

Each document served as an entry into the database, using its publication date for reference. Every document was identified by its documented date, event date (sometimes different as documents were published after the event), source (e.g. SEDAR, Nortel, a media outlet), source (classification of the document, if application, such as “CEO Email”), author (for Nortel documents, the actual name was listed), title of the document (if provided), and the event itself. In addition, the Nortel stock price on the day in question was included.

In addition to the excel workbook format, a secondary event database was created within the software used for the narrative analysis, ATLAS.ti. ATLAS.ti<sup>11</sup> is qualitative scientific software that provides the ability to analyse large quantities of qualitative data including text, graphics, audio, and video. It also provides the ability to manage the documents dynamically through user-defined categories and to map out relationships between texts through networking tools.

To use ATLAS.ti as both an event database and tool for qualitative analysis, the narrative documents were filed on computer (in PDF or rich text format) and labelled by date and type. The documents were then loaded into ATLAS.ti and numbered

---

<sup>11</sup> ATLAS.ti version 6 was used to start the research. When version 7 was released, the project Hermeneutic Unit (data set) was upgraded to the new version.

chronologically by their published date. Reference to the event database from this point forward includes both the Excel workbook and the ATLAS.ti database.

### **3.7 Step 3: Case History**

Using the documents and the event database, a case history was developed of Nortel for the period from 2002 to 2010. The case study is an anchoring of events in time, with an additional anchor point of the CEOs, who (in this case) are the lead actors. Constructing the case narrative is an important step; it represents an ordering of events and stories to establish the context of the case (Langley, 1999). The case history became a primary source of study for Step 4, the characterization and analysis of Nortel's organizational path.

To establish the case study context, a detailed longitudinal case history of Nortel, over the period under study, was first constructed from the raw data (Langley, 1999), using the event history database and the documents themselves. The data presented in the previous sections was read individually and the listing of events was reviewed in the database. An outline of major events was then created from the data and analysis using event identification techniques suggested by Van de Ven and Poole (1990), whereby individual incidents are analyzed over time and events are extracted. The list of events, by quarter, can be found in Appendix E. The case history is presented in Chapter 4.

### **3.8 Step 4: Path Constitution Analysis**

Before studying the role of CEO narratives in path dependence, the constitution of the organizational path had to be characterized and tested for strategic lock-in. As

explained previously, Sydow et al. (2012) recently proposed Path Constitution Analysis (PCA) as a means to this end. This step therefore applied PCA methodology to identify Nortel's path and test for lock-in by investigating the six constitutive features.

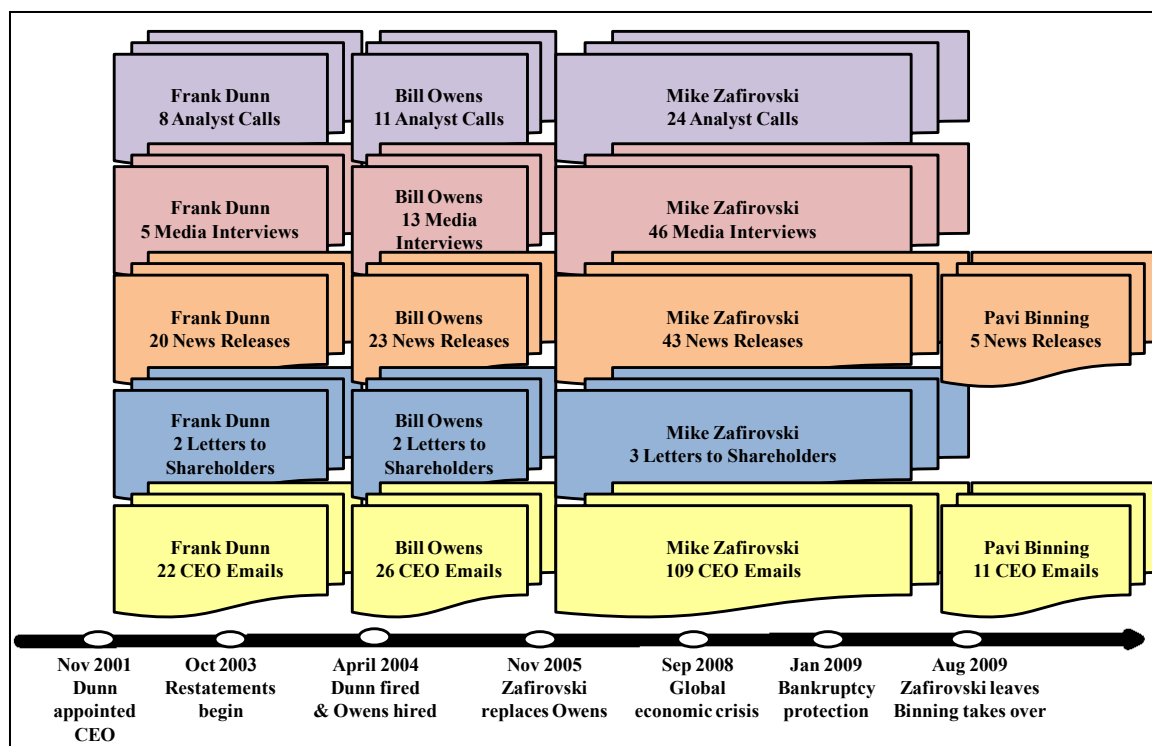
As an initial step, visual mapping and temporal bracketing strategies were applied to the event database to begin identifying the constitutive features such as critical events and lock-in: first, visual mapping was used to show the events as they occurred over time; and, second, temporal bracketing was used to identify the potential phases of path dependence. As suggested by Langley (1999), "the decomposition of data into successive adjacent periods enables the explicit examination of how actions of one period lead to changes in the context that will affect action in subsequent periods" (p. 703).

Using the case study and the results from the temporal and visual mapping strategies, the PCA was undertaken. Each of the constitutive features listed in Table 2 were analyzed, using the indicators (column three of the table) as a guide. Notably, the CEO narratives were included in some portions of this analysis, as a means to identify the constitutive features. For example, to determine level interrelatedness, both the CEO narratives and event documents were analyzed for references to groups of actors, the industry, financial markets, etc... As opposed to retrospective interviews, these narratives and documents offered an in-vivo account of Nortel's levels of interaction (level interrelatedness and actors) and Nortel's identification of significant events. The data from the CEO narratives was taken from the grounded coding of the narratives as explained in the following section and as listed in Appendix C.

### **3.9 Step 5: CEO Narrative Analysis**

As in Step 4, this step was a precursor to analyzing the influence of narratives in path dependence, by understanding the narratives themselves (content and form) and the relationships that exist between different sources of narratives, different authors and over time. As proposed in the conceptual framework, it was suggested that if the intertextuality between the narratives was significant, the narratives would form an infrastructure that would influence the firm's trajectory (as suggested in Figure 6). This step therefore involved an analysis of the intertextual relationships within and between the CEO narratives that spanned the 8-year period of the case, four CEOs, and five narrative sources (as described in step 1B) and a characterization of the resulting narrative infrastructure. This step was approached in two phases: (1) an analysis of structural characteristics; and (2), an analysis of discursive themes.

**Figure 6: Proposed CEO Narrative Infrastructure**



*Structural analysis of narratives and textual relationships.* A structural analysis on each source of CEO narrative was performed to understand its form and relationship between different sources. The structural analysis was grounded in Genette's (1997) approach and included: (1) a descriptive analysis, including peripheral aspects (i.e. paratextuality and architextuality); and, (2) evidence of narrative within other narrative, either direct or indirect (i.e. metatextuality and hypertextuality).

*Content analysis of narratives and textual relationships.* A content analysis was performed using a grounded coding method (Langley, 1999). In grounded coding, comparative analysis on a large number of small units of data (e.g. text) is performed to create descriptive categories. As it applies here, the grounded coding method (as with Riad et al., 2012) was used to identify discursive themes and to investigate the



relationship between both the different sources of CEO narratives and over time/between CEOs.

The analysis was performed using the scientific software, ATLAS.ti. For the analysis, each of the 389 CEO documents was read within ATLAS.ti and the CEO quotes (only) were coded using the grounded coding techniques. The process of grounded coding produced over 200 first-order concepts (see Appendix C), which were then categorized into second-order themes (driven by theory). Both the concepts and themes were used to identify the textual relationships between the content of the narratives.

### **3.10 Step 6: CEO Narratives in Organizational Path Dependence**

The objective of the research project was to investigate the influence of CEO narratives in organizational path dependence. In this final step, the results of the path constitution analysis (step 4) and the CEO narrative analysis (step 5) were brought together to discuss findings and to address the questions raised in the conceptual framework. This step considered the dependent variable as organizational path dependence (and lock-in, in particular) and therefore investigated the influence of CEO narratives as an embedded unit of analysis on the creation of the path. This step also further investigated the influence of initial conditions, self-reinforcing processes, and triggering events in the organizational path dependence process. The major contributions of the thesis are discussed in this step.

### **3.11 Pilot Studies**

Prior to undertaking the full research project, pilot studies were performed to investigate the validity of the case selection (i.e. Nortel) and, in particular, the utility of the data collected prior to proposal defense. Given the theoretical support for the use of public CEO narratives (as outlined previously), the pilot studies focused on the CEO Emails (although other CEO narratives were included). Three aspects of the research were investigated in three different studies: (1) the appropriateness of the CEO Emails as a source of narrative; (2) evidence of strategy narrative in the CEO narratives; and (3), evidence of intertextuality (between different sources of narratives and over time). Each of these three areas were tested separately and explained as follows.

#### ***3.11.1 Pilot Study 1: CEO Emails as a Source of Narrative***

To test the utility of these emails, the research idea was presented to a group of six researchers during HEC Montréal's Strategic Discourse Days, held October 31, 2011, and November 1, 2011, one of them being Dr. Loizos Heracleous, from Warwick University, who does research in strategy discourse. An outline of the research project was provided to the group in advance (see Appendix D), and included three sample CEO Emails issued by Mike Zafirovski (February 6, 2006; June 16, 2008; and, September 17, 2008). During the workshop, the researchers read the three emails and then provided their initial impressions, as follows.

One researcher noted that each text contained a wealth of data that could be studied from a number of different perspectives, suggesting that emails provided the opportunity for in-depth theorizing. A second researcher noted how the texts moved over

time from a polyphonic tone to a monological tone, citing how the CEO initially used pronouns such as “we” and “us” but changed over time to using references such as “me and my leadership team” and “you” or “the employees.” A third researcher focused on analytical methods, suggesting that, due to the length of the texts, it might be worth studying just the introductions and conclusions of the texts over time as a first step, to see how the narrative elements changed from the beginning of the CEO’s tenure to the end (this suggestion was followed). All researchers agreed that the scientific software, ATLAS.ti, was an appropriate software program for this type of study.

### ***3.11.2 Pilot Study 2: Evidence of Strategy Narrative in the CEO Emails***

To determine if the CEO Emails contained strategy narratives and/or reflected corporate and external events, a small event database was created for the period from November 2005 to June 2006. Using corporate SEC documents, media articles, stock price, and financials, main events were extracted and recorded in a time series. These main events included changes in stock price, material reports (e.g. financials, executive changes), and industry events. Thirteen CEO Emails (from the same period) were then inserted, by date published, into the event database. Each email was then analyzed for evidence of the events that took place around the same period. Findings indicated that the CEO Emails contained not only strategy narrative but also reference to both corporate events (past, present, and future) and external events (industry and market). Notably, it became apparent that external events were appropriated by the CEO when they supported the strategy narrative but ignored or debated when they conflicted with the narrative. Findings also suggested that the emails both represented managerial discretion and

reduced managerial options, indicating a potential relationship with organizational path dependence.

### ***3.11.3 Pilot Study 3: Evidence of Intertextuality in the CEO Emails***

Kuhn (2008) argues that texts are constructed within context and through other texts, and that texts are not only present in other texts, but also recontextualized through social processes and change over time. Intertextuality suggests that texts not only reflect organizational becoming but also can directly participate in path dependence. This test looked for evidence within the CEO Emails for intertextuality.

Findings indicated that certain elements of text were common across a number of types of text, and that some elements were unique to each. For example, when the corporation had a material change, the document filed with the SEC (8-K) was precise about the details of the change, and provided limited reference to future strategy. The press release related to the material change included only a portion of what was included in the official SEC filing, and excluded the financial data, significantly changing the context of the message. The related CEO Email was even more limited on the details of the material change yet provided a lengthy narrative on strategic imperatives. The underlying facts of each text were the same but the narratives differed significantly in tone and content.

In addition to comparing and contrasting types of text at a given point in time, texts were also compared over time, that is, a group of different types of text, published at the start of Zafirovski's tenure (early 2006) were compared to the same grouping of texts published towards the end of his tenure (mid 2009). Notably, the variance in text between

types at the start of his tenure was greater than at the end. More specifically, the narrative in the CEO Emails more closely resembled messages to other stakeholders in both content and form, suggesting that the variance shifted over time due to significant events. This analysis suggested that the firm was moving through the path dependence process and that it reached a point of lock-in where the room to manoeuvre, even within narratives, had become limited.

#### ***3.11.4 Pilot Study Conclusions***

The pilot studies indicated that the initial research questions, along with the data itself, represented a viable research program. The studies also increased confidence in the data generally, as certain findings confirmed previous research in the area of shareholder letters and internal strategy discourse: Fiol (1995) found that managers internal communication was often similar to their external communication especially in terms of non-evaluative statements; D'Aveni and MacMillan (1990) found that Letters to Shareholders of failing firms deny crisis while focusing on short-term goals; and, Abrahamson and Park (1994) found that corporate officers may, at times, conceal negative organizational outcomes from shareholders.

Based on the findings of the pilot study, the research was undertaken, with two significant changes. First, the period of study was broadened from the tenure of one CEO to that of four CEOs. The pilot study suggested that the intertextuality that existed within one CEO's tenure might also exist between CEOs. Therefore, additional data was pursued. The study period was extended to cover the period of April 2002 to March 2010.

Second, the number of CEO narrative types was broadened. Originally, the data set did not include analyst calls. However, with the Fair Disclosure Rule (SEC, 2000), all analyst transcripts from April 2002 were found, providing an additional CEO narrative type for the study.

### **3.12 Trustworthiness and Ethical Considerations**

This research used a case methodology to investigate the research question, which raises concerns over credibility, transferability, dependability, and confirmability, discussed as follows.

#### ***3.12.1 Author's Experience***

The author of this thesis was employed by Nortel from 1992 to 2009 in functions that included information technology, research and development, solutions design, communications and sales. The author's responsibility levels increased over the period of employment, from professional to senior management. Throughout, the author had significant interaction with strategic decision makers and executive officers, including the CEO, Chief Information Officer, Chief Technology Officer, and certain presidents. Although this prolonged engagement (Lincoln & Guba, 1985) provided the author with an in-depth understanding of the organization's culture and strategy, it also has the potential to influence the author's analytical results. As a result, significant precautions

were undertaken to ensure that the analysis was grounded in proper research methods<sup>12</sup>, to include the extensive data set collected for and used in the project.

### ***3.12.2 Credibility***

Credibility is obtained due to the large sample size of texts across both space and time. The sources of CEO narratives (389 texts) included five different types of texts, produced over eight years and by four CEOs. This set of texts was supplemented by an additional 2000+ documents, which were used as supplementary data. The analysis of the qualitative data was done with scientific qualitative software (ATLAS.ti) and theoretically supported by accepted qualitative research methods. In addition, quantitative data was used to support the qualitative findings and to extend the context of the case, specifically as it relates to the industry and competitive environment.

### ***3.12.3 Transferability***

Although the Nortel case is, by definition, an extreme case (Yin, 2003), the longitudinal nature of the case enhances the transferability of results. Throughout the eight years, Nortel underwent different types of change, each of which could be applicable to other firms at different stages in their organizational paths. In addition, as

---

<sup>12</sup> The author's "minor" in the doctoral program is in research methods, which included courses in multivariate statistics, quantitative research methods, qualitative research methods and structural equation modelling. Many of the techniques from these courses were used in the analysis.

the thesis investigated not only the role of CEO narratives in organizational path dependence but also initial conditions, self-reinforcing processes and triggering events, these conceptual results could be both theoretically and practically applied to future research and practice, respectively.

#### ***3.12.4 Dependability and Confirmability***

The data set, event database, analytical software, and all analytical results have been kept on file electronically, on a local hard drive, DropBox, and a back-up hard drive. The emails are also available in hard copy. All data and analysis can be made available upon request.

#### ***3.12.5 Ethical Considerations***

With the exception of the CEO Emails, case data came from public sources. Most of the CEO Emails (148) were obtained by the author while employed with the firm. The remaining emails were provided by a Nortel employee upon request, when the firm was in bankruptcy protection. Since the emails were obtained, Nortel has announced its intention to liquidate all assets (Nortel 8-K, August 29, 2012) and therefore the CEO emails are considered public domain. However, for the protection of privacy, only extracts of the CEO Emails are used in the thesis and only four complete emails are provided as an example. Although the full set of emails is available upon request for the purpose of examination, it has not been made generally available. Additionally, the intent of this thesis is to understand the influence of CEO narratives in organizational path dependence; it is not intended to be an evaluation of CEO performance and therefore



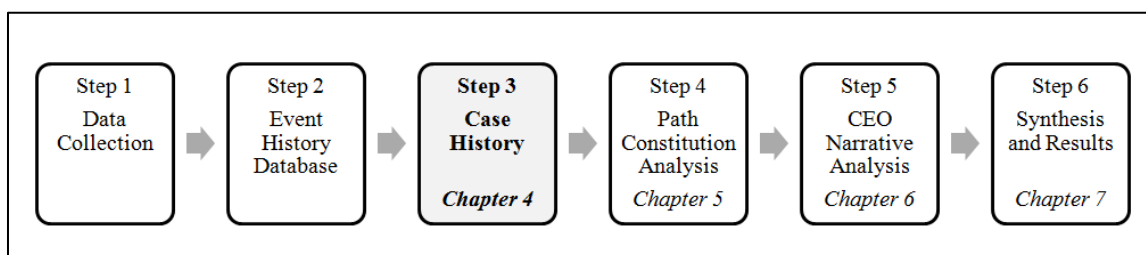
makes no judgement or evaluation of either the individual CEOs or the CEOs as a group of executives.

## CHAPTER 4. Nortel Case History

### 4.1 Introduction

In this chapter, the case of Nortel is presented to establish context and prepare for the path constitution analysis (see Figure 7). This case history was constructed using the event history database and the content from the documents identified in the previous chapter, including industry, competitive and Nortel reports, along with Nortel's securities filings. The CEO narratives included in the case history were added once the case analysis was complete, for illustrative purposes only.

**Figure 7: Case History (Step 3)**

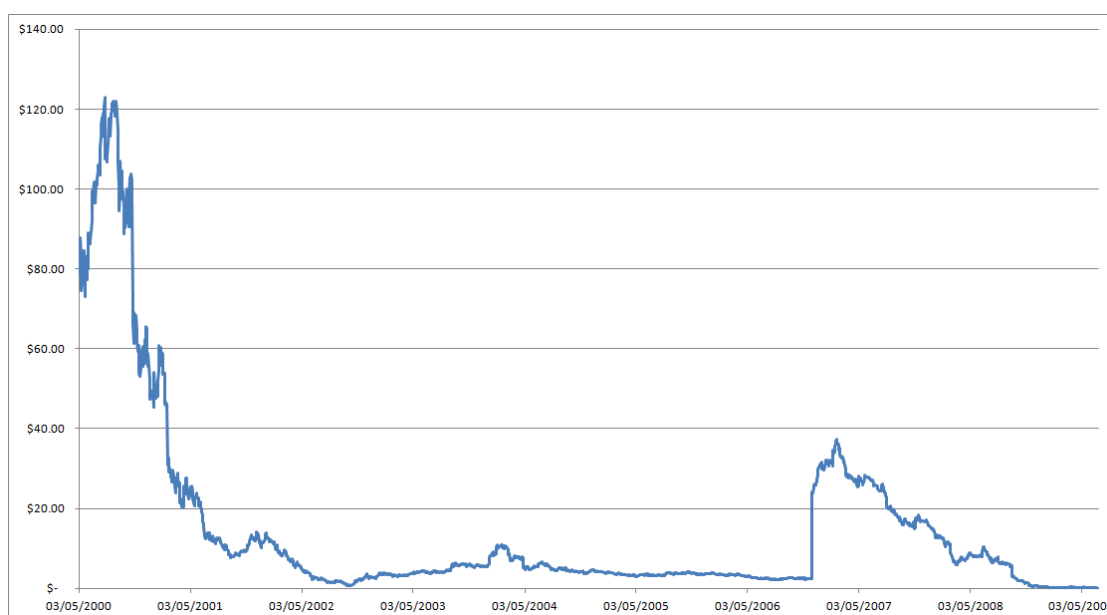


### 4.2 Beginnings

The story of Nortel starts long before the dramatic collapse of the telecommunications industry in 2000, although the last decade of the corporation was arguably the most dramatic phase of Nortel's history. Stock price is certainly not the only

indicator of success and failure, but Nortel's drop from a high of CDN<sup>13</sup> \$124.50 in August of 2000 to less than CDN \$2 in November 2002 was significant (see Figure 8). At its peak, Nortel carried more than one third of the Toronto Stock Exchange, with a market capitalization of almost CDN \$400 billion. This dramatic decline generated an abundance of media attention throughout all of Canada and in the United States. At the centre of the narrative: the Nortel CEOs.

**Figure 8: Nortel Stock Price (Canadian Dollars)**



Source: Toronto Stock Exchange, TSX

Note: Splits occurred on May 3, 2000 (2:1) and Dec 1, 2006 (1:10)

<sup>13</sup> All dollar amounts are in US dollars, unless indicated otherwise.

### 4.3 Nortel History

The story of Nortel begins in 1885, when the company was first incorporated as Northern Electric and Manufacturing. Headquartered in Montreal, Quebec, Canada, the firm was largely responsible for building the equipment used in Canada's cross-country telephone system and, in later years, led the digital and fibre optic revolutions within the global telecommunications industry. The company's parent, the Bell Telephone Company of Canada (Bell), initially owned 93% of Northern Electric and was its biggest customer.

In 1914, the firm became incorporated as the Northern Electric Company, Limited, through a merger with Imperial Wire and Cable Company Limited. At that time, the company was 50% owned by Bell, 44% owned by Western Electric (a U.S. company), and 6% owned by others. Although it originally purchased technology from Western Electric, Northern Electric created its own R&D organization in 1958. Following, in 1962, Bell bought Western Electric's 44% share and, two years later, created Northern Electric as a wholly owned subsidiary.

In 1969, Bell-Northern Research Limited (BNR) was created as a separate subsidiary, charged to focus exclusively on research and development for both Northern Electric and Bell, who shared equal ownership of BNR. A few years later, Northern Electric was renamed to Northern Telecom Limited (Nortel) and began its international expansion in countries that included the United States, the United Kingdom, Hong Kong (China), the Netherlands, and Turkey. At the same time, Bell (and by extension Nortel

and BNR) went public, selling 9.9% of the company's ownership in a 2.6 million stock offering at \$15 per share. Nortel also increased its ownership of BNR from 49% to 70%.

In 1983, as the telecommunications industry deregulated, Bell Canada Enterprises (BCE) was formed, which acted as a parent company to both Bell and Nortel. During this period, Nortel amalgamated all of its wholly-owned subsidiaries

Throughout the last quarter of the 20<sup>th</sup> century, Nortel continued to expand its manufacturing and sales operations around the world through acquisitions and joint ventures. By the early nineties, the company had grown significantly. Jean Monty, the CEO who took over in 1993 after Paul Stern, implemented a new organizational structure that brought together the four major product organizations (switching networks, multimedia communication systems, transmission and components, and wireless systems) and the North American sales teams into one of two operating units; Nortel North America. The second operating unit, Nortel World Trade, was responsible for all business operations (i.e. marketing, sales, and administration) for the rest of the world. While Monty pushed ahead with full internationalization of the company, he also sold off non-core businesses, focusing on large opportunities with the carrier customers (i.e. telecommunication service providers).

In 1997, John Roth, an engineer from BNR, became CEO of the firm. From 1997 to 2001, Roth led the acquisitions of more than 20 companies, with a total value of \$45B. His largest purchase was that of Bay Networks, a Californian-based company that sold into the enterprise business market (a hole in Nortel's portfolio), at a purchase price of \$9.1B. With the acquisition, Nortel formally changed its name to Nortel Networks (to

recognize the new partnership). Soon after, BCE spun off Nortel, who acquired full ownership of BNR (and consequently integrated it into the organization).

In the late nineties, industry experts forecasted huge bandwidth requirements for the explosion of internet companies, and Nortel, as a global leading supplier of fibre optic equipment, was expected to benefit. In May 2000, the company's common shares split 2 for 1 and, by August 2000, the stock price had reached an all-time high of CDN \$124.50 on the Toronto Stock Exchange; its market capitalization was almost CDN \$400B. By year-end, revenues were recorded at \$30B – up from \$22B in 1999 and \$17.5B in 1998.

In 2001, however, the internet boom was circumvented by the dot.com bust. Bandwidth requirements dropped significantly; the internet was at overcapacity. With sales that never materialized, Nortel focused on streamlining operations by outsourcing most of its manufacturing business. The company restructured into three organizations (Metro and Enterprise Networks, Wireless Networks and Optical Long-Haul Networks) and dropped its workforce from 92,900 at the start of the year to 51,600 by year-end. It continued to operate, however, all over the world, with employees located in 276 sites (18,700 USA; 13,700 Canada; 13,700 Europe; 5,500 other).

By the end of 2001, Nortel's stock price had lost more than 90% of its value and revenues were almost halved (\$17.5B). John Roth had announced his intent to step down and his expected replacement, Chief Operating Officer, Clarence Chandran, had quit for

medical reasons<sup>14</sup>. Frank Dunn was appointed CEO, working in conjunction with John Roth and Chairman Red Wilson to form the Office of the Chief Executive. The company had a net cash position of \$3.5B and \$4B in outstanding long-term debt and over 100 subsidiaries (wholly and partially owned). Although the company was only about half the size it was a year earlier, in people and in revenue, it continued to operate within the same product markets and geographies as before.

#### **4.4 The Telecommunications Industry at the Turn of the Century<sup>15</sup>**

At the turn of the century, the telecommunications industry was experiencing rapid growth, with the year 2000 seeing the most rapid, at 28%. Mobile subscribers worldwide had reached 700 million, expected to reach over ½ billion by the end of the decade and to surpass fixed line telephony as early as 2004. Service revenue in 2000 was reaching \$3T. As technological advances shifted focus from voice to data, and from fixed to wireless, investor enthusiasm grew. Dot.com companies promised the delivery of multimedia internet applications and consumer expectations soared. Service providers

---

<sup>14</sup> Chandran had suffered from a stabbing during a robbery in his Singapore home in 1997

<sup>15</sup> Data source for industry information is from The International Telecommunications Union ([www.itu.int](http://www.itu.int)), a United Nations specialized agency for information and communication technologies. Data retrieved from the World Telecommunication Development Report 2002, Internet for a Mobile Generation 2002

turned to the equipment manufacturers (e.g. Nortel) to upgrade and install new networks, as wireless communications required new equipment (e.g. GSM). Network infrastructure spending was more than \$200B in year 2000.

As the industry grew, however, so did competition. Changes in regulation opened up incumbent territories worldwide. Operators began investing in foreign firms and the nature of competition became truly global. Consequently, service providers dropped their end-user prices and profits fell; investor confidence began to fall, leaving less money available for the investment in new networks.

While investor confidence was falling, requirements for capital investment had never been higher. The promise of the internet and mobile telecommunications demanded significant funding for both the spectrum licences and the 3G network itself. Service providers, successful at buying the highly expensive 3G licenses, were left with a huge debt burden, leaving some unable to purchase and install the network for which they purchased the licence.

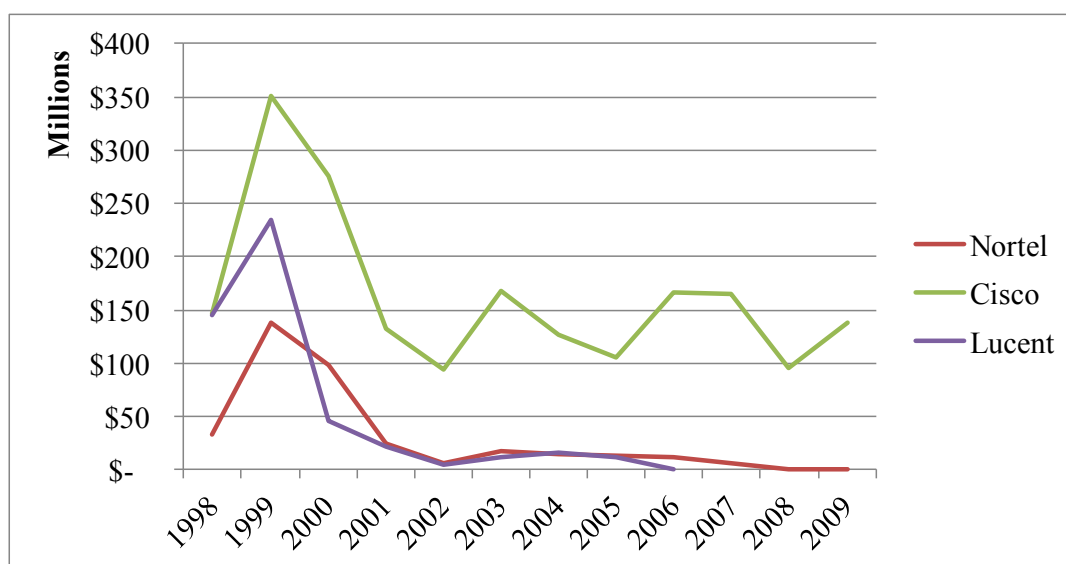
Beyond the network and associated capital requirements, there were further complications, which could only be solved with more investment; interoperability with older networks and technology was necessary to continue providing seamless services and the applications themselves needed to be created and delivered. However, the applications did not materialize. With investor confidence lagging, paired with the complexity of the applications and technology, dot.com companies were unable to deliver on their business plans. Many went out of business. The telecommunications industry, because of this collision of high capital requirements, technology advancements and complexity, flattened. While service providers were seeking new investment to build



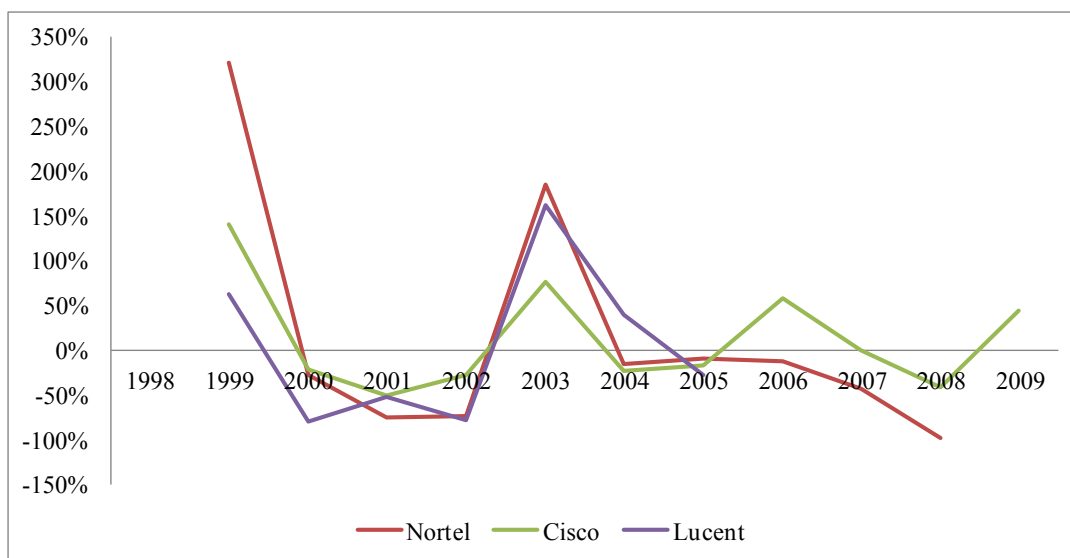
their 3G networks, shareholders were looking for consolidation of operations, reduction in operating margins and industry consolidation.

The providers of telecommunications equipment, such as Nortel, saw a significant drop in demand from their carrier customer base, and were left themselves with too much operational capacity. Their only choice was to reduce their own investments and wait for the carriers to start spending again. Some companies unable to cope with the sudden industry downturn went out of business, such as Global Crossing (a fibre optic cable company) and Iridium (a satellite company hoping to provide the world with internet access). Others that had a global installed base and a diversified portfolio of products were strategically positioned to manage through the downturn, assuming their financial and operational structure was effectively managed. (See Figure 9, Figure 10, and Figure 11 for competitive positions).

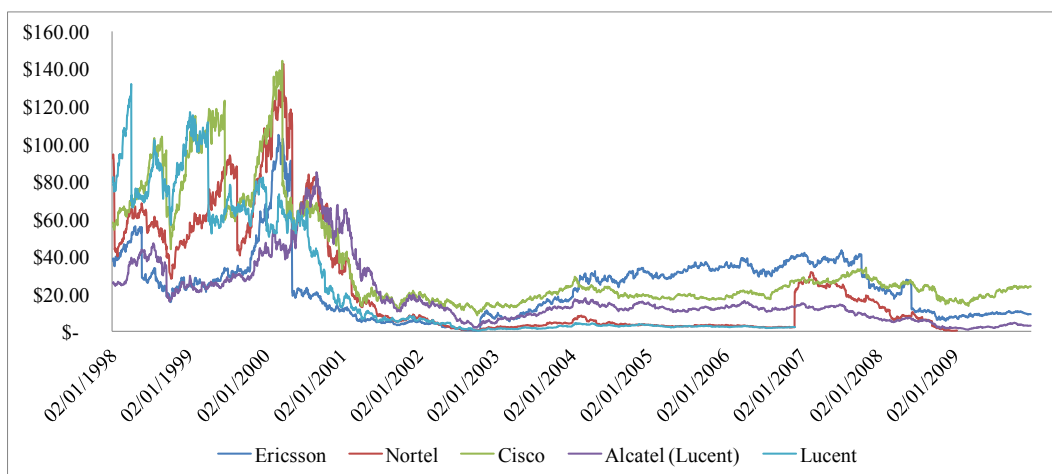
**Figure 9: Nortel and Competitor Market Capitalization**



**Figure 10: Nortel and Competitor Change in Market Capitalization**



**Figure 11: Nortel and Competitor Stock Price**



#### 4.5 Frank Dunn: November 1, 2001, to April 28, 2004

Frank Dunn became Nortel's CEO at a difficult time; the stock price had dropped by over 90% and year-end revenues for 2001 were down about 50%. Although Chief Operating Officer (COO), Clarence Chandran, was the presumed successor to Roth, the

COO's sudden departure left a gap. After a six-month search, the Board appointed Frank Dunn as President and Chief Executive Officer. Dunn was 48.

Dunn joined Nortel Networks in 1976 as a graduate of McGill University (Montreal, Canada), with a bachelor degree in Commerce. He worked in a variety of operational roles within all of the business units and, just prior to his appointment as CEO, was the company's Chief Financial Officer (CFO). When he was appointed President and CEO, the company created an Office of the CEO, which included Dunn, Roth, and the Chairman of the Board, Lynton Red Wilson. The office was dissolved in February 2002, when the Board of Directors decided that Dunn was capable of leading the company on his own.

One of Dunn's first major responsibilities was the reporting of the 2001 results, which were significantly lower than the previous year. Dunn presented a conservative outlook, given the drop in customers' capital spending, but firmly stated that return to profitability would occur towards the end of 2002. The market generally accepted his position, although raised concerns that customers' low capital spending would continue to weigh heavily on the firm's financial structure.

Soon after announcing the results, Dunn and his executive management team held an investor conference in New York City to provide the 2002 outlook. Just two days prior to the conference, CFO Terry Hungle resigned after being charged with trading outside of the authorized trading period. Entering into the conference, Dunn immediately took on the responsibility of CFO, a position he held interim until July 2002, when Doug Beatty was appointed.

At the conference and in the months to follow, analysts questioned Nortel's ability to return to profitability so quickly. Capital spending remained low for its customers and competition was driving down prices. Nortel's product portfolio was also significantly diverse and the downsizing activities were only making it more difficult to meet customer demands. Moody lowered Nortel's rating below investment grade and a class action lawsuit was filed against the company for material misrepresentation of the company's investment plan. Dunn, however, was adamant about returning the company to profitability. In his update to employees on the second quarter outlook, Dunn said:

Everything that we announced today has one goal in mind - making us profitable and doing so with urgency. We can't afford to stand still in this environment, and we are adjusting our business model where we need to with the goal of becoming profitable in the near term. (Dunn, CEO Email, May 29, 2002)

Throughout 2002, Dunn made a number of significant decisions to restructure the company's balance sheet and its operations. He raised almost \$4B in equity and aimed to make additional cuts in the workforce, moving from a target of 48,000 employees (from 51,600 at start of year) to 35,000. Periodically throughout the year, he revised the financial outlook lower than guidance due to further slowdown in customer spending. When the share price dropped below \$1, he considered a reverse stock split, with intention to present at the following year's annual general meeting (AGM).

By year-end of 2002, Nortel had not achieved profitability. Although some of the restructuring was underway, its cost structure had not changed significantly and customer spending still had not returned to expected levels; revenues were down again from \$17.5B in 2001 to \$10.56B in 2002. Dunn had made downsizing decisions across the

company but he did not change his product market strategy, only reorganizing what was already there into four segments: wireless networks, wireless networks, enterprise networks, and optical networks. He also moved his projection of returning to profitability to June 2003, but remained optimistic about Nortel's future:

Despite the fact we're going through the worst slowdown in the industry's history, we are making significant progress, and you have my personal assurance we're going to be more aggressive in getting our story out. The constant second-guessing, wrong-headed speculation, and pessimistic assessments of people outside the company cannot continue to go unanswered. I've recently given a series of interviews making it clear we've bolstered the company's staying power and are executing a sound strategy to rebuild our foundation for the future. (Dunn, CEO Email, October 7, 2002)

As Nortel entered 2003, Dunn identified seven strategic objectives: return to profitability in the second quarter, technology leadership, customer engagement, rebuilding the brand, quality, energizing employees and collaboration for success. However, Dunn's focus on profitability was the priority. In this opening year letter to employees he stated:

As many of you know, I'm a football fan. So let me conclude by sharing a quote I like by the great Johnny Unitas, one of the best quarterbacks in professional football history. His Baltimore Colts won the 1958 NFL Championship over the New York Giants when he threw a no-margin-for-error touchdown pass in overtime. After the game, a journalist asked him why he threw such a risky pass when there was a good chance it could have been intercepted and returned for a touchdown. Demonstrating quiet confidence, Unitas replied: "When you know what you're doing, you don't get intercepted."

I can assure you Nortel Networks knows what it's doing and we know where we're going. In the near term, we'll not get intercepted as we drive to profitability by the second quarter of 2003. Nor will we be intercepted on our long-term drive to be an industry leader synonymous with the future of telecommunications. Let's all be energized and passionate about making 2003 a winning year for Nortel Networks! (Dunn, CEO Email, January 1, 2003)

By the end of the 2003's first quarter, Nortel had achieved profitability, a full quarter ahead of schedule. Employees were rewarded with a return to profitability bonus. At the same time, Export Development Canada extended a CDN \$750M facility agreement to Nortel and shareholders approved a 5:1 to 10:1 reverse stock split (which was never implemented). Aside from a small net loss in the second quarter, Nortel seemed to be heading towards recovery. Third quarter reported net earnings of \$179M and year-end results were profitable, resulting in over \$10M in bonuses to the executive management team.

In late 2003, however, Nortel entered into its first series of financial restatements, by announcing a plan to restate the years 2000, 2001, 2002 and the first half of 2003. Dunn reported that he expected a reduction in net losses and increase in shareholders' equity and net assets, although he did not expect any impact to cash balances or future operations. From that point forward, the company experienced ongoing delays in the reporting of both the restated financials and the ongoing financial reports, repeatedly requesting extensions from Canada's Ontario Securities Commission (OSC) and the United States' Securities Exchange Commission (SEC).

Dunn entered 2004, however, with optimism. He continued to focus on downsizing and streamlining operations by initiating the outsourcing of all remaining

manufacturing activities to Flextronics. Dunn also focused the company's strategy on taking an "offensive" position in services. He expressed confidence that Nortel was well positioned for the future.

By achieving profitability for the year 2003, we are sending a clear signal that our business strategy is sound, we have grown market share in key categories, and we are again recognized globally as an industry innovator and thought leader. We offer a portfolio of technologies that I believe are second to none, and an ability to deploy a comprehensive suite of solutions across a complete set of market participants, be they enterprises, wireline or wireless service providers. (Dunn, CEO Email, January 29, 2004)

Analysts, however, had mixed opinions. In early 2004, some began to upgrade Nortel's stock and projected valuations of double or more within 12 months. Other analysts recommended hold or underperform on Nortel stock, citing questionable customer spending projections. Nortel was often compared to Lucent, who appeared unable to manage through the downturn. Nortel, on the other hand, had one of the highest growth margins in the industry, which caught the attention of the analyst community, although they were skeptical that it could be sustained.

Nortel's February 2004 analyst conference continued to inspire analysts, who responded to Dunn's movement from products to solutions. The still-flat carrier spending seemed a concern to all (Nortel and investors) but many seemed to believe that Nortel was well positioned to recover. With approximately \$4B in cash and the same in debt, Nortel financials appeared strong, and their product portfolio seemed poised to serve the growing shift from voice to data, and wired to wireless telephony. The stock price began

to reflect the optimism, surpassing \$10 for the first time in years (and the highest price the stock would ever reach from that period onwards).

Nortel ended the quarter, however, on a more solemn note. Doug Beatty, the CFO, and Michael Gollogly, the controller, were placed on paid leave by the Board of Directors, in light of their potential responsibility in the accounting issues. On April 28, 2004, Dunn, Beatty, and Gollogly were all terminated for cause by the Chairman of the Board, while four other senior finance executives were placed on paid leave. Nortel delayed the Annual General Meeting (AGM) and announced that financials would be restated once again; net losses were expected to decrease in the early years, while net earnings were expected to become net losses in 2003. Because of the restatements, the SEC issued a formal order of investigation in connection with previous financial restatement and the current need to restate. The OSC followed suit and ordered the temporary stop to all trading by directors, officers, and employees. The federal grand jury in the US subpoenaed documents from January 1<sup>st</sup> onwards in relation to the ongoing criminal investigation related to the restatements and the RCMP undertook their own investigation. Twenty-seven class action complaints were filed in the US.

#### **4.6 William (Bill) Owens: April 27, 2004, to November 15, 2005**

On April 28, 2004, the Chairman of the Board, Lynton Red Wilson, issued the following email to Nortel employees about Bill Owens' appointment:



Nortel Networks is well-positioned within our marketplace. Our solutions and product portfolio are superior. While challenging, it is important we make the decisions necessary to move the Company, its employees, customers and shareholders beyond this chapter.

It can be expected that today's announcements will receive significant attention from the media and investor communities. Obviously, customers, suppliers and other industry members will also have questions.

I want to reassure you that the Board of Directors of Nortel Networks, Bill Owens, and the other members of the senior management team take this broad attention and these questions seriously. We also recognize it is distracting and challenging to maintain focus on the business, but we must. While bringing closure to this chapter is ongoing, it is only one part of the Nortel Networks story. It is important that we do not allow it to overshadow our recognized technology leadership and business momentum.

Nortel Networks remains strong. Our true focus remains on creating value for our customers and our shareholders. (Chairman's Email, April 28th, 2004)

Bill Owens, a retired U.S. naval commander, joined the Board of Directors on February 28, 2002, at the age of 61. At the time, Owens was co-CEO (and Vice Chairman of the Board) of Teledesic, LLC, a satellite telecommunications private venture that was trying to bring broadband telecommunications to all parts of the world. Owens had previously worked at Science Applications International Corporation, an information technology company, as their Vice Chairman, President, and Chief Operating Officer. His military positions included Deputy Chief of Naval Operations, Commander of the 6<sup>th</sup> Fleet, Senior Military Assistant to the Secretary of Defence, and Vice Chairman of the Joint Chiefs of Staff. While he sat on the Board, Owens also was a director of British American Tobacco, Polycom, ViaSat, Microvision, Symantec, Metal Storm, and Telstra.

On April 27, 2004, a day before Dunn's firing was announced, Owens was appointed President and CEO of Nortel. Upon his appointment, Owens left his position at Teledesic and relocated to Nortel's headquarters in Toronto, Ontario. Owens' terms of employment included a base salary of \$1M and a target annual bonus of 170%. His contract also stipulated a monthly 5-year pension payment of \$33,540.

As with Dunn, Owens became Nortel's CEO at a difficult time. The restatements consumed the attention of the finance organization, which was charged to not only run the finance operations but also redo the finances for the previous years, work with external auditors, and partner with consultants to prevent future problems. In his opening letter to employees, Owens acknowledged the difficult situation but also discussed Nortel's strengths (see Table 14).

**Table 14: Owens' First Email to Employees (April 29, 2004)**

As we read the many stories in the media, for me, today has been filled with a lot of reflection. I wanted to share with you my thoughts. I think that it's important to put a lot of perspective into the comments we're hearing and reading about ourselves today. Nortel has been a continuing strong player in our marketplace and we remain so today. I am very confident about our future. Our business is strong and I am excited about the momentum we are generating in the marketplace. As you know, we have announced a number of important contracts during the quarter, and I am looking forward to continued momentum in 2004.

We WILL WEATHER the arduous process of getting through the accounting review, and we will deliver truly best of breed financial accountability. I promise you my every effort to restore trust, transparency and financial accountability in Nortel. We have a process in place that will get us through this complex situation as soon as it can be done, and I will be giving you ongoing updates. Beyond that, I look forward to working with you to grow the business and to continue to deliver the kinds of solutions and services our customers have come to expect from Nortel.

I want you to know of my deep feeling that we will emerge from all of this a very strong company. It will take some time to re-establish our complete credibility, but there are certain truths. First and most importantly, we are blessed with a wonderful group of people -- strong, smart, and devoted to our company. Second, I want you to know how committed and confident I am in working with you to grow our business to an even stronger level. Third, while confidence has been shaken, I know we will work to restore it for our customers, our suppliers and our many shareholders. We will succeed and, one day in the not too distant future, celebrate the fact that even through this great challenge, we have persevered together.

Nortel is a truly great company. I'm very proud to be here with you. Let's put our arms around each other and stay focused on growing our business and taking care of our customers. And importantly, know that I and the senior leadership of this company care deeply about you, our most treasured asset.

This will pass.

Bill Owens

Soon after Owens' appointment, the remaining seven employees on leave were fired with cause. The class action lawsuits and the criminal investigations continued, with Dunn et al. being accused of manipulating financial reports. Proceedings began in the Ontario Securities Commission (OSC) for damages related to the return to profitability program, which not only paid millions to executives but hundreds of millions to employees company-wide. Filings of both the restatements and current earnings were continually delayed and years 1999 and 2000 were added into the analysis. Nortel did not hold an AGM that year.

Throughout 2004, Owens focused on completing the financial restatements and fixing the corporation's cost structure, which included further layoffs of 3200 employees. Previous guidance by the past executive management team on gross margins (too high) and operating expenses (too low) proved incorrect, and customer-spending growths were slower than expected. Nortel also seemed to be losing market position vis-à-vis its competitors and revenue forecasts were adjusted downwards. In an effort to be first in the Indian market, Nortel signed a contract with Bharat Sanchar Nigam Limited (BSNL), an Indian state-owned telecommunications company, for \$500M, but at a loss. Customers, however, seemed loyal to Nortel; sales in the wireless and voice-over-IP markets appeared promising.

Importantly, our customers have been very loyal to us, and our business is solid. I have visited with most of our major customers. While they watch the progression of our restatement, they have the faith that we will handle it correctly, that we will be there for them for the long-term, and that we will continue to develop and support them with the quality products we've brought them for decades. (Owens, CEO Email, December 17, 2004)

As Nortel moved into 2005, the financial statement and restructuring activities dominated Owens' time. The independent review filed their recommendations in an official report (i.e. as a material filing), which the Board adopted in its entirety. A new Ethics and Compliance Officer was hired and five Board members chose not to return. The executives that received the profitability bonuses offered to return them (but kept their restricted stock units) and Nortel launched a lawsuit against Dunn, Googly, and Beatty to retrieve their bonuses valued at over \$10 million. Nortel held both its 2004 and 2005 AGM at the same time. There was a change in the CFO and controller, once again. Although the financial restatement activity seemed to be behind them, Nortel still had significant restructuring expenses ahead.

In early March of 2005, Owens began making strategic moves – an area where both employees and industry felt Owens had neglected. He hired Gary Daichendt, an ex Cisco (Nortel competitor) as President and Chief Operating Officer, who in turn brought in his colleague, Gary Kunis (also from Cisco) as Chief Technology Officer. Owens also made a strategic acquisition of PEC Solutions, a government professional services firm that had access to lucrative U.S. federal government contracts. Soon after, Owens reiterated his earlier strategy of rebuilding corporate integrity, establishing an effective leadership team, managing cash, cost and revenue, and growing the business through

partnerships and acquisitions. Business strategies continued to focus on data solutions, wireless, and services. “Innovation is alive and well at Nortel, and we will continue to invest and lead in next-generation technologies” (Owens, CEO Email, May 4, 2005).

Owens enthusiasm was short lived. A month later, the two Cisco executives left Nortel abruptly. On Gary Daichendt’s departure, Owens’ stated, “Although I am disappointed with this outcome, it became increasingly obvious that our business views and management styles are different” (CEO Email, June 10, 2005), while the media suggested a conflict in corporate strategy. At the same time, Lynton Red Wilson stepped down as Chairman of the Board, replaced by Harry Pearce, who followed by giving the directors a pay increase. Investor confidence started to wane.

Nortel, however, made enough sales to satisfy the market and seemed poised to achieve their expected 10% growth rate for the year. In the fall, Owens restructured the organization to support his ongoing strategy of services, enterprise customers, innovation, and customer relationships (a strategy that deviated little from Dunn’s). The restructuring was, ultimately, Owens’ last major strategic initiative at Nortel. On November 15, 2005, Owens officially stepped down. On the analyst call in which his replacement was introduced, Owens stated:

And, you know, it's a bittersweet time for me, of course, but I have been a part of the CEO succession process. I have done it openly, willingly with Harry Pearce and the Board, and I'm just very proud of the fact that we found Mike Zafirovski to come and be our CEO. So I feel good about it, and I think it is appropriate at this time.

There was no desire on my part to be a candidate. I realized this was time for the next phase, and I have been with the Board now watching the growth of the Company and realizing that we are ready for and the Company is stable enough to have truly a world-class CEO. And so the search for a world-class CEO included a wide variety of people. I was not on that list, and I did not intend to be on that list. And this is the right time for a new younger person who is going to be able to be with this Company for years to drive the Company forward.

I was not asked to step down. This is something that we talked about as Mr. Pearce said right after the AGM, and it was a discussion about where is the Company, how does it feel about finding a successor? I was not asked to step down, and I feel like the Company is doing exactly the right thing at the right time, and I feel very good to have been a part of all of this. The stabilizing of the company and then turning it over to truly a world-class person. (Owens, Nortel Analyst Call, October 17, 2005)

When Owens left Nortel, he entered into a severance agreement that included lump sum payments of two years' salary (\$2M), 9 weeks accrued vacation, two times annual 170% bonus, prorata bonus payment for 2005, accelerated vesting of 2.9 million options, relocation costs, tax preparation services, and a 5-year guaranteed pension benefit ( \$703,913 lump sum and monthly payments of \$99,073). When Nortel entered into bankruptcy protection in January 2009, Owens filed a claim for his remaining pension payments of approximately \$2M.

#### **4.7 Mike Zafirovski: November 15, 2005, to August 10, 2009**

Mike Zafirovski, at the age of 51, assumed the role of President and CEO on November 15, 2005. Zafirovski's terms of employment included an annual salary of \$1.2M, annual bonus between 150% and 300% of base salary, 5 million stock options,

restricted stock units of \$7.5M, long-term incentive of 200% to 400% of salary, relocation costs, and a special lifetime annual pension benefit of \$500,000 (after five years of employment).

Zafirovski emigrated from Macedonia to the U.S. in 1969, at the age of 15. He joined General Electric in 1975, where he stayed until 2000. During his last 13 years at GE, he worked as President and CEO in five of their businesses. In 2000, he left GE for Motorola, where he was President and COO from 2002 to February 2005. The media speculated that he left Motorola in 2005 because he was passed over for the position of Chief Executive Officer, although this was never substantiated by Zafirovski himself.

Owens chose to announce Zafirovski's appointment through an analyst call held on October 17, 2005, the same day the news was released to the press. Together, the current and new CEO discussed Nortel's progress and its future. Although his official start date was still a month away, Zafirovski used the call to present his strategic plan: complete the financial transformation; renew integrity; establish a strategic focus; work towards profitability; build innovation and R&D effectiveness; and, focus on processes and automation. In response to an analyst question regarding a COO position, Zafirovski stated:

We do not plan to fill a COO position. My perspective has been now for 30 years it is virtually impossible to separate execution and strategy. And at least for the foreseeable number of years, if not decades, I would not think of us having a COO position. (Zafirovski, Analyst Call, October 17, 2005)

On October 18, 2005, Motorola launched a lawsuit against Zafirovski and Nortel over breach of contract. They settled out of court, where Zafirovski had to repay \$11.5M

of his severance package, all of which was reimbursed to Zafirovski by Nortel. During the same period, Nortel sold its Toronto headquarters for CDN \$100M and relocated to a smaller facility in the area. Third quarter results were issued on time, presented by Owens, and the transition to Zafirovski on November 15, 2005, was well received. Analysts and the media were encouraged with Zafirovski's background and immediate focus on corporate strategy. The restatements behind them, Nortel seemed (finally) on the road to recovery. Zafirovski moved into a Toronto apartment and worked out of the company's headquarters throughout his tenure, while his family continued to live in Illinois.

On November 15, 2005, Zafirovski sent his first all-employee email (which he called "Zmails") announcing a 45-day tour of the Nortel sites. During this period, he began to change his executive team, starting with the removal of Brian McFadden (Chief Research Officer), Sue Spradley (President of Global Services) and Pascal Debon (President of Wireless), all of whom reported to Frank Dunn. At the same time, he hired David Drinkwater, Chief Legal Officer, who worked for the OSC; Joel Hackney and Don McKenna from GE (his former employer); George Reidel, Chief Strategy Officer, from McKinsey; and, Dennis Carey, who worked for both Motorola and GE. Carey, in particular, was charged with focusing the corporate culture into three areas: integrity and accountability; effective leadership and decision-making; and, cross-company collaboration.

From his first analyst call, Zafirovski established a specific strategic vision. He used ideas from his former mentor, Jack Welch, to be either first or second in each business, with a target of at least 20% market share. He instituted quality and efficiency



programs (e.g. Six Sigma), restructured the R&D investment profile, and brought in McKinsey consulting to help. His focus was on creating a new leadership team and new leadership values, implementing a strategic planning process (adopted from GE), and a program called BIG: Business transformation, Integrity renewal, and Growth Imperatives. The business transformation program focused on pricing and sales effectiveness, direct materials, services, organization, general and administrative effectiveness, and R&D effectiveness. In his 2005 year-end letter to employees, Zafirovski was candid about his own role.

Last Friday night, as I was flying back from a very productive trip to Europe following several customer and employee visits, I came across a newspaper article entitled "Optimism Puts Rose-Colored Tint in Glasses of Top Execs." Included in the article were quotes like:

- "99% of CEOs thought they could lead their companies from crisis;"
- "Optimism is all about possibilities, change, hope...without those qualities, how can any leader succeed?;" and,
- "By definition, leaders are slightly delusional."

My first reaction was to take exception to the word "slightly" . . . . Seriously, the question of our confidence in ourselves-and as members of Team Nortel-is something I will begin discussing today and a topic I will continue to raise in the coming weeks and months. Confidence in ourselves and each other will be critical factors in how far and how fast we take this 110-year-old company. (Zafirovski, CEO Email, December 20, 2005)

Zafirovski also acknowledged both the company's attributes (see Table 15) and adopted an attitude of "forceful optimism... a belief and an attitude that I expect from everyone at Nortel – a combination of positive anticipation for the future combined with a determined approach to maximize positive impact" (Zafirovski, CEO Email, December 20, 2005).

**Table 15: Nortel's Attributes (Zafirovski, CEO Email, December 20, 2005)**

| <b>Positives</b>               | <b>Must Improve</b>                   |
|--------------------------------|---------------------------------------|
| Strong innovation DNA          | Decision-making processes             |
| Customer partnering            | Lack of accountability                |
| Global footprint               | The over-complexity of our processes  |
| Employee talent/qualifications | Quality of products/solutions         |
| Loyalty                        | Lack of focus                         |
| Brand                          | No / low profitability (last 9 years) |

In addition, Zafirovski quickly made changes in the corporation's marketing strategy. He moved from Owens' "This is the Way" campaign to "Business Made Simple":

We have the opportunity to make it as powerful externally, and as a catalyst for driving our cultural change as "Just Do It" and "We Bring Good Things To Life" were for their companies. (Zafirovski, CEO Email, February 6, 2006)

In parallel, we will be introducing programs to significantly increase your engagement and involvement in running the business--as well as helping to eliminate the complexity and bureaucracy in our company. We will only reach our goals of Business Made Simple when we run our company in a simpler, more focused fashion. (Zafirovski, CEO Email, February 2, 2006)

Zafirovski's beginning, however, was marked by further challenges. In February 2006, Nortel settled the class action lawsuits filed against them for the accounting problems that plagued Dunn's tenure. The settlement included a payment of \$575M cash and an issuance of 14.5% of the firm's equity. Although the cash payment represented approximately one sixth of the firm's cash reserves, Zafirovski downplayed the event to employees:

The attention this settlement will get will no doubt be a temporary distraction as pundits and industry watchers may use it as an opportunity to re-tell the circumstances around the financial restatement and recent challenges facing the Company. It's important to recognize that the settlement is in relation to activities that are a part of our past, and a big part of moving forward is in closing this unfortunate chapter in our otherwise proud and distinguished history. (Zafirovski, CEO Email, February 8, 2006)

Soon after the settlement, Nortel announced that the company would have to restate results (for the third time) for 2003, 2004 and part of 2005, due to methodological issues with revenue recognition. The company delayed reporting of its 2005 results, which showed growth for the first time since 2000, but low profitability and shrinking cash reserves. They delayed the AGM and announced job cuts mid-year of 1000 employees (a reduction 1900 and a hiring of 800 in lower cost locations). Employees received salary increases and partial bonuses; Zafirovski voluntarily reduced his special lifetime annual pension benefit by 29%, to \$355,000. Midyear, the company issued \$2B of senior notes and membership changes occurred within the Board of Directors.

Despite the setbacks, Zafirovski continued to promote his short-term priorities and established a long-term plan. He committed to \$1.5B operating margin expansion and formally communicated his strategy (see Table 16).

**Table 16: Zafirovski's 6-Point Plan**

| <b>Zafirovski's 6-Point Plan</b>   |
|--|
| 1. World-class management team, culture and processes.   |
| 2. Focus on the balance sheet, governance and business/finance controls.                                     |
| 3. Drive to world-class cost structure and quality levels that will take us to a mid-teens operating margin. |
| 4. Our targeting a minimum of 20% market share.  |

---

**Zafirovski's 6-Point Plan**

---

5. Investment for profitable growth.
  6. An increased emphasis on service and software solutions.
- 

As part of his plan, Zafirovski brought in more executives including Lauren Flaherty, Chief Marketing Officer (from IBM), John Roesse as Chief Technology Officer (an entrepreneur) to oversee not only the core R&D organization of 250 employees, but (eventually) all 12,000 R&D employees worldwide, Dietmar Wendt (from IBM) to lead the new Global Services organization, and Ellen Bavornick (from GE and Motorola) to preside over the corporate-wide Six Sigma program. He also promoted from within for regional positions in Europe and Asia.

Zafirovski, in an effort to reduce costs and focus on market opportunities, promoted the necessity of strategic partnerships and established an alliance with Microsoft, a move that encouraged analysts (although had minimal material impact).

Re-creating a great company happens one step at a time, and today I am convinced we have taken a giant step forward in that direction. I am delighted to report that we have signed a landmark agreement with Microsoft to create the Innovative Communications Alliance. This clearly demonstrates Nortel's commitment to charting a course for growth that combines our own industry-leading innovation with opportunities to work with other industry leaders to accelerate the creation and adoption of new technologies. (Zafirovski, CEO Email, July 18, 2006)

Zafirovski also established a strategic focus in three areas: mobility and convergence, enterprise transformation, and services and solutions. As a result, Zafirovski sold the company's UMTS (wireless) business, sensing that Nortel could not achieve a leading market position or 20% market share – a decision that analysts

repeatedly questioned for more than a year after the sale was complete and one that Nortel appeared to have difficulty accounting for financially. In emails to employees, Zafirovski appeared confident.

My interaction with the “outside” world -- investors, customers, and shareholders -- has made one thing perfectly clear: our plan and framework is right on target. It attacks fundamental issues like integrity, talent, financial health, quality and cost competitiveness; and it underlines the process we have to embrace for growth. (Zafirovski, CEO Email, September 20, 2006)

Towards the end of 2006, employee satisfaction seemed to be improving, “The good news is that 20% more of you agreed that ‘you currently feel satisfied as an employee’ compared to 6 months ago” (Zafirovski, CEO Email, November 13, 2006). Zafirovski’s executive management team was in place, the company’s strategy was formalized, revenue was increasing, a number of strategic partnerships were signed, and manufacturing efficiencies had been gained. However, Nortel was still spending more than it was earning; shareholder value had not been realized. The November investor conference confirmed Zafirovski’s concerns:

Across the board, they were particularly impressed with our progress on Business Transformation; it bolstered their confidence that the turnaround at Nortel is in full swing. And while we outlined a strong story on the plans and processes we will follow to invest for growth, we have to demonstrate that we can execute on those plans fully to earn their confidence. The bottom line is that it’s the combination of our transformation progress and our ability to generate growth that will answer their questions about our ability to generate sustainable profit (Zafirovski, CEO Email, November 17, 2006)

In his year-end letter to employees, Zafirovski’s emails suggested concern:

[We] still face a challenging future if we – each and every one of us – don't make some critical changes and execute on our plans. Our cost structure is still too heavy, our processes are still complicated, and although improved, our quality and our ability to meet delivery schedules and plans of record must achieve higher levels of performance. Yes, our processes (Business Transformation, Lean Six Sigma, TTM and Own It!) are in full swing, with lots of promising traction. But – and I told the investment community AND customers this too – we must bring an even stronger focus and level of urgency and effectiveness in getting results in these critical-to-success areas. It is really in our hands.  
(Zafirovski, CEO Email, December 19, 2006)

Zafirovski's second year as CEO was just as challenging as the first. In Dec 2006, the company chose to consolidate its shares with a 10:1 ratio, reducing the number of outstanding shares from 4.3 billion to 433 million. Two executives left the company without explanation: Susan Shephard, the Chief Ethics officer, and Peter Currie, the CFO, who was replaced by David Drinkwater (the Chief Legal Officer). Nortel announced that they would restate results for a fourth time, for the years 2004, 2005, and 2006, and delay 2006 year-end reporting. The Code of Business Conduct was reissued and a new business transformation plan led to a further reduction of 2900 positions (and a relocation of 1000 more). Deloitte, the firm's auditor, withdrew their audit reports from earlier years and Nortel announced a \$1B senior notes offering, required to refinance a portion of the existing \$1.8B convertible notes due in September 2008. Nortel also settled a CDN \$35M civil penalty for OSC violations related to the financial restatements.

Soon after the employee reductions and the issue of the new code of conduct, Hackney, one of Zafirovski's first executive hires and eventual President of Enterprise, was charged with assaulting a young woman in a Raleigh, North Carolina (USA) parking

lot, over a parking space. In response to queries from employees and the media in regards to the company's code of conduct, Zafirovski issued the following to employees:

Joel is a leader with an important mandate who will need to continue to challenge his team to perform at world-class levels while exemplifying our leadership and core values. His track record includes very strong results and his leadership capability has been validated by employee assessments (as recent as December 2006), which included feedback from all of his direct reports. That said, I know Joel is taking this incident very seriously and will use it to work to become an even better leader.

I am absolutely confident of Joel's ability to execute our business objectives, and he has given me his full assurance that he will hold to the highest ethical and professional standards expected of a Nortel leader. (Zafirovski, CEO Email, February 28, 2007)

On March 12, 2007, the SEC charged Frank Dunn (and three others) for accounting fraud. The RCMP followed suit on June 19, 2008, with similar charges<sup>16</sup>.

Employee satisfaction suffered; results from the winter survey suggested that employees were skeptical about Nortel's turn-around. Zafirovski responded as follows:

So let me be clear. My executive team and I are not the ones who will ensure a bright future for Nortel alone. Each and every one of you has a part to play. Each and every one of you is part of team Nortel. We need you in the game. 100%. Without reservation. The sum of all of your efforts, if channeled with the right attitude in the right places, can make an incredibly powerful difference.

---

<sup>16</sup> The RCMP case went to court in January 2012 and closed in January 13, with full acquittals.

This is one of those moments of truth. When each and every one of you needs to look in the mirror and ask the following question: do I believe in Nortel and am I willing to get in the game? If the answer is yes - then jump in. Take that extra step. Do that extra task. Run that project just a little tighter. And you will see the momentum build all around you. More importantly, you will see a change in your own career progression. Because nothing unlocks potential like commitment and dedication. (Zafirovski, CEO Email, May 4, 2007)

Despite the setbacks, 2007 hinted at recovery. Revenues, gross margin, and operating margin were up, and cash flow was positive for the first time since 1998. Paviter Binning was brought in as the new CFO (the 8<sup>th</sup> CFO in less than five years) and Zafirovski stuck to his 6-point plan. He continued to shift R&D investment into the Enterprise and Services business, and worked towards cultivating a “must do” attitude. He was elected to the national security telecommunications advisory committee by US President George Bush. Third quarter results for 2007 indicated that Nortel’s gross margins were better than industry, pushing the stock up 16%. On Analyst Day, when Zafirovski’s entire management team presented the corporate strategy to investors, the stock inched up. Nevertheless, Nortel still had not achieved the projected targets set by Zafirovski.



Our future success no longer depends on regulators or courts. It depends on us -- on our ability to accelerate this year's progress into 2008 and make us a *smarter, stronger* and better *performing* company. A company that can reclaim its rightful leadership position in the market. I won't mince words: 2008 will be a highly competitive year. There is still a lot of work to be done. But with *forceful optimism, confidence* and *passion*, we will make the right decisions, the tough choices and the bold moves. There is no team in the industry that I'd rather have by my side than you! And I know we can do it (CEO Email, December 20, 2007, italics in original)

The year 2008 started much like the previous year, with further reductions. In the reporting of its 2007 results, Zafirovski announced that 3100 employees would be laid off, while 1000 employees would be hired in lower cost areas. The restructuring would initially cost the company \$250M, with benefits realized about a year later. "I am certain that the media headlines that will appear during the course of the day will not be kind. We knew this going in, and we moved forward knowing that these decisions are necessary to affect a turnaround that is real, and that will last" (Zafirovski, CEO Email, February 27, 2008).

The first half of 2008 continued to suggest improvements. A strategic alliance for WiMax with Alvarion was initiated, Nortel won a contract for the London 2012 Olympic and Paralympic Games, quarterly results showed growth in revenue and margins, and the analyst day conference in June ended with upward movement in stock price. Although analysts continued to question growth potential given the global economic situation, they recommended to either hold or buy the stock and the S&P listed Nortel as a B stock for long term issuer rating. All the while, Zafirovski continued to emphasize urgency. He

issued six employees emails during this period, all closing with a call to action (see Table 17).

**Table 17: Closing Paragraphs, Zafirovski's CEO Emails**

| Email date/title  | Closing Paragraph   |
|---|---|
| February 4, 2008:<br>Accelerate to win                                  | Together, we can re-create this great company. We have a shared desire to succeed that drives us forward. We also have momentum. We have a strategy that resonates with our customers. And, we have a leadership team that will go the distance. I'm telling you, because I also know, it won't be easy. To get to the next level, we have to accelerate. You have my full commitment on this journey and, rest assured, I will accelerate the actions necessary to make Nortel a winner. I need you all to be the best you can be. I'm counting on you. Our customers are counting on us. Let's go make it happen! |
| February 27, 2008:<br>A Year of Tough Challenges...and Huge Opportunity | Make no mistake, there is a tremendous amount of work ahead of us. But our ultimate goal remains the same: to build a great company, with great people who strive, achieve and grow as part of a winning enterprise. I have great confidence in our ability to succeed.   |
| March 26, 2008:<br>State of the Business and The Road Ahead             | We are already achieving what many doubters out there said was impossible. Every day we are improving and rebuilding our company and our prospects for the future. We are working very hard, we are determined and committed - and, we are really making change happen. Not just strategically, but in everything we do. We are making some bold and courageous moves to redefine Nortel and the future of communications. We've reached the middle of our transformation and we all know we're not done yet. Finishing the journey won't be easy. Far from it. But, if anyone can do it, we can -- and we will.    |
| May 5, 2008:<br>Making 2008 a Breakout Year                             | With the fundamentals starting to come into place we must ready and push ourselves with urgency. Together, we can make 2008 the breakout year for this company. We have all put much into this journey, and now we are catching glimpses of what will come if we keep working at it. This is not the time to let up, but to stand up, be counted and work together to go the rest of the way.   |
| June 16, 2008:<br>The Power of Momentum                                 | You are this company, and your impact is the only thing that is going to take us to the next level. I believe we are on the right path - our strategy is resonating with our customers - but the execution is up to all of us. If we deliver, we will succeed. I am proud of this team, and I thank you for your hard work to get us this far. Let's dig down and find what it takes to go the distance. I know we can do it.   |
| August 1, 2008:<br>Driving Growth and Profitability                     | If we stay true to these values, we will transform with purpose, we will grow and we will succeed. As we discussed at the June analyst meeting, I am very excited about moving our transformation to the growth stage. Great companies grow or perish. The most successful organizations are those that have a strong sense of who they are, what they value and how they bring it to the world. Nortel is no different. Even during the toughest of times, by pulling together, we can be part of something truly special. Let's make it happen.   |

On August 1, 2008, Zafirovski announced the 2<sup>nd</sup> quarter results to the analyst community, about six weeks prior to the global economic downturn. In his closing summary of the presentation portion, the CEO stated:

Let me just finish this page with this unrelenting focus to continue to drive achieving our 2008 objectives. Again operating margin improvement ahead of the market. To build the customer and market momentum in the areas where we are making the investments in growth, which we know we are going to have to achieve, to be able to not only finish 2008 strong, but build a foundation for 2009. We are just starting to move from the transformation stage, to one where we are growing the business. We understand our markets, we understand the industry, we know the headwinds facing us and the industry, but also I want to highlight that we feel confident, by the management demanding following standards, and we are projecting to do this right. (Zafirovski, Analyst Call, August 12, 2008)

In the question and answer period, Vivek Arya, from Merrill Lynch, questioned Zafirovski's outlook:

Mike, my question is the same I asked in the last call. Do you think Nortel has the right strategy for growing in 2009, or do you need to make drastic changes right now in 2008 to make sure that things don't get worse next year? Gross margins seem to have peaked, new orders are slowing significantly. Operating expenses are not really coming down. Even though it seems you can do okay in the second half '08 because of your deferred revenues, I am still struggling to see what the five month plus strategy is, especially if the macroeconomy does not improve? (Nortel Analyst Call, August 12, 2008)

On September 17, 2008, Nortel provided a preliminary view of the third quarter and revised its outlook for the 2008 fiscal year. Zafirovski announced to the press (news release), the analysts (analyst call) and employees (CEO Email) that the company was

facing considerable challenges due to poor global economic conditions (and low customer spending) and would therefore undertake “a comprehensive review of our business and steps to reduce Nortel’s overall cost base” (Zafirovski, CEO Email, September 17, 2008). He also announced that Nortel would divest its Metro Ethernet Networks business unit, considered by some analysts and media to be the company’s core asset.

Nortel’s situation became clearer in November, when Zafirovski announced the need to deliver an annual savings of \$400M by the end of 2008.

As I told you when we last spoke, the credit crunch has serious implications for Nortel and how we need to behave in this environment. We must preserve and/or generate as much cash as we can to give ourselves options. If we do not manage this part of our business, well, the future will be bleak. It’s that simple. (Zafirovski, CEO Email, November 11, 2008)

Zafirovski restructured the corporation into three distinct self-sufficient business units and announced 1300 layoffs, with 25% to be completed by year-end through voluntary severance packages. Corporate functions were significantly reduced and six members of the executive management team were to leave by year-end, including four corporate officers (legal, technology, marketing, and compliance) and two presidents.

By the end of 2008, Nortel had 30,000 employees (down from 90,000 in 2002). Moody Investor’s Service downgraded the Nortel family rating from B3 to Caa2. Analysts raised concerns that Nortel lacked cash to fund operations in 2009, and that the sale of the Metro Ethernet Networks business would be difficult given the economic circumstances. However, not all analysts were ready to sell off the stock; of the 20

recommendations from Bloomberg, only nine analysts recommended selling, and price targets ranged from about \$6 to \$8.

Mark Sue, an analyst with RBC Capital Markets (New York), however, rated the stock at underperform and set the target price to \$0, arguing that unless Nortel could successfully sell the Metro Ethernet Networks business (at the price they originally valued), the company would run out of cash; Nortel would be unable to cover the interest carrying costs on their \$4B of unsecured public debt and the pension plan liabilities. The Wall Street Journal followed, reporting that Nortel sought legal counsel to explore protection from creditors, although Nortel argued that “No bankruptcy filing is imminent” (Wall Street Journal, December 10, 2008).

On January 14, 2009, suspicions were confirmed; Zafirovski announced that Nortel’s Canadian and US subsidiaries had filed for bankruptcy protection (see Table 18). With about \$2.5B in assets and \$4.5B in outstanding debt, Nortel decided to restructure under protection from creditors.

**Table 18: Zafirovski’s Email on Bankruptcy Protection (January 14, 2009)**

This morning, we announced that Nortel is undertaking a comprehensive business and financial restructuring. To accomplish this, Nortel has made court filings for creditor protection. I know this is incredibly tough news to hear, but I believe this process will enable Nortel to become a more focused, financially sound and competitive company. Make no mistake, the coming days and weeks will not be easy. But together, we will get through it. Later today I will speak with you in person, explain this decision in more detail and answer your questions. Please join me. [Click here to presubmit questions.](#)

Most importantly, during this restructuring process, we must reach out to customers and explain what is taking place, and why. I want to personally assure them that Nortel is here to serve them and is dedicated to our relationship with them. Our sales teams are on the front lines, but in this environment, we must all be ambassadors for Nortel.

Despite the need to do this, and my firm belief that it will allow us to strengthen our financial footing, this was an incredibly difficult decision for us to make. It will impact jobs and some of Nortel's prior obligations. I can assure you we explored every possible alternative and engaged in extensive consultation with our Board of Directors and advisors. High debt levels, a high cost structure, and certain historic costs

(some going back to when we had three times as many employees) - compounded by the current economic crisis - significantly reduced our options.

Just seven months ago, at our June 2008 investor conference, we summarized that the external market expectations for most of our growth segments were in the 10% range for the next 3 years. We believed that we had the solutions, momentum and improving cost structure to do well in that environment. You know the changes in the external environment since then, from financial and capital markets to decreasing visibility and forecasts for our industry. Faced with an unclear view of 2009 - where most current predictions are for industry revenue declines of at least 10% (a net decline of over 20% from just two quarters ago) - we needed to act now while we have sufficient cash to fund our ongoing operations.

Let me briefly outline the way forward. While day-to-day operations will be ongoing, the filing process will unfold in phases. We have completed the pre-filing and planning phase and have started what is known as a "stabilization" phase. This period is focused on getting customers, suppliers and employees on board with how we will operate under protection and in line with how we will move forward. Following that, we will formulate a plan that will go in front of creditors for approval. Once the plan is accepted, we will begin its implementation.

I assure you, I am eager to communicate openly and frequently to ensure you are well-informed about the milestones that we will pass over the next while. We have built a communications site for employees. We have also built an external site for customers, partners and other stakeholders to ensure transparent communications with the broad network of individuals and companies that do business with us and that rely on Nortel. These sites will be updated regularly with new information as this process unfolds.

The management team and I are committed to the future and passionate about helping Nortel emerge from this process stronger, better and more focused. Acting decisively, preserving the business and delivering the best results possible will be critical to our future. It is important to know that the more successful we are in preserving our business, the greater the opportunity to preserve employment and optimize value for all stakeholders.

As employees in these times, we must all continue doing our daily work with intensity and dedication. Our ultimate success depends on executing the comprehensive business and financial restructuring plan, however difficult, and moving this company forward.

I am proud of the work we do at Nortel. I've seen your deep determination and resolve to help this company succeed. You have stepped up time and again. The most recent examples are your strong efforts in closing the fourth quarter, including a strong performance in meeting customer deliveries. Thank you!

I recognize that delivering at such a high level for such a long time has been difficult. I understand that it has taken a toll on you and your families and that you are worried about this announcement. Yet, every time we have faced adversity, I have been inspired by your strength and will to carry on. It is clear that you care about what happens to Nortel. To emerge successfully from this, we must reach inside and find that same drive and dedication. We must also reach out and support each other. At the end of the day, we must all feel the reward - a stronger and better Nortel - will be worth the effort.

I know you are committed to continuing this journey and to building the kind of company of which we can all be proud. We now need to work together and write a new chapter for Nortel. You have my commitment on this journey.

Thank you for all you are doing for Nortel.  
Mike

The New York Stock Exchange delisted the Nortel stock and the CEO limited news releases to the extent the law allowed. Although quarterly and annual results continued, Nortel did not publish an annual shareholders letter or hold an AGM. Material filings were limited to three categories: financial reporting, asset sales, and changes in executive management. Severance packages committed to in late 2008 were cancelled; the pension plan was underfunded, and a series of employee layoffs ensued. Severance and pension benefits became unsecured claims, while the large bondholders attempted to take over the firm; Zafirovski attributed decisions to the company's financial advisors and suggested that withholding such claims would be detrimental.

But in the end, it came down to a simple, but extremely difficult decision. Do we pay severance and risk our financial footing further - putting the company at risk - or do we forgo severance and arm ourselves so that we may continue the fight and save this company? (Zafirovski, CEO Email, January 30, 2009)

Zafirovski's arguments to stakeholders suggested that Nortel's restructuring was temporary and that a new Nortel would emerge. To incentivize employees, he paid out quarterly bonuses for anyone who worked 45 days in the quarter. Payments were based on revenue, cash, and customer-oriented operational metrics of lead-time, outage recovery, and service responsiveness. He withdrew plans to sell the Metro Ethernet Business, continued to work towards reducing costs and, with this executive and sales teams, spoke with customers in an effort to restore confidence. At the same time, however, he decentralized the four major businesses and centralized administrative functions. By mid-year, the first of many sales agreements was initiated; the liquidation of assets had begun.

On May 11, we said we were working to maximize the value of the company, while preserving our innovation platforms and employment to the greatest extent possible. We also said that we had been in discussions with external parties around a number of our businesses. I am pleased to announce that these discussions have progressed and that today we entered into a "stalking horse" sale agreement for our CDMA business and LTE Access assets with Nokia Siemens Networks for US\$650 million are advancing in discussions with external parties to sell our other businesses. (Zafirovski, CEO Email, June 19, 2009)

By July of 2009, the Toronto Stock Exchange had delisted the Nortel shares (at CDN 18.5 cents) and Zafirovski continued to sell off pieces of the company. Nortel entered into a sales agreement with Avaya, for the Enterprise business, and Ericson successfully won the auction of the CDMA and LTE assets for almost twice the original bid (US\$1.13B).

On August 10, 2009, Mike Zafirovski stepped down as Nortel's last CEO and issued his last email to employees (see Table 19). As per the terms of his agreement, he was entitled to a lump sum payment of two full years of salary, two times the annual bonus and pro-rata bonus payment, immediate vesting of options and restricted stock units, and his pension. In September 2009, he filed a claim against Nortel for \$12M.

**Table 19: Zafirovski's Last Email to Employees (August 9, 2009)**

Team Nortel:

This will be my last Zmail to you, and let me say upfront how much I have appreciated working with you and valued your tenacity, professionalism and dedication. As we announced today and as I discuss in my video to you, we have reached a natural transition point in the company - both I and the majority of the Board of Directors will be stepping down as of today.

With the recent sale agreements for our CDMA and LTE Access assets; the stalking horse sale agreement around our Enterprise business; the promising discussions we are having around our other businesses - we now need a streamlined leadership and operating structure to take us forward.



The tremendous work you have done to stabilize our business since our filing on January 14 and your continued efforts to keep the company running well have been truly remarkable. Unlike most companies in our situation - we not only continued to win new business, but we were able to reach multi-year highs during the first half of this year in our ability to serve customers and perform under the tough conditions of creditor protection and a very weak global economy.

The Q2 results which we also announced today - the combination of improving revenues, margins and cash compared with Q1, as well as continued strong customer service - are good proof of it.

Our journey together has been paved with both challenges and successes. Over the past few years, we have much to be proud of. We laid to rest the material weaknesses in our business and put an end to accounting issues that had been so draining on the company's resources for so long. We improved our quality and productivity levels. We also went a long way along a path to re-imagine this company and shift its economic center from legacy to growth investments. Your ability to innovate and apply those innovations to solve our customers' business problems remains unparalleled in this industry. From fourth-generation mobile broadband to 40Gig/100Gig to Unified Communications to VoIP applications - you have demonstrated to the world that Nortel ingenuity can go a long way.

Together, with your colleagues, you have created significant value - value that does not go away even as our businesses will be incorporated into other industry players. That value has been made real in the intense competition to win access to our technologies and the people behind them. Our acquirers see the value your expertise and know-how can bring to their own visions to transform the industry and the world. The Nortel name may go away, but the breadth and depth that many of you will carry forward under new banners will not.

Within my mandate to maximize the value of the company for our stakeholders - my greatest efforts have been spent trying to ensure that we preserve the innovations you have created and employment to the greatest extent possible. Certainly, with the sale to Ericsson and the safe landing of at least 80 percent of Nortel's wireless employees there, I am pleased to say there has been a return on that effort.

Most importantly, I want you to know that I have never been more proud to have been associated with a group of people as I have with the people of this company. Even as the global economy faltered - you did not. Through the uncertainty of past many months and difficult goodbyes to long-time colleagues, you stayed focused and got the job done. You did the right thing - for each other and for Nortel. The power and pride that flows from those accomplishments will be with you forever.

I am profoundly humbled by your passion and commitment. Like you, I wish things had gone differently. But, I can assure you that since my first day with Nortel, including since filing for creditor protection, I took my obligations very seriously to press on and ensure I did my best to protect the value you had worked so hard to create.

There is still much work to be done. Continuing to operate and working to sell our remaining businesses is key to ensuring we find homes for as many employees as possible with new players. We must not and cannot let up on serving our customers through the integration process. The more seamless our transition to our acquirers, the more successful it will be for everyone. I ask that you do everything you can in the weeks and months ahead to ensure Nortel's legacy is a robust and vibrant one. In the video accompanying this Zmail, as well as in the other organization announcements being issued today, you will see the new and expanded leadership roles for Pavi Binning, as well as for George Riedel, Joe Flanagan and John Doolittle. These are very important and deserved moves, and my last request to you is that you support them with your best efforts and dedication. I know you will.

My final words to you are simply this: thank you. I will be thanking our customers who stuck with us through this tough time. I will be thanking our suppliers who did everything they could to ensure we could

continue serving our customers. I have thanked our Board of Directors who worked tirelessly to bring good guidance and governance and ethics back to Nortel.

And, most of all, I want to thank you - the Nortel's employees - for all you have done and continue to do for Nortel. You are a most important group of people, and it has been a privilege to have worked with you.

Thank you, and I wish you well.

Mike

#### **4.8 Paviter Binning: August 10, 2009, to March 21, 2010**

On August 10, 2009, when Mike Zafirovski stepped down, Nortel chose not to replace the CEO position. Instead, the Board of Directors (and the court appointed monitor) assigned Paviter Binning, Nortel's CFO, as Chief Restructuring Officer (CRO). Binning was one of four executives responsible to the Board of Directors, the monitor, and the proposed U.S. Principal Officer. He had accountability for all four of Nortel's business units. The three other executives included George Riedel (corporate strategy), Joe Flanagan (Nortel Business Services), and John Doolittle (restructuring activities).

Binning joined Nortel in November 2007, at the age of 47, as Executive Vice President and CFO. He came to Nortel with a 25-year finance background, including the role of CFO at Marconi Corporation PLC, and finance positions at Diageo PLC and Hanson PLC. His terms of employment included a salary of CDN \$683K, CDN \$1.35M restricted stock units, annual bonus of up to 100% of base salary, and long-term incentives of CDN \$2.3M. Separation terms included 18 months of base salary, 36 months of benefits, and vesting of restricted stock units.

During Binning's tenure, most of Nortel's assets were sold off. The CDMA and LTE business sold to Ericsson for over \$1B, while the Enterprise business was sold to Avaya for \$900M. The Metro Ethernet Business was sold to Ciena corporation for almost

\$800M and other components of the firm were either sold or on their way to being sold by March 2010, when Binning stepped down from the CRO role.

Due to creditor protection, Binning was not required to hold analyst calls. During his eight months of leadership, he was quoted in three news releases and issued ten employee emails, all of which were directly related to the sale of particular assets (see Table 20 for an example).

**Table 20: Binning’s CEO Email on Enterprise Sale (December 12, 2009)**

Today Nortel reached another important milestone by concluding the sale of substantially all of the assets of our Enterprise and Government Solutions businesses to Avaya. This is our second large-scale divestiture of assets, following the recent completion of the sale of our CDMA and LTE Access assets to Ericsson.

While its never easy to bid farewell to an important and successful part of the Nortel family, we remain proud of their reputation for excellence and for their contribution to preserving the value of our innovation and know-how in the enterprise marketplace. Furthermore, we are pleased to have secured employment for more than 6,000 Nortel employees, who today became a part of the Avaya team.

There has been tremendous effort on the part of the Enterprise and Nortel Business Services teams that has allowed us to get to this stage of our agreement with Avaya. NBS is ready to deliver on our obligations under the Transition Services Agreement. I appreciate the hard work and long hours that have made today's announcement possible. Nortel employees can keep up with their progress on the new Transition Services web page <<http://navigate.us.nortel.com/imds?pg=/tsa>>.

It is important that we remain vigilant in the days ahead when it comes to respecting Nortel's and Avaya's intellectual assets. In some instances, you may have former colleagues who share Nortel facilities, but who now work under the Avaya banner. We remain friends, but professionally please keep in mind that we're now in different companies.

I would like to thank those who are joining Avaya for your years of professional and dedicated service to Nortel. We wish all of you great success in the days ahead. To those of us remaining with Nortel, please accept my thanks for your continuing efforts at protecting the value of our know-how for ourselves, our customers, potential buyers and all stakeholders.

Pavi

Binning officially stepped down as CFO, CRO, and EVP on March 21, 2010, but stayed for a short period to assist in the transition to Doolittle, who assumed his responsibilities as CFO. The CRO position was not filled. On April 12, 2010, George

Riedel became President of the business units, in addition to his role as Chief Strategy Officer.

#### **4.9 Epilogue**

By the end of 2010, Nortel had generated over \$3B in net proceeds related to the divestiture of all its businesses (including the sale of its Ottawa R&D facility for over CDN \$200M) and had generated about \$620M in annual revenue (down from \$3.5B in 2009). As part of continuing operations, the company paid out almost \$100M in retention bonuses to key employees. Through the divestitures, just over half of the 30,000 employed on January 14, 2009, were offered positions of employment in the acquiring companies. Nortel continued to fund healthcare benefits for its Canadian pensioners and survivors until the end of the year, along with survivor and long-term disability benefits, the plans of which were then wound up; healthcare benefits ceased, while pension, survivor, and Long Term Disability (LTD) payments were dramatically reduced due to underfunded pension and LTD plans. (In other regions, some of these decisions remain before the courts). During this period, Nortel also paid terminated employees a \$3000 advance on their claims, for a total of about \$4M.

In 2011, the firm sold its 6000 patents for \$4.5B to a consortium of companies that included Apple Inc., EMC Corporation, Ericsson, Microsoft Corporation, Research in Motion Limited and Sony Corporation. “The extensive patent portfolio touched nearly every aspect of telecommunications and additional markets as well, including internet search and social networking” (Nortel, 2001 Annual report, Management Discussion and Analysis). By mid-2012, Nortel had about 500 million shares outstanding and \$8B in

escrow (proceeds from divestitures). In August 2012, with about \$600M in cash and 500 employees, the firm announced that it would cease any further financial reporting.

<sup>17</sup>In light of the foregoing, the directors and officers of NNC and NNL have indicated that they will step down from their positions with NNC and NNL upon the issuance of a court order under the CCAA that the Monitor will be seeking to extend its powers. Such order would allow the Monitor to exercise any powers that may be properly exercised by a board of directors and to terminate the engagement of NNC and NNL's external auditors.

Following the third quarter 2012 filing deadlines, as a means of keeping the public informed of material developments during the remainder of the CCAA proceedings, and until otherwise determined by the Monitor, we and NNL will endeavour to continue to comply with the material change disclosure requirements under Canadian securities laws, to the extent practicable in the circumstances, and to file on SEDAR<sup>18</sup> (the electronic filing system of the Canadian Securities Administrators) all court reports of the Monitor except for such reports, or portions thereof, in respect of which confidential treatment has been requested. All other continuous and current disclosure filings of NNC and NNL will be discontinued. (Nortel 8-K, August 9, 2012)

---

<sup>17</sup> NNC=Nortel Networks Canada; NNL – Nortel Networks Limited (US); CCAA - Companies' Creditors Arrangement Act.

<sup>18</sup> SEDAR stands for the System for Electronic Document Analysis and Retrieval [www.sedar.com](http://www.sedar.com)

In January 2013, Frank Dunn, Douglas Beatty, and Michael Gollogly were acquitted in Canada of any wrongdoing. As of May 2013, creditor proceedings for the disbursement of Nortel's \$8B remained before the courts.

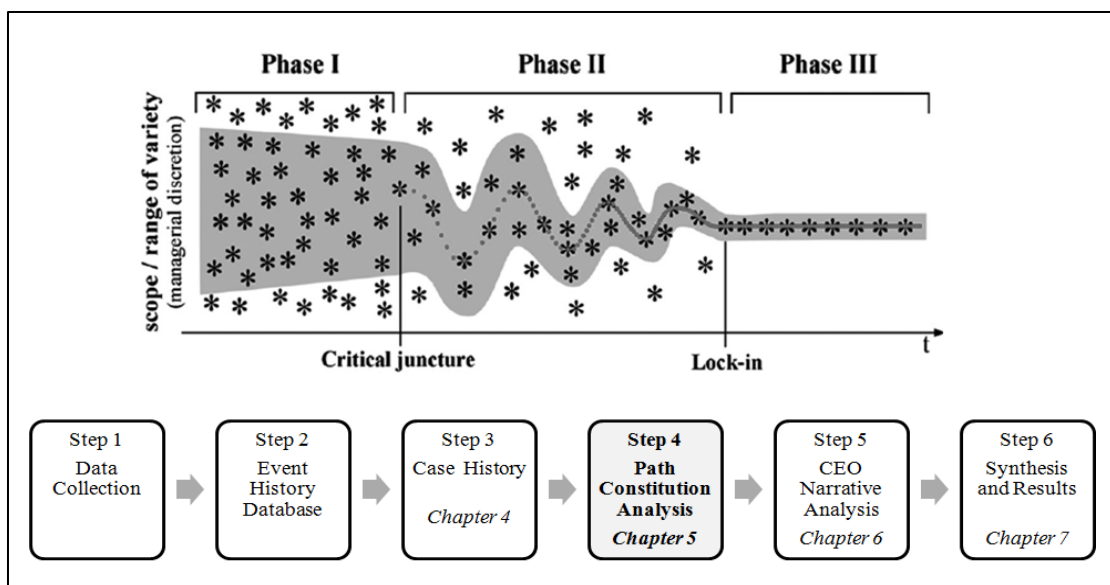
## **CHAPTER 5. Organizational Path Dependence at Nortel**

### **5.1 Introduction**

In the previous chapter, the case history of Nortel was presented, to establish context for the research project and to identify the chronological listing of major events. As the case history suggests, Nortel's organizational path involved a series of events that seemed to reduce strategic options over time. When the economy finally collapsed in September 2008, all of Nortel's efforts to move off path failed, sending them into bankruptcy protection.

The objective of this chapter is to present the results of the path constitution analysis (PCA), which was undertaken as a theoretical analysis of Nortel's organizational path. Although the case history suggests that lock-in occurred, the purpose of the PCA is to determine, using the event data (and associated documents), the characterization of Nortel's path and the occurrence of lock-in (see Figure 12).

**Figure 12: Path Constitution Analysis (Step 4)**



This chapter follows the structure of Path Constitution Analysis as presented in the Research Methods chapter (and in Table 21, as a reminder), as follows.

***Level interrelatedness and actors.*** This section demonstrates how focal actors (i.e. the CEOs) in the organizational level of analysis related activities recurrently both within their level of activities (firm level) and at levels above. As argued by Sydow et al. (2012), “a certain path can only be observed when it is put into perspective with regard to the surrounding – i.e. contextual – levels of analysis (Ragin, 2006)” (p. 6).

***Triggering events.*** In an effort to identify triggers of path dependence, major events were identified from the event history database (through the documentation) and the case history analysis. The CEO narratives were then used to supplement the analysis, to understand how the CEO positioned the events in regards to strategic options. For example, a major event that suggested an opportunity for change was positioned as such



by the CEO. An event that may have restricted strategic options was sometimes downplayed by the CEO.

*Non-ergodic process.* Using the results of the triggering event analysis (above), the collection of events was studied to determine how the events, over time, influenced the organizational path. Organization path dependence suggests that the outcome is neither initially automatically determined nor entirely left to chance. This section discusses how Nortel's path became increasingly constrained until lock-in was unavoidable.

*Self-reinforcing processes.* This section used the results from the previous analysis above, and also the results of the case history, to identify the self-reinforcing processes that appeared to influence Nortel's strategic path. The primary data used for this analysis was the event data, as the influence of the CEO narratives on the organizational path (specifically as it relates to self-reinforcing processes), is completed in the following chapter.

*Lock-in.* This section also discusses how Nortel became locked in to a particular strategic path and, even when they tried to move off-path, was not able to.

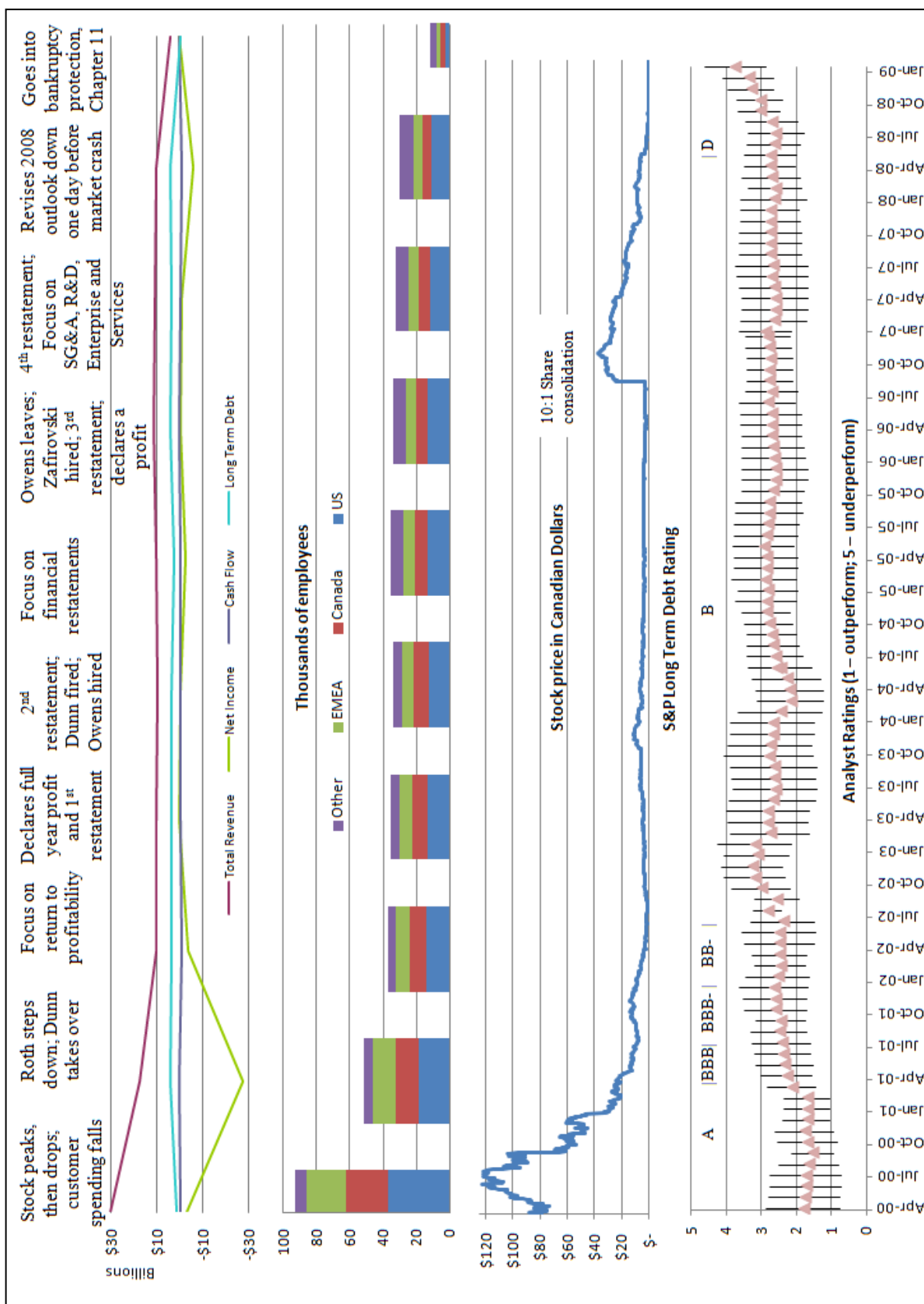
**Table 21: Path Constitution Analysis**

(Sydow et al., 2012: 2)

| Constitutive feature              | Definition  | Indicators  |
|-----------------------------------|---|---|
| <b>Level interrelatedness</b>     | A focal level of analysis that needs to be conceptualized in relation to surrounding levels of analyses that are more micro and macro.  | Actors and/or observers relate their activities (1) recurrently, (2) intensively, (3) and to an important extent not only to a focal, but at the same time to more micro and macro levels of analysis.  |
| <b>Triggering event</b>           | Incident that potentially induces the current and/or future trajectory of a path.   | Actors and/or observers assess an incident as being (1) decisive, (2) initiating self-reinforcing processes for an option's likelihood to be prevalent in the future ...  |
| <b>Non-ergodic process</b>        | Course of simultaneous and/or sequential events that lead to an outcome, which is not automatically determined from the onset but is not arbitrarily, either.   | From the onset, (1) options of equal potential are (2) narrowed down to (3) a final solution.   |
| <b>Self-reinforcing processes</b> | Course of interlocking simultaneous and/or sequential events that are progressively aligned to each other, thereby fostering the overall course of a path in an overall direction and potentially leading to a momentum; in this connection, certain initial conditions are connected with certain results. | Over time, (1) (interorganizational) overarching institutions that serve to formulate and pursue joint objectives are established, (2) the design and usage of complementary management systems with regard to organizational aspects, and operations, (3) learning effects reinforce ... |
| <b>Lock-in</b>                    | Situation or outcome where the trajectory of a path becomes confined to a single solution that does not need to be efficient.   | (1) investments are stable or increase with regard to the prevailing option, (2) investments in alternatives are reduced, (3) alternative options are considered to be niches ...   |
| <b>Multiple actors</b>            | Constellations of individual or collective agents.  | (1) number of actors (more than two), (2) properties of actors, (3) actors bound together by sets of relations ...  |

Before performing the PCA, visual and temporal mapping methods were used to descriptively understand the organizational path. Using the event data and the case history, an event diagram was constructed to identify major events (see Figure 13 on the following page). This event map was used as a guide in the PCA analysis. Follows (after the event map) is the PCA.

Figure 13: Nortel Event Map



## 5.2 Level Interrelatedness and Multiple Actors

In the case of Nortel, the path was analyzed at the firm (organizational) level. To initiate the investigation into the degree of interrelatedness between levels, each level of the competitive environment was considered as potentially related to the focus level of analysis. Using both the concepts identified in the grounded coding of the CEO narratives (see Appendix C) and the narratives used to construct the event database, five levels were identified: the macroeconomic (geo-political) environment level, the industry level (product and financial markets), the organizational level (focus level of analysis), the intraorganizational level and the individual employee level.

In some documents the narratives referred to the actors who operated within the level (i.e. analysts, as opposed to financial markets), while in other cases, they referred directly to the level itself (i.e. “the industry”). As such, both actors and bodies of actors (represented by and denoted as “levels”) were used to identify the boundaries and levels that were operating in Nortel’s particular organizational path, which are represented in Figure 14 and Table 22. As the figure indicates, Nortel was embedded within a larger context, including the industry and the macroeconomic environment. Organizational path dependence theory suggests that an organizational path is bounded by these levels and characterized by the interaction between the levels (Sydow et al., 2009); therefore, this section outlines the interaction.

**Figure 14: Level Interrelatedness and Actors****Table 22: References to Actors in CEO Narratives**

| Actor “Groups” (Extracted from 1 <sup>st</sup> Order Concepts, see Appendix C) | Level                       | Total Quotes (in 389 narratives) |
|--|-----------------------------|----------------------------------|
| Customers  | Industry – Product Market   | 1464                             |
| CEO Reference to Self  | Organizational              | 1374                             |
| Employees  | Individual Employee         | 1062                             |
| Industry Conditions  | Industry – Product Market   | 965                              |
| Top Management Team  | Organizational              | 909                              |
| Business units, LOBs   | Intraorganizational         | 776                              |
| Partners, JVs, Strategic Alliances   | Industry – Product Market   | 356                              |
| R&D  | Intraorganizational         | 298                              |
| Analysts   | Industry – Financial Market | 229                              |
| Regulators   | Industry – Financial Market | 201                              |
| Marketing  | Intraorganizational         | 179                              |
| Shareholders   | Industry – Financial Market | 177                              |
| Competitors  | Industry – Product Market   | 169                              |
| BOD  | Organizational              | 150                              |
| Operations   | Intraorganizational         | 144                              |
| Macroeconomic Environment  | Macroeconomic               | 133                              |
| Sales  | Intraorganizational         | 121                              |
| Legal, Litigation  | Industry – Financial Market | 102                              |
| External Experts   | Industry – Financial Market | 84                               |
| Suppliers, vendors   | Industry – Product Market   | 72                               |
| Business Media   | Industry – Product Market   | 65                               |

### ***5.2.1 Macroeconomic (geo-political) Environmental Level***

Throughout the case, narratives (both CEO and others used in the event analysis) positioned Nortel as a firm competing within an industry that was significantly influenced by the macroeconomic environment. The macroeconomic environment was often blamed for: lower than expected performance; future expectations; uncertainty; and, general industry slowdown. For example, in discussing the 2002 results with analysts, Dunn explained:

The wild card, by the way, is the geopolitical situation around the globe, and that is a wild card. And that's why we are very cautious here at Nortel and we are planning not for any positive surprises and will adjust accordingly (Dunn, Analyst Call, January 23, 2003).

References included how the economy directly influenced not only Nortel's performance but also the performance of Nortel's customers, and thereby indirectly affected Nortel. For example, when reporting the 2001 results, Dunn explained,

Market visibility remains limited given the uncertainty of the economic downturn and its impact on our customers' businesses and spending plans. As a result, we expect customers to move cautiously in the near term while maintaining the flexibility to increase spending in the future. (Dunn, News Release, January 15, 2002)

The references to the economic environment followed a pattern. Dunn's narratives included the economic environment in two periods: when reporting the 2002 results, which had fallen by 50%, and when his target for profitability (end of 2002) slipped by six months. Zafirovski's narratives on the economic environment increased from late 2007 onwards, when the corporation struggled to achieve growth objectives.

Of course, the Telecom and enterprise markets are not immune to the more global economic developments. Not revolutionary statement. There is a concern over the U.S. economy and related what it could do to other economies globally.” (Zafirovski, Analyst Call, February 27, 2008)

### **5.2.2 Industry – Product Markets Level**

Within the industry, Nortel interacted with four major groups of actors: the industry conditions themselves (considered a ‘group’ for this purpose), customers, competitors and partners (joint ventures, strategic alliances), suppliers/vendors, and the business media.

*Industry conditions.* Industry conditions played a significant role throughout the case period, given the interrelatedness with the macroeconomic environment and with the firms in the industry itself. At Nortel, industry conditions were positioned as a result of the macroeconomic environment. Global economic and political change (macroeconomic environment) influenced the availability of capital within the industry, which led to a reduction three areas: telecommunications capacity; infrastructure; and, (consequently) the need for manufacturing equipment. Industry conditions were mainly drawn upon, however, when the conditions were less favourable, and as a means to support lower than expected (or industry average) performance, allowing Nortel to attribute problems to external issues that were beyond the firm’s control. Significant discussion on industry conditions occurred soon after the dot.com bust, when Nortel’s annual revenues dropped by 50%.

For the telecom industry, the big event in 2001 was a sudden reversal of fortunes that reverberated across the sector. No telecom company was unaffected by a critical mass of difficulties that engulfed the entire industry. Every company in the industry was challenged to re-examine assumptions, strategies, and expectations. (Dunn, 2001 Letter to Shareholders)

Dunn's narratives referenced industry conditions throughout his tenure with a second peak in early 2003, on the reporting of financial results, where revenue was again lower than the previous year and he had not achieved profitability. The primary concern at the time was that growth in customer spending had not returned to expected levels, due to the general slowdown in the economy and lack of capital spending by customers. Nortel (and competitors) were directly affected by this industry phenomenon.

Owens had somewhat less narrative on the industry conditions although it also remained relevant throughout his tenure. References peaked at the reporting of the 2004 annual results, which were lower than expected.

Zafirovski's narrative had consistent inclusion of industry conditions, with increasing references in 2008, when growth in customer spending was still lower than expected and the economy was showing further signs of weakening.

*Customers.* Customers also dominated the narratives throughout the entire case. Narratives spoke about customers as a resource and as an influence; for example, Zafirovski stated, "To win in this fast-paced, global marketplace, we have to be obsessed with our customers' needs" (Zafirovski, CEO Email, February 4, 2008). During periods of difficulty, narratives emphasized the need to connect with customers and reassure them of Nortel's longevity.



Over this year I have spent a lot of time meeting with customers, keeping them informed of our situation and listening to their needs. They've stayed with us and we appreciate it greatly. Nortel is a great franchise and we will preserve it, we will do everything possible to be there for our customers and their needs. (Owens, Analyst Call, May 2, 2005)

In relation to Nortel's strategy, narratives discussed customer needs as the driving force for change.

As I've mentioned many times before, one of our strategic priorities is to drive consistent and increasingly profitable organic growth in the Enterprise space. We've upped our investments in R&D, sales and go-to-market to drive new innovations demanded by our customers. And we have put in place the monetization and marketing capability to capitalize on them rapidly and successfully. (Zafirovski, CEO Email, June 5, 2007)

*Competitors (competition)*. When referring to the external environment, CEO narratives included relatively fewer discussions about competitors, with most occurring during analyst calls. The narratives fell into three categories: competitive positioning, strategic comparisons, and financial comparisons. Naming of competitors was done in the analyst call narratives: "Lucent's a very significant player in CDMA. We're in number two position, gaining momentum. Number three and four are struggling right now. Ericsson talked about maybe getting out of the business" (Dunn, Analyst Call, July 18, 2002).

Other narratives included competitors when discussing financial performance or general industry malaise, to suggest that Nortel was doing as best as could be expected since even competitors were struggling.

We may see more pressure on Huawei and other Chinese competitors to go through what we have done with respect to financial accountability -- to be completely transparent in all of their support structures. And for the good of this market it will be terribly important that we see those elements of financial accountability going forward to make a comparison among the competitors. (Owens, Analyst Call May 2, 2005)

The third type of competitor narrative was in regards to growth, when the CEOs claimed Nortel was growing faster than the industry:

We have a better trajectory, that I showed you a few minutes ago, than any of our peers. We significantly improved our quality, operational cost structure. As I've indicated, we've outgrown the market in key segments. (Zafirovski, Analyst Call, February 27, 2008)

*Partners, joint ventures, strategic alliances.* CEO narrative from Dunn onwards consistently emphasized the importance of partnering with other firms to deliver the types of solutions that customers were seeking. As the industry moved from products to services and solutions, from differentiation to commoditization, from wired to wireless and from voice to data (and multimedia), the telecommunication manufacturing companies found themselves lacking the resources to develop the required capabilities. Some companies went out of business, while others merged (e.g. Alcatel and Lucent) and others again focused in specific markets (e.g. Cisco concentrated on Enterprise customers and solutions). From Dunn onwards, the CEOs chose an alliance strategy to complement Nortel's core competencies, over mergers and acquisitions.

CEO narrative demonstrates the growing discussion about partners throughout the 8-year period. Dunn initiated the discussion on partners in regards to developing the Enterprise business. In his discussion with analysts, he said:

So first on the Enterprise, we have talked about -- we are committed, focused and see a great business opportunity in the Enterprise space and we have been working very hard to improve our portfolio but also to improve our partnerships and our offerings to our customer bases (Dunn, Analyst Call, January 23, 2003)

Owens continued the alliance strategy: “So you can see a lot of emphasis on the issue of partnering in Nortel. I take it very seriously. We will provide the best solutions through the best partnerships we can engender” (Owens, Analyst Call, August 19, 2004). Owens cultivated joint ventures with LG and with the government organization, PEC. He also emphasized the importance of partnerships to employees, using the Symantec partnership announcement:

Since I joined Nortel as your President and CEO, you have heard me talk about the importance of these types of relationships. They will become a way of doing business at Nortel, and are one way we will bring new value to our customers while ensuring our own competitiveness. At our recent leadership meeting, we spent a great deal of time talking about the importance of these types of strategic relationships as one way to build a successful future for Nortel (Dunn, CEO Email, December 7, 2004)

Zafirovski continued to promote the partnership strategy to analysts, in the context of Nortel's situation:

There's no silver bullet on the near horizon that will promise in one swoop to transport this company past our challenges. Our transformation is a careful mix of organic growth, continued commitment to innovation and R&D, our extensive ecosystem of partnerships and other opportunities designed to maximize our effectiveness, and successes in the market. (Zafirovski, Analyst Call, July 17, 2006)

Only days later, he announced a strategic partnership with Microsoft, an alliance that remained at the forefront of the CEO narrative throughout his tenure.

We bring a lot to the party and they do as well. That is what makes relationships strong - where both parties can drive benefits. They are not always the easiest, but frankly Nortel has not been that great in partnerships as well. We are realising we cannot do everything ourselves. (Zafirovski, Financial Times Media Interview, June 20, 2008)

*Suppliers and vendors.* Some references were made about suppliers and vendors in the CEO narratives. Dunn's narratives included discussions about the outsourcing of manufacturing to Flextronics, a significant operational decision for the corporation that resulted in the move of 2500 employees. Although Dunn did not complete this transaction (he was fired two months prior), Owens ensured its completion in June 2004. For the most part, references to suppliers by all three CEOs were in regards to the corporation's cost structure; suppliers were considered a resource with which to negotiate lower costs:

We will be driving process excellence through the implementation of three major initiatives: supplier life-cycle management, which maps supplier capabilities including agility and volume capacity to the different stages in a product's life cycle; smart, simple design or parts standardization; and Clean Sheet Analysis, a data-intensive best practice that enables Nortel to identify what a product or component "should" cost and then use that data in supplier negotiations. (Owens, CEO Email, June 27, 2006)

Once Nortel went into bankruptcy protection, the supplier relationship changed, as protection from creditors also included non-payment of outstanding bills. In his last email to employees, Zafirovski acknowledged this hardship: "I will be thanking our

suppliers who did everything they could to ensure we could continue serving our customers” (Zafirovski, CEO Email, August 10, 2009).

*Business media.* Relative to other groups of actors at the industry level, CEO narratives included only a few references to the media, but during these times, the media was central to the narrative, positioned as either a hero or a villain. Narratives included three types of discussions: media attention (both negative and positive), CEO engagement with the media, and response to media attention. Narratives were purposeful in their use of the media to either legitimize decisions or establish the media as a villain, trying to diffuse Nortel’s strategic efforts.

The constant second-guessing, wrong-headed speculation, and pessimistic assessments of people outside the company cannot continue to go unanswered. I've recently given a series of interviews making it clear we've bolstered the company's staying power and are executing a sound strategy to rebuild our foundation for the future. (Dunn, CEO Email, October 7, 2002)

Of course, the press is mainly looking for updates on the status of our financial information, but we have been able to address other issues, and have been as forthcoming as we can be. I feel confident of our continued ability to be forthcoming and to have an open, credible relationship with the media and analyst community over the years ahead for the benefit of our company. I've done a lot of this in my life, and openness and trust with the media is important for any public company. There's a lot of good in Nortel to share with them! (Owens, CEO Email, June 18, 2004)

There is also the added skepticism regarding Nortel's potential to again be a great, relevant (and much higher market cap) company. Concerns expressed on Nortel are around our scale and portfolio age and mix. I even remember a magazine cover story that labeled our efforts: "mission impossible." And, to this day, I remember how fired up my team got in response; to prove that it was possible and that we were going to return this company to greatness. (Zafirovski, CEO Email, March 17, 2008)

### 5.2.3 *Industry – Financial Markets Level*

Financial markets included four distinct groups: analysts and shareholders; legal and litigation; external experts; and, regulators.

*Analysts and shareholders (including institutional investors).* The narratives spoke about this group throughout the case and were based either on upcoming engagement activities (e.g. conferences) or the outcome of the activities. CEOs also used the notion of shareholder value and investor value as a means to encourage the pursuit of financial objectives. Owens referred to the analysts when explaining how he prioritized the corporation's objectives:

I tell analysts that I spend 40 percent of my time on the activities associated with the restatement and the actions to make our financial accounting first-class going forward, 40 percent on implementation of 2004 business and development of the 2005 business plan, and 20 percent on the strategy for the future. (Owens, CEO Email, December 17, 2004)

Zafirovski evoked the need to deliver on shareholder expectations in an effort to increase the pace of change. "But let's make no mistake, the pressure is on. If we're going to deliver on the year, and on what the Street, our shareholders and all of you expect, we need to accelerate the pace of our execution" (Zafirovski, CEO Email, August

6, 2007). He was also clear with analysts about his priorities “And I can tell you that driving shareholder value is without a question number one imperative for the management team, for the Board, for me personally” (Zafirovski, Analyst Call, February 27, 2008).

*Regulators.* The presence of regulators within the CEO narratives, which included industry, financial and governmental actors, increased over time. They first appeared when Standard and Poor removed non-US companies from its S&P500 index, then again with the restatement activity that began in late 2003. From the initial restatement activity and throughout Owens’ tenure, narratives included discussion about the role of regulators, including the SEC and OSC, and the various decisions they made in regards to the restatement activity. Although some narratives discussed industry regulation (e.g. the purchase of PEC solutions in January 2005), most regulator discussions were related to financial markets and governments. Financial regulators were concerned with the requirements around public companies for listing, and issuance of bonds and stocks, while government narrative centered not only around the new government business purchased by Nortel but also the role of government in Canada (and other nations) to support R&D and encourage growth in the telecommunications industry.

In 2006, narrative around regulators came with Zafirovski’s emphasis on integrity, which followed the independent financial review commissioned by the Board of Directors. In 2007, with the announcement of a further restatement, Zafirovski evoked regulatory requirements as the reason, saying, “Today’s regulatory environment requires us to restate in a situation like this” (Zafirovski, CEO Email, March 1, 2007). By mid-

2009, regulator narrative had become common, with the ongoing bankruptcy protection proceedings.

*Legal, litigation.* Although narratives around legal entities and litigators were minimal during Dunn's tenure, they climbed over time. They became prevalent when Dunn was fired and then returned in February 2006 for the settlement of the class action lawsuit that included a payment of \$575M and 14.5% of equity. In 2007, narrative included discussion about the CDN \$25M settlement with the OSC, related to the investigation on the financial restatements; a narrative that persisted through the latter half of the year. Finally, legal discussions surfaced during bankruptcy protection proceedings, specifically related to the rules and regulations (and laws) on what Nortel was and was not obliged to do during this period.

*External experts.* CEO narrative drew on external experts to legitimize Nortel's strategy, such as industry experts and reports that positioned Nortel (and its products) as an industry leader (e.g. Gartner, Del Oro), for example: "the readers from Computer World voted our combined Microsoft/Nortel Unified Communications as the leading user solution in the marketplace" (Zafirovski, Analyst Call, August 1, 2008).

Experts were also drawn upon to legitimize what may have been perceived as a poor decision. When Nortel changed the pension plan, Zafirovski told employees:

Pressures on pension plans have increased around the world. Employers in several major industries - steel, auto, airlines - cite the weight of legacy pension obligations as a major inhibitor to competing successfully in the face of rapid global change. Today's announcement is about adapting our retirement plans to changing realities. (Zafirovski, CEO Email, June 27, 2006)



Additionally, experts were brought in to assist Nortel in its transformation, to include Accenture, McKinsey, and KPMG, suggesting that the firm did not have sufficient internal resources. Experts were also used to explain the industry advancements and opportunities: “In 10 years, David Clark from MIT, one of the people that helped invent the internet, predicts 1 trillion devices will be connected to the networks. That provides enormous opportunities for productivity, education, entertainment, and communications” (Zafirovski, Financial Times, Media Interview, June 20, 2008).

Finally, experts were used to explain poor performance, attributing results to industry factors as opposed to Nortel-specific factors. Notably, Zafirovski defended his revised 2008 outlook, stating to analysts:

In terms of a market versus competition, what we've seen including some confirming reports from Forrester for the IT purchasing survey results is that even the last 30 to 90 days anticipation of spend, were number of IT professionals having IT spend either in yellow or red is increased by anywhere from 10% to 25% in terms of a -- go from 23% to 35% of the IT managers are now predicting no growth to a decline versus the previous year. This is pretty consistent with what we are hearing from a number of our sales people, particularly in North America who do not believe this is a Nortel-specific. (Zafirovski, Analyst Call, September 17, 2008)

#### **5.2.4 Organizational Level**

The organizational level is defined broadly as the actors who had upper echelon responsibility for firm performance. This includes the Board of Directors, the Top Management Team, and the CEOs themselves.

*Board of Directors.* The Board of Directors (Board) were a visible actor in CEO narratives throughout the case. Narratives included mention of changes in the Board's

constitution, gratitude for their ongoing support, and (mostly) interactions between them and the CEO/Top Management Team.

The Board was referenced frequently during 2004 and 2005, primarily in reference to their involvement in the restatement process, including Dunn's firing and the engagement of an external auditor on the review of Nortel's finance organization.

Another part of our announcement today is the Board's decision to ask Wilmer Cutler to examine the facts and circumstances that led to improperly recognized revenues, which were identified in the later stages of the restatement process by Nortel management. This is an appropriate and responsible follow-on action on the part of the Board. It is a tangible manifestation of good governance. (Owens, Analyst Call, January 11, 2005)

The Board was often used to legitimize decisions, such as:

However, I am pleased that the Board has approved my recommendation for a Nortel performance factor of 50% for our AIP, which will result in payments of \$106 million to our employees. (Zafirovski, CEO Email, February 27, 2008).

In February 2009, management recommended, and the Board concurred, that bonuses earned under the 2008 plan were not to be paid out given the company's circumstances. (CEO Email, June 18, 2009)

*Top Management Team.* The CEO narratives spoke frequently about members of the Top Management Team and the collective group itself. This included organizational announcements produced by both Owens and Zafirovski, who made numerous changes within their leadership teams. Narratives also included leadership biographies, praise for contributions, appreciation for years of services, and changes in responsibility, along with lengthy discussions on the outcome of leadership meetings and explanations of changes

in reporting structures. Leadership, in general, dominated CEO narratives, especially those of Owens and Zafirovski. Once bankruptcy protection was initiated, narrative on leadership dropped from the texts.

*CEO.* The CEO narratives were written in the first person and all CEOs referred frequently to themselves in the narrative. CEOs expressed their emotions to employees, and provided their “assurance” and “commitment.” They had “confidence” in the employees, and made clear requests of employees. On the second day as CEO, Owens stated:

Nortel is a truly great company. I'm very proud to be here with you. Let's put our arms around each other and stay focused on growing our business and taking care of our customers. And importantly, know that I and the senior leadership of this company care deeply about you, our most treasured asset. (Owens, CEO Email, April 29, 2004)

On September 17, 2008, Zafirovski was clear with employees about the challenges that lay ahead:

I need your full commitment. It may sound odd since the above decisions will impact some of you. In return, you have my absolute commitment that I will continue to always put Nortel first in all my decision making, continue to look for expanded opportunities to promote our best performers, and do my very best to ensure timely communications and maximum redeployment for affected employees. (Zafirovski, CEO Email, September 17, 2008)

### ***5.2.5 Intraorganizational Level***

The intraorganizational level is defined as the individual and groups of employees that made up the firm, including functional groups and the business units.

*Employees.* Employees were a constant and significant group in the CEO narratives. CEO narratives included discussions *about* employees and *to* employees. All CEOs, throughout their tenure, spoke of employees through the media (in news releases), in analyst calls, and in shareholder letters. They thanked employees for past work, identified the employees as a competitive advantage, acknowledged employee well-being, and set expectations of employees. In the CEO Emails, narratives included not only recognition, but also acknowledgement of problems raised by employees through satisfaction surveys, and the general challenges of working at Nortel.

*Business units.* Nortel's structure over the years was modified periodically. Organizations changed names, R&D was decentralized and then centralized (and back again), sales organizations swung from a regional to a product structure, and services were pulled out of the product groups. These changes aside, the notion of business units remained throughout the case period. There were two organizations that served the main customer groups: Enterprise (serving businesses of all sizes) and Carrier (serving the telecommunications service providers). The products produced by the firm included both wired and wireless solutions used at most points in the network – from fibre optic equipment, to wireless base stations, to routers and voice over IP telephones.

CEO narratives contained business unit references throughout the case, with significant mention of the business units during analyst calls, especially when discussing financial results and overall business performance. CEO Emails included narrative on business units when discussing performance, organizational changes, new leadership responsibilities, and corporate strategy.

*R&D.* R&D was an intraorganizational actor that showed consistently in the CEO narratives throughout the case. However, the mention of R&D as an activity versus a group of actors was not always clear. CEOs included R&D in narratives as a financial resource, as a cultural resource, as a competitive advantage and as a function.

You will be well aware that in reference to many of our competitors, Nortel, even with these reductions in R&D, spends more on R&D than the others. We will continue to be very strong in R&D. But we are well aware that we have to have these numbers in balance and we're trying to realize the strongest R&D and the strongest technology future by virtue of synergies and by virtue of partnering with people who bring quality technology that can be bundled in solutions that we offer to both the carriers and to the enterprise customers. (Owens, Analyst Call, August 19, 2004)

And as we've said in R&D we spent \$1.9 billion. We have a proud history of innovation, as a matter of fact we have developed many of the technologies that make the networks of today run very effectively. We seek to build on this legacy, we have an R&D group that makes still great products and solutions but does so with better efficiency, more focus, and greater speed. (Zafirovski, Analyst Call May 16, 2006).

*Sales.* The sales force at Nortel was protected throughout many of the restructuring activities and this was referenced in the CEO narratives often. Additionally, every CEO spoke about the annual sales conference, including new branding programs and the emphasis on the sales process.

We're marshalling our resources and rallying the company behind our sales force to win the competitive battles ahead. (Dunn, 2001 Letter to Shareholders, March 11, 2002)

Our workforce actions are focused to disproportionately protect customer and sales facing roles as well as continue our focus on new innovative solutions. (Dunn, News Release, September 30, 2004)

Our sales teams are the "G" in our BIG initiative - the growth engine for Nortel, and all of us have a big role to play in ensuring our sales teams get our full support. (Zafirovski, CEO Email, February 6, 2006)

A significant part of this, as I said before, does not impact sales and go to market resources. A significant part of this are G&A slashes. (Zafirovski, Analyst Call, February 7, 2007)

*Marketing.* The marketing function was included in the CEO narratives much the same way as the sales function. Marketing and sales were often included together and they were consistently mentioned as functions excluded from any of the work force restructuring and cost cutting activities. Nortel changed its branding periodically through the case; these branding changes were also included in the CEO narratives.

*Operations.* Operations were mentioned in CEO narratives, although to a lesser degree than the other groups. Operations were more loosely defined as any activity or employee involved in the ongoing work, outside of R&D, sales and marketing. Operations narratives discussed cost reduction activities, such as the following:

Leaders in both Services and Operations agree that margin and total cost objectives can best be supported with aligned supply chain, deployment, and customer service resources. We are consolidating our service delivery and supply chain operations into one organizational structure to enable our services business to sustain a laser focus on executing the new services strategy. (Zafirovski, CEO Email, April 11, 2006)

Zafirovski suggested that operations were just as important as strategy:

Let me just make one comment. We do not plan to fill a COO position. My perspective has been now for 30 years it is virtually impossible to separate execution and strategy. And at least for the foreseeable number of years, if not decades, I would not think of us having a COO position. (Zafirovski, CEO Analyst Call, October 17, 2005)

### **5.2.6 Conclusion**

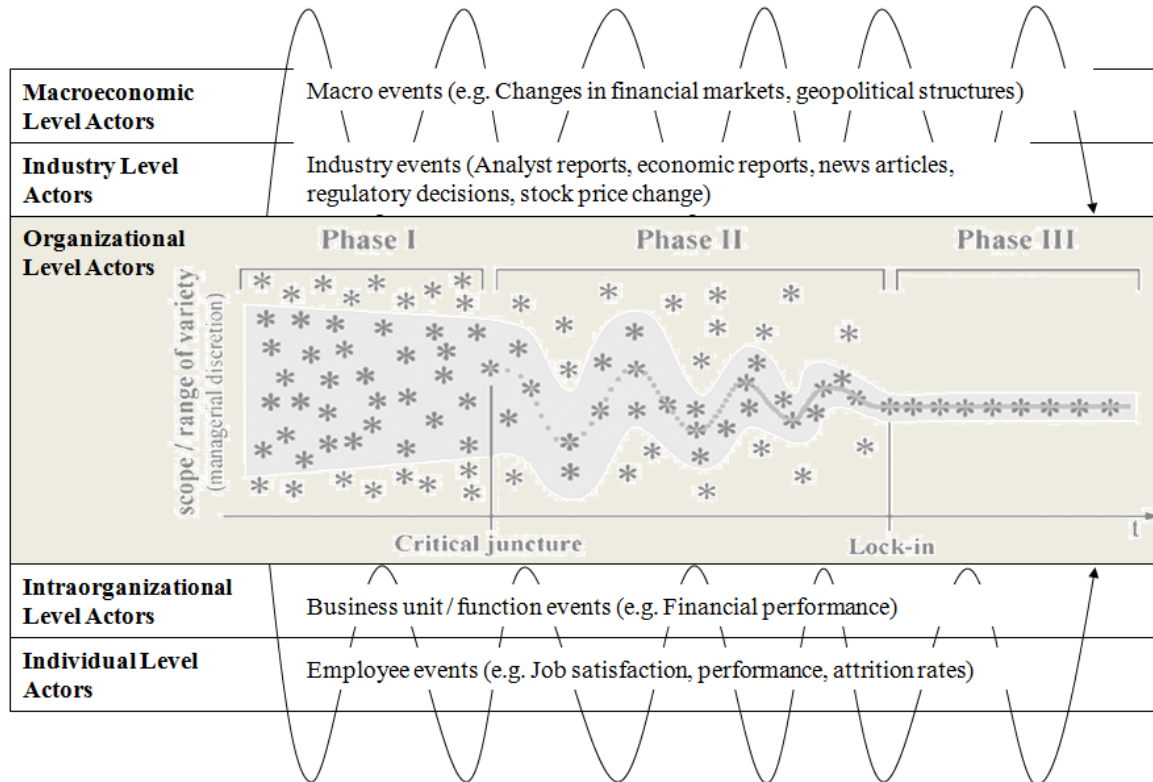
In organizational path dependence, the interrelatedness between the focal level of analysis and the surrounding levels is a basic premise of the theory (Sydow et al., 2012). To study a particular path at the focus level of analysis, the upper and lower boundaries provide context; actors may recursively refer to actors and events with the various levels, and respond to them reflectively. By positioning the organization within these levels, the constitutive features of the path can be determined.

As the above analysis suggests, the focal level of analysis (Nortel, as an organization) was both structurally embedded within the industry (that was, in turn, embedded with the macroeconomic environment) and discursively embedded within these levels (see Figure 15). Notably, the CEO narratives specifically focused on customers, employees, industry conditions, the Top Management Team, the business units, partnerships, and R&D.

Level interrelatedness was usually expressed in terms of events. The recursive activities were evident in narratives, when the events took place. If an event was initiated by Nortel (e.g. a material decision such as a new CEO, restatement activity, etc...), the event was positioned in relation to levels and groups of actors. If an event was considered external (e.g. economic downturn), the influence of that event was described in terms of Nortel's current performance, future performance and strategy.

**Figure 15: Level Interrelatedness at Nortel**

Overlaid on Sydow et al.'s (2009: 692) Constitution of an Organizational Path



The actor-centered narrative that persisted throughout the case, which demonstrates Nortel's embeddedness, is as follows. The economic downturn (positioned as such throughout the case) reduced customer spending and therefore customer needs had changed. To sustain and improve performance, Nortel had to meet these changing needs through the restructuring of the business units and realignment of the R&D organizations. The CEO and Top Management Team, with the Board's direction, would lead the efforts, but success remained in the hands of the employees.



### 5.3 Triggering Events

Organizational path dependence theory argues that the path is initiated by a triggering event that reduces strategic options (Sydow et al., 2009). The triggering event can be identified either by the actors themselves or by observers (in vivo or retrospective) (Sydow et al., 2012). In reconstructing a strategic path it is therefore important to include data from various sources.

The case of Nortel suggested that more than one triggering event may have contributed towards the creation and persistence of an organizational path. An initial set of events was identified from the event history database using visual and temporal mapping strategies, as shown earlier in the Nortel Event Map (and reproduced in Figure 16). A second set of events was identified from the first order concepts produced by the grounded coding of CEO narratives (i.e. corporate challenge, corporate opportunity, difficult situation, financial restatement activity, financial return to profitability, global economy, industry challenge, industry opportunity, uncertainty / caution) (see Figure 17).

Figure 16: Triggering Events – from Event History Analysis

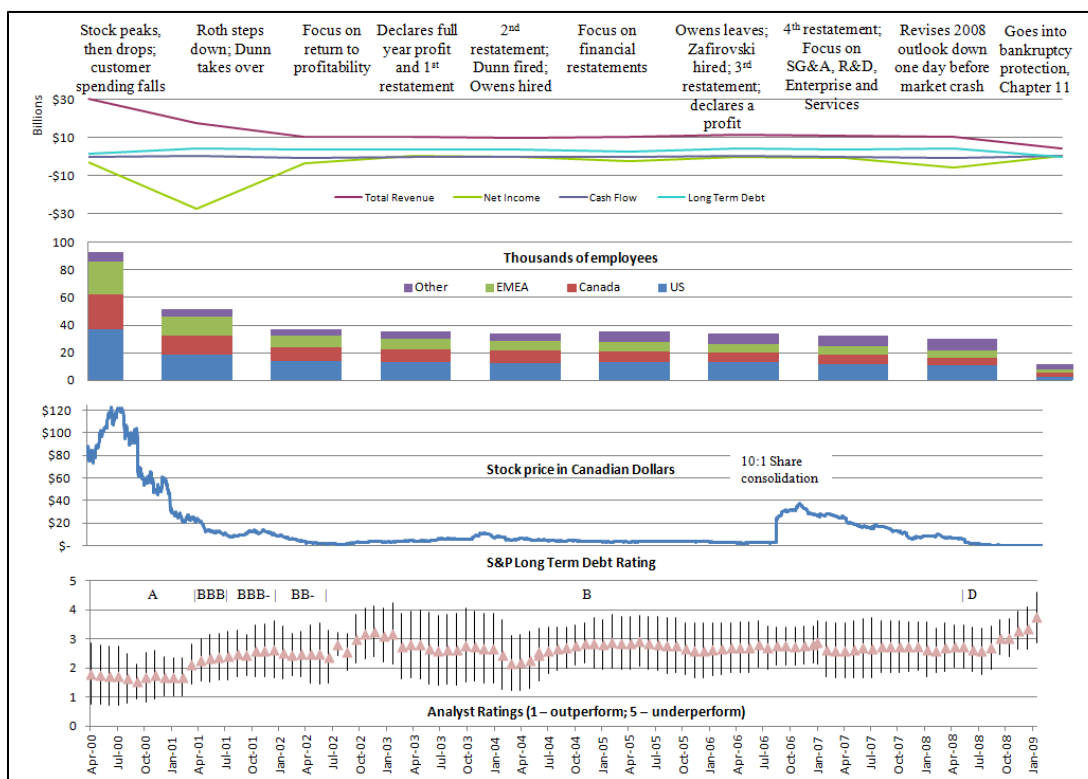
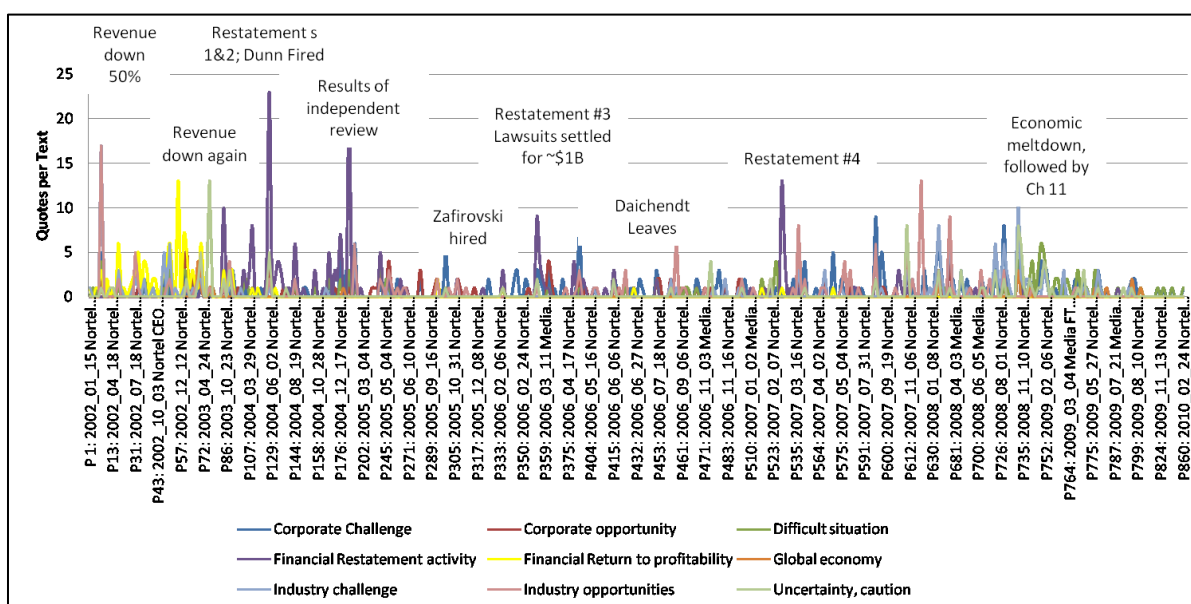


Figure 17: Triggering Events – from CEO Narrative Analysis



From the two sets of findings, an integrated list of triggering events was created. The events were further investigated to understand how the influence of each event was perceived by the organizational actors and by the observers (i.e. other actors within the case and analysis). This included an assessment of how the event either expanded or limited strategic options (see Table 23). An analysis of each event follows.

**Table 23: Triggering events and impact on strategic options**

| <b>Year (Month)<br/>Triggering Event</b>                               | <b>Level of<br/>Trigger</b> | <b>CEO</b>          | <b>CEO<br/>Position</b> | <b>CEO claims<br/>as trigger<br/>for change?</b>                                   | <b>Influence on Strategic<br/>Options</b>   |
|--|-----------------------------|---------------------|-------------------------|--|---|
| 1 2001<br>Dot.com<br>bust  | Industry                    | Dunn                | Negative                | Yes  | Strategic options constrained as firm has to restructure both financially and organizationally to prepare for revenue decline.      |
| 2 2003 (Oct):<br>Financial<br>restatement<br>#1                        | Org                         | Dunn                | Neutral                 | No; expects no material implication  | Strategic options further constrained due to loss of stakeholder confidence and therefore reduction in ability to obtain resources. |
| 3 2004 (Apr):<br>Firing of<br>Dunn &<br>Financial<br>restatement<br>#2 | Org                         | Owens               | Negative                | Yes; urgency in solving problem and preventing future problems                     | Redirects resources to solve the problem, leaving strategic investments under resourced. Strategic options further reduced.         |
| 4 2005<br>(Feb/June):<br>Daichendt's<br>hiring /<br>departure          | Org                         | Owens               | Positive /<br>Neutral   | Yes for hiring – expect strategic change;<br>No for firing – no impact on strategy | Hiring suggested expansion of strategic options (change path);<br>Firing kept firm on same strategic path (no major developments)   |
| 5 2005 (Oct):<br>Zafirovski's<br>hiring                                | Org                         | Owens<br>Zafirovski | Positive                | Yes  | Apparent broadening of growth options, new "era"; strategic options increased, given new CEO succession.                            |

| Year (Month)<br>Triggering Event                | Level of<br>Trigger | CEO            | CEO<br>Position                                    | CEO claims<br>as trigger<br>for change?  | Influence on Strategic<br>Options   |
|---|---------------------|----------------|--|--|---|
| 6 2006 (Feb):<br>Class Action<br>Settlements    | Org                 | Zafirov<br>ski | Positive   | Yes, firm<br>will have<br>increased<br>flexibility   | Reverse occurs due to<br>erosion of cost structure<br>and therefore financial<br>flexibility. Strategic<br>options further reduced.                                       |
| 7 2006 (Mar):<br>Financial<br>Restatement<br>#3 | Org                 | Zafirov<br>ski | Neutral  | No, but in<br>parallel<br>launch a<br>\$1B cost<br>reduction<br>program<br>and 6 point<br>plan | Strategic options potentially<br>increased due to new<br>strategic plan by new<br>CEO; opportunity to move<br>off path.   |
| 8 2007 (Mar):<br>Financial<br>Restatement<br>#4 | Org                 | Zafirov<br>ski | Neutral  | No, consider<br>“normal”<br>course of<br>business  | Erosion of stakeholder<br>confidence potentially<br>reinforces current strategic<br>path.   |
| 9 2008 (Sep):<br>Economic<br>Meltdown           | Macro               | Zafirov<br>ski | Negative   | Yes,<br>although<br>firm<br>leading the<br>industry,<br>economy<br>constrainin<br>g growth     | Strategic options further<br>reduced, firm locked in.<br>Immediate impact on cost<br>structure (debt<br>repayments) and unable to<br>effect divestiture<br>opportunities. |
| 10 2009 (Jan):<br>Bankruptcy<br>Protection      | Org                 | Zafirov<br>ski | Negative,<br>but<br>blamed<br>economic<br>meltdown | Yes, will<br>allow for<br>restructuri<br>ng and<br>emergence<br>of “new”<br>Nortel             | Strategic options eliminated,<br>firm liquidates.   |

### 5.3.1 *Dot.Com Bust (2001)*

In late 2001, Frank Dunn took over from John Roth, who had led Nortel through an acquisition period that involved more than \$45B in spending. The stock had hit an all-time high of CDN \$124.50 in late 2000, but less than a year later, had fallen below CDN \$2. As discussed in the previous chapter, the dramatic decline of Nortel’s stock, along

with its competitors and its customers, was based on an over capacity of network bandwidth, lack of application development, technological interoperability challenges and, as a result, a lack of capital available for further expansion. The entire industry suffered. Strategic options were reduced for all competitors in the industry, as customer spending had dramatically declined.

Dunn's narratives persistently referenced the collapse of the telecommunications industry in 2001 as reason for Nortel's rapid decline. The dramatic decrease in 2001 annual revenues spurred the corporation and Dunn, in particular, towards one specific financial objective: return to profitability.

To answer a key question on shareholders' minds, the new executive and management team is committed to returning the company to profitability. This will not be easy. In the aftermath of 2001, caution tempers optimism. The consequences of last year's events have not yet played out. Consolidations and restructurings continue and forecasting the climate ahead is, at best, difficult. (Dunn, 2001 Letter to Shareholders)

With a significant reduction in capital, strategic options were constrained. Although some companies chose mergers and acquisitions to manage through the downturn, Dunn stated to the Wall Street Journal that he would not choose this path, saying that Nortel had a "clear, winning formula that's going to create success for the company and its investors . . . and in that plan is not a merger" (Dunn, Wall Street Journal, Media Interview, April 28, 2002). Dunn also stated that Nortel would not change its product mix, instead it would continue to invest in all of its current businesses, "These core businesses are inter-related and deliver the right products aligned with the right opportunities" (Dunn, 2001 Letter to Shareholders).

We're not backing away from optical. We can provide a network for a wireline customer that could run wireless through it, or we could provide networks for wireless customer that could do wireline activity. (Dunn, Analyst Call, April 18, 2002)

Months later, Dunn was still convinced of the corporate strategy:

The senior leadership team has carefully reviewed and assessed our game plan---our roadmap to recovery---and has come to the conclusion that it's the right plan. We concluded we're in the right businesses, and we've got an outstanding portfolio to serve the needs of both carrier and enterprise customers. Our core businesses are aligned with the right growth opportunities and represent a solid competitive advantage. Our commitment to leading the next stage of network evolution is grounded in the reality that we have one of the strongest portfolios of products and technology in the industry. (Dunn, CEO Email, August 27, 2002)

In 2003, Dunn continued to stick with the broad market and product portfolio that Nortel had established prior to the dot.com bust, suggesting that synergy was one of the company's competitive advantages: "We face four market segments, but we really have one technology platform and evolution strategy. And that's really important and that's why you're starting to see this leverage" (Dunn, Analyst Call, April 24, 2003).

### ***5.3.2 Financial Restatement #1 (October 2003)***

The initial announcement of the financial restatements, at the time, garnered relatively little attention in the CEO narratives. When Dunn first introduced the need to restate financials, he presented it as a consequence of the industry problems that preceded his tenure.

In the aftermath of a dramatic reduction that took place in the 2001 and 2002 time frame, both for the industry as well as Nortel, and as we entered into a period of relative stability that began to take hold as we entered 2003 for the company, Nortel proactively undertook a comprehensive review of our assets and our liabilities. We announce this action in conjunction with our 2nd quarter results. This has led us to the planned restatement that we announced today. ... Again, I would like to emphasize that this process has no impact on a cash position or our operations going forward. (Dunn, Analyst Call, October 23, 2003)

However, the announcement of the restatement attracted attention from the financial markets, which was confounded as the restatement process continued into the following year and affected the reporting of annual results. Analysts began downgrading Nortel stock and the stock price began to fall further. The financial restatement was the beginning of a significant transformation activity, which involved an external audit of the finance organization, three subsequent restatements, millions of dollars of expense, and significant attention by the CEO, Board, Top Management Team, and financial markets.

In early 2004, when industry spending still had not returned to normal levels and Nortel's cash was being depleted, CEO narrative began discussing the need for partners. Dunn apparently recognized that Nortel did not have the required resources to deliver solutions (versus products), but did not have the capital available for acquisitions, so strategic partnering was one of the only options available to broaden the firm's capabilities. He reiterated, however, the need to remain in Nortel's current markets:

We need to be able to deliver capability without owning everything... Yes, we need to find a partner. The biggest issue is where are these inflection points? We've got to hit those inflection points. But to say let's sit out of the market for two years and then hit the inflection point, our view is you lose a lot by not being in the market, not learning from your customers, not learning the challenges. So we'll be in the markets, that's part of that game, but the longer game is we're going to simplify all of this stuff. (Dunn, Network World, Media Interview, March 8, 2004)

### ***5.3.3 Firing of Frank Dunn and Ongoing Financial Restatement (#2) (April 2004)***

Once Dunn was fired and the restatement investigation was initiated, the restatement activity became the firm's strategic priority and dominated Owens' narrative throughout the first year of his tenure.

I tell analysts that I spend 40 percent of my time on the activities associated with the restatement and the actions to make our financial accounting first-class going forward, 40 percent on implementation of 2004 business and development of the 2005 business plan, and 20 percent on the strategy for the future. (Owens, CEO Email, December 19, 2004)

The restatement process has been, as you know, a difficult and demanding experience for us. Very, very few companies have undertaken a financial review of this scope and magnitude. It has absorbed the time, talent, and resources of so much of this Company -- more than 600 employees working full-time on this project, \$100 million of our Company's resources, more than 80 Board and Audit Committee meetings since October 2003. (Owens, Analyst Call, January 11, 2005)

Owens, however, did not question Nortel's business strategy. Soon after Dunn was fired, Owens' narrative showed signs of support for earlier strategic decisions:



The company has been through a lot and the pathway forward has been set as generally a good one. My emphasis will be a bit more in the areas that I mentioned but in general, this company is and has been on the right track to go forward as far as the business side is concerned. (Owens, Analyst Call, June 2, 2004)

However, strategic options were still limited by the industry's general malaise, and mergers and acquisitions were still on the mind of business analysts, "We will be the consolidator, not the consolidatee" (Owens, Network World, Media Interview, July 9, 2004). But with limited cash and significant resources dedicated towards the financial restatement process, acquiring companies did not seem to be an option in the short term. The alliance strategy, as initiated by Dunn, continued:

Partnering is extremely important to Nortel. No one can bring the complete solution set to the marketplace, and so you'll see us much more aggressive in our organization. (Owens, Analyst Call, August 19, 2004)

By 2005, Nortel's cash position had improved slightly and Owens initiated the purchase of PEC, a US telecommunications company that served the US government, for \$448M in cash.

#### ***5.3.4 Daichendt's Hiring and Departure (February and June 2005)***

In early 2005, Owens hired ex-Cisco executive Gary Daichendt as President and Chief Operating Officer, stating in a corporate news release:

He is a world class leader with unquestioned integrity and one of the top technology executives in the world. Gary's deep involvement in the spectacular growth of some of the world's leading technology powerhouses and his unique track record have given him a special perspective and experience that will optimally position our great Company for our customers, shareholders and employees. (Owens, News Release, March 4, 2005)

Daichendt brought Gary Kunis, also an ex-Cisco executive, who was given responsibility for Nortel operations. The media and analysts responded favourably. Only a few months after the appointment, however, both Daichendt and Kunis left Nortel, explained by Owens as follows:

Although I am disappointed with this outcome, it became increasingly obvious that our business views and management styles are different. Gary Kunis will also be leaving the Company... With respect to our product portfolio, we will increasingly focus on those areas where we can lead and where we see significant market opportunity. Make no mistake, we will continue to be a company that serves both carrier and enterprise customers, and we will lead with technology and innovation. (Owens, CEO Email, June 10, 2005)

Owens also made a similar announcement to the press on the same day, claiming that the two executives were leaving due to differences in management style. The markets responded with a 9% drop in the Nortel stock price. Owens emphasized that, although Nortel would start investing in areas that held market potential, the firm would continue to serve the same markets; the corporate strategy had essentially remained unchanged from Dunn's initial strategy.

### 5.3.5 *Zafirovski's Hiring (October 2005)*

The hiring of Zafirovski dominated CEO narratives (and media and analyst narratives) throughout October and November of 2005. Zafirovski was introduced to the analyst and the media a month prior to his appointment, in a news conference with both the firm's chairman and Owens<sup>19</sup>. Owens introduced Zafirovski saying:

Having known Mike personally now just for a few days, but having followed his reputation for a number of years I can tell you this is a great fellow we have coming in to be the CEO of Nortel.

I can also tell you that in just the few days I have been together with him you can sense a real soul. There is a real soul in this gentleman who will take this Company that next step. (Owens, Analyst Call, October 18, 2005)

During the conference call, even before he had assumed his position as CEO, Zafirovski presented his strategic plan in response to a question from analyst Joan

---

<sup>19</sup> Gordon Pitts of the Globe and Mail described Owens: "As he surrendered the CEO's job at Nortel Networks Corp., Bill Owens almost broke down yesterday, his eyes welling with tears, his voice choked with emotion. For Mr. Owens, the feelings of love and loss were so strong that 35 years of discipline as a U.S. naval officer could no longer keep them under tight-lipped restraint. It was the most touching moment in a fascinating and ultimately confusing press conference — another bizarre chapter in the messy, overwritten novel that Nortel has become." (Pitts, Globe and Mail, October 18<sup>th</sup>, 2005)

Engerbretson, America's Network: "What would you consider to be Nortel's three biggest challenges right now and three biggest opportunities?" Zafirovski answered:

First of all, let me just I will be doing lots of listening and learning for the coming weeks and months. Of course, I have done some -- lots of homework over the last few months as well. This is not a, if you will, a commitment at this point in time, but some of the five or six things which I have discussed with Harry and Bill, my initial observations that are resonating with them. Those are very consistent due to the game plan which is in place right now. (Zafirovski, Analyst Call, October 18, 2005)

Zafirovski then followed with a description of each of the following six priorities: financial transformation and integrity renewal; a clear strategic focus; profitability; innovation and R&D effectiveness; processes and automation; and, profitable growth.

Although Zafirovski claimed that these six priorities were only initial observations, they became his 6-point strategic plan, which he narrated throughout his tenure. He positioned the "new" strategy with employees within two weeks of his official appointment, as the BIG initiative: Business transformation (pricing and sales effectiveness, direct material supply chain group, services, organization, general and administrative effectiveness, R&D effectiveness), Integrity renewal and Growth imperatives (achieving profitable growth). As part of this strategy, he changed the corporate mission to Business Made Simple, which he defined as follows:

Business Made Simple is the way we will define Nortel internally and externally, and it's about simplifying our own business through our BIG initiatives, Six Sigma and an attitude of forceful optimism. It's also about how we will make Nortel easier for our customers to do business with, and most importantly, the value proposition we deliver to customers. The message is clear for our customers: Nortel is delivering the products and solutions that help simplify their networks, improve productivity as well as drive value creation and efficiency for consumers. (Zafirovski, CEO Email, February 2, 2006)

### ***5.3.6 Class Action Settlements (February 2006)***

The class action settlement was announced by Zafirovski through a news release, on an analyst call, and to employees through a CEO Email. Although the settlement was significant, including a payment of \$575M in cash and 14.5% of equity, Zafirovski did not link the impact of the settlement to the firm's strategic options, rather he indicated that it was an end to past events and provided the firm with "financial flexibility."

The attention this settlement will get will no doubt be a temporary distraction as pundits and industry watchers may use it as an opportunity to re-tell the circumstances around the financial restatement and recent challenges facing the Company. It's important to recognize that the settlement is in relation to activities that are a part of our past, and a big part of moving forward is in closing this unfortunate chapter in our otherwise proud and distinguished history.... We've put an end to the costly litigation process and can look forward with renewed enthusiasm to future opportunities and to building a profitable, growing Nortel that's focused on our customers and returning value to all stakeholders. This will pave the way for us to go about the business of rebuilding confidence in Nortel and gives us additional financial flexibility through debt refinancing opportunities. (Zafirovski, CEO Email, February 8, 2006)

Although the settlement did reduce uncertainty, it also reduced the corporation's cash reserves and, consequently, options for acquisitions.

### 5.3.7 *Financial Restatements #3 (March 2006)*

In March of 2006, Zafirovski announced that the company would restate its financials for the third time. In his email to employees, he acknowledged their contributions and managed their expectations:

What makes this company great is the way all of you have created new innovative market solutions while rising to meet the challenges of the past. Today marks another challenge; however, rest assured, today's restatement announcement is not going to slow down our commitment to rebuilding a high-performing company that we can all be proud of. (Zafirovski, CEO Email, March 10, 2006)

Within the same announcement, and to analysts and the media, Zafirovski also claimed that Nortel would achieve a \$1B reduction in margin improvement through the business transformation activities, suggesting that, due to slow industry growth, the reduction in Nortel's cash reserves was becoming problematic. Soon after, he officially launched his '6-point plan', as follows:

1. World-class management team, culture and processes
2. Focus on the balance sheet, governance and business/finance controls.
3. Drive to world-class cost structure and quality levels that will take us to a mid-teens operating margin.
4. Our targeting a minimum of 20% market share.
5. Investment for profitable growth.
6. An increased emphasis on service and software solutions.

(Zafirovski, CEO Email, March 13, 2006)

Although the plan had clear quantifiable objectives, it was very similar to the plan he initially presented in October 2005. Strategically, options seemed reduce due to low

earnings and high expenses; objectives focused primarily on the reduction of operating expenses.

This is our roadmap for building investor value and a great company. The work will be challenging, exciting, and of course, foundational to return to a competitive and winning position. This is a process that will take three to five years and will require the dedicated focus of every single one of us. The challenges are huge and so are the opportunities. But I don't think we want to stay where we are. (Call or write to me if you disagree!) Let's make it happen together! (Zafirovski, CEO Email, March 13, 2006)

#### **5.3.8 Financial Restatement #4 (March 2007)**

The fourth financial restatement was positioned as being different from past restatements, as it was related to accrual issues from before 2000 and changes in revenue recognition rules. Scott Coleman, an analyst for Morgan Stanley, asked Zafirovski on the March 1, 2007 Analyst Call, "I guess just one question from my end which would be is this the last revenue recognition issue we're going to see from Nortel in your opinion?"

Zafirovski responded as follows:

Part of our challenge is that you're looking at the items, they're less than 1% of revenues, gross margin, SG&A, R&D. So if we were a "normal" company, the restatement - the amount would not have been material. The unfortunate fact, which is of course -- the much bigger part of our job is to turn Nortel into a profitable company. And if you were breakeven to a slight loss any impact on earnings becomes a material, both from a quantitative and also from a qualitative perspective. (Zafirovski, Analyst Call, March 1, 2007)

Zafirovski's reference to "normal" suggested that, although many companies go through restatements, any restatement for Nortel had a material impact.

### **5.3.9 Economic Meltdown (September 2008)**

The economic meltdown is an obvious critical event, as it impacted many industries throughout the world. In the case of Nortel, CEO narratives leading up to the meltdown were conflicting. On the one hand, Zafirovski hinted at the potential difficulties that slow growth in 2008 would bring:

Of course, the Telecom and enterprise markets are not immune to the more global economic developments. Not revolutionary statement. There is a concern over the U.S. economy and related what it could do to other economies globally. (Zafirovski, Analyst Call, February 27, 2008)

However, his narrative after the June 2008 analyst meeting suggested that Nortel was succeeding in its strategic plan:

As we told analysts, we are continuing to aggressively shift our investments to seize growth markets and the expanded opportunity in the converging telecom and IT worlds. We are well positioned to deliver the future of communications, and our strategy is increasingly resonating across all of our key stakeholders. (Zafirovski, CEO Email, June 16, 2008)

But on August 1, 2008, upon announcing 2<sup>nd</sup> quarter results, Zafirovski's narrative to employees sounded desperate:



As a company, we need to redouble our efforts, or better, the effectiveness of our efforts. We need to continue to transform our thinking, planning and execution. We need to transform our carrier business; drive growth engines like Enterprise and MEN [Metro Ethernet Networks] forward; and, accelerate the evolution to services, applications and solutions offerings. We need to be obsessed with delivering differentiated business value to our customers. From sales to product engineering and operations to R&D, everything we do must start with this in mind. And, we need to buckle down and balance our expenses in line with our revenues. Clear guidelines have been communicated around managing our expenses and I expect us to all work together to follow them and achieve the savings I know we can. (Zafirovski, CEO Email, August 1, 2008)

Narrative from September 17, 2008, one day before the markets crashed, indicated that Nortel was in crisis. Zafirovski announced that the 2008 outlook would be revised downwards. He explained the situation to employees:

To that end, we are undertaking a comprehensive review of our business and steps to reduce Nortel's overall cost base and continue to mitigate the risks associated with our 4th generation carrier wireless investments. Additionally, we have decided to explore the divestiture of our Metro Ethernet Networks (MEN) in order to take advantage of a consolidating carrier marketplace. Combined, these three actions will strengthen our balance sheet, increase our liquidity and provide funds for restructuring or investments to increase scale in our growth areas. (Zafirovski, CEO Email, September 17, 2008)

Unfortunately, the desire to divest the Metro Ethernet Networks (MEN) was not realized within the expected period. The strategic decision to reduce the corporation's product portfolio and markets in which it competed was made too late. The industry (at the time) did not value the MEN business to the extent that Nortel had hoped, given the economic situation. Nortel's strategic options were once again reduced.

### ***5.3.10 Bankruptcy Protection (January 2009)***

In November 2008, CEO narratives indicated that Nortel's cash reserves had been depleted and that the pending debt payments were imposing a significant threat.

Zafirovski announced to the market and to employees that further headcount reductions would take place:

That said, we have continued to use cash to run our business. Today, we announced we are taking immediate measures to preserve our cash and to deliver savings of \$400 million annually. As I told you when we last spoke, the credit crunch has serious implications for Nortel and how we need to behave in this environment. We must preserve and/or generate as much cash as we can to give ourselves options. If we do not manage this part of our business, well, the future will be bleak. It's that simple. (Zafirovski, CEO Email, November 10, 2008)

Zafirovski also spoke about the company's competitive position:

I believe Nortel can be a strong partner for our customers today and for the long-term. We have made very good strides in the past three years. Today, we have leading innovations and solutions ahead of the market and people who know how to deliver the business value our customers need. (Zafirovski, CEO Email, November 18, 2008)

But Nortel was unable to recover from the tumble of financial markets. Zafirovski explained to employees on the day Nortel filed for protection from creditors:

Just seven months ago, at our June 2008 investor conference, we summarized that the external market expectations for most of our growth segments were in the 10% range for the next 3 years. We believed that we had the solutions, momentum and improving cost structure to do well in that environment. You know the changes in the external environment since then, from financial and capital markets to decreasing visibility and forecasts for our industry. Faced with an unclear view of 2009 - where most current predictions are for industry revenue declines of at least 10% (a net decline of over 20% from just two quarters ago) - we needed to act now while we have sufficient cash to fund our ongoing operations. (Zafirovski, CEO Email, January 14, 2008)

As part of his announcement, Zafirovski told employees that he, the executives, the Board, and the court appointed monitor, were working on a strategic plan that would be communicated to employees as soon as possible. Meanwhile, the protection process came with direct impact to employees and pensioners. On the one hand, severance packages were withheld and the pension fund went underfunded, while on the other hand, remaining employees and executives received retention bonuses.

CEO narratives throughout January, February, March, and April of 2009 focused on the ongoing business – retaining customers and continuing to sell. In each of his employee narratives, Zafirovski continued to acknowledge that employees were eager to see the new strategic plan.

I know it is tough out there, with the combination of downturns in the overall economy and our industry, further amplified by our company-specific issues. And I know you are looking for answers. I can only commit to tell you the facts as soon as they are available. Most important, we must stay focused on the job at hand and keep our determination to deliver excellence every day. (Zafirovski, CEO Email, April 9, 2009)

In May 2009, while announcing the first quarter results, Zafirovski told analysts, the media, and employees that Nortel was reorganizing from a matrix organizational structure to four independent strategic business units (with a centralized administrative function).

We have made the necessary structural decisions to give Nortel the ability to optimize value, and preserve innovation platforms and employment to the greatest extent possible. Our businesses will have the opportunity to more effectively serve the discrete needs of their respective customers and market segments, while maintaining high customer service and network performance levels. (Zafirovski, News Release, May 11, 2009)

At the same time, he explained to employees “maximizing the value of this company is the central principle that guides all of our decision making” (Zafirovski, CEO Email, May 11, 2009).

One month later, on June 19, 2009, Zafirovski announced the first potential sale of one of Nortel’s businesses, for \$650M, which marked the beginning of the sale of all business units and the firm’s technology patents.

### ***5.3.11 Conclusions***

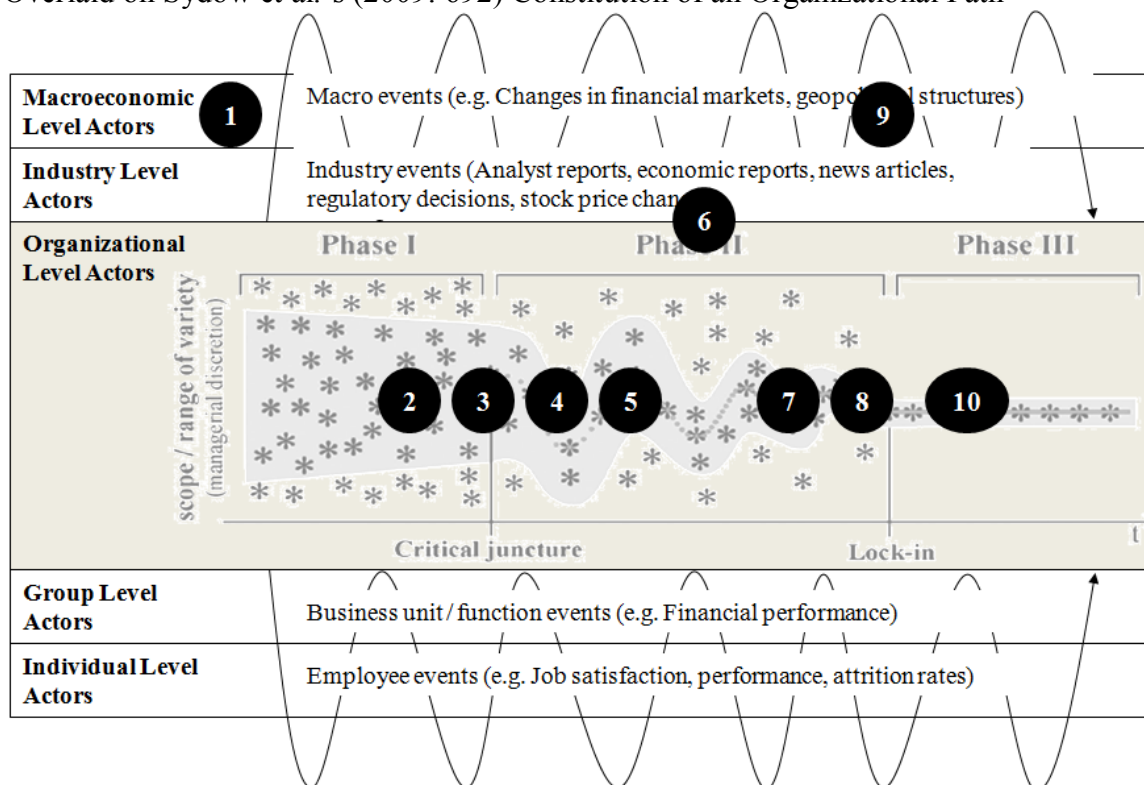
Organizational path dependence theory suggests that only one critical juncture is required to initiate a path (Sydow et al., 2009). In the case of Nortel, the first triggering event was the dot.com bust. From this event, a series of further events followed, some of which appeared to broaden options, but eventually led to a reduction of options over time. In some cases, the CEOs acknowledged the influence of the events on strategic options, but not always. The acknowledgement was related to three factors: event type, nature of

event, and the role of the CEO in the event. When the event was external, beyond the control of the organization, it was acknowledged as a potential threat to the firm's strategy and performance. An internal event, on the other hand, if negative, was not acknowledged by the CEO as significant (even though it had reduced options), unless the event occurred under a previous CEO's tenure. If the event was positive, the CEO claimed it as a trigger, suggesting strategic opportunity.

The events also appeared to occur not only between the first and second phase of the organizational path (as defined by theory), but also throughout each phase, with each event contributing towards the reduction in options and the movement towards lock-in. As shown in Figure 18 and Table 24, some events had more specific contributions towards the path than others. The 1<sup>st</sup> event, the dot.com bust, established the initial conditions within the industry, by which Nortel was influenced. The 3<sup>rd</sup> event, the firing of Dunn and the second financial restatement announcement, reduced options not only through investor confidence (and reduction of capital) but also within the firm, as significant resources were redirected towards solving the financial problems. The 6<sup>th</sup> event, the class action settlement, although dismissed within the CEO narratives as relatively uneventful, dramatically reduced Nortel's cash reserves. The 9<sup>th</sup> event, the global economic downturn, effectively eliminated Nortel's options, resulting in bankruptcy protection (and eventually, liquidation).

**Figure 18: Triggering Events on Nortel's Path**

Overlaid on Sydow et al.'s (2009: 692) Constitution of an Organizational Path

**Table 24: List of Trigger Events for Path Diagram**

| Event, Year - Month              | Description                               | Trigger Type               |
|----------------------------------|---|----------------------------|
| 1 2001                           | Dot.com Bust                              | External initial condition |
| 2 2003 – October                 | Financial Restatement #1                  |                            |
| 3 2004 – April                   | Firing of Dunn / Financial Restatement #2 | Critical juncture          |
| 4 2005 – February<br>2005 – June | Daichendt's Hiring / Departure            |                            |
| 5 2005 – October                 | Zafirovski's Hiring                       |                            |
| 6 2006 – February                | Class Action Settlements                  |                            |
| 7 2006 – March                   | Financial Restatement #3                  |                            |
| 8 2007 – March                   | Financial Restatement #4                  |                            |
| 9 2008 – September               | Economic Meltdown                         | Triggering lock-in         |
| 10 2009 – January                | Bankruptcy Protection                     |                            |

## **5.4 Non-ergodic Process: The Role of Triggering Events**

In the previous section, triggering events in Nortel's path were identified and a path of strategic lock-in proposed. PCA argues that the process of lock-in is non-ergodic, in that the final outcome is neither dictated at the outset nor entirely arbitrary (Sydow et al., 2012). At the start of the path, options are influenced by initial conditions, but choice exists; options will not necessarily narrow until an event triggers the initiation of the path (between Phase I and Phase II) (Sydow et al., 2009). Follows is a discussion on the non-ergodicity of Nortel's path, and how strategic options were reduced over time. The discussion draws on findings presented in the previous section.

### ***5.4.1 Non-ergodicity***

The dot.com bust had a direct impact on the entire industry, limiting the availability of customer capital, and therefore reducing the overall market size. With the reduction in market size, competition amongst current competitors increased. Competitors within Nortel's strategic group each chose different market positions. For example, Cisco chose to remain concentrated in the Enterprise market, not only with its current product portfolio but also with new application software and business solutions. Unlike Nortel, they were selective in their internationalization, concentrating sales in specific geographic locations and centralizing their operations mainly in North America. Alcatel and Lucent chose to merge, complementing their product lines but lowering overall costs. Other competitors (e.g. Global Crossing) went out of business while some chose to establish spin-off joint ventures (Nokia Siemens). Nortel, unlike all of its competitors, did not change its strategy even though market dynamics shifted. Instead

they continued to serve the same global customer base, with the same sales and manufacturing locations, with the same portfolio of products, as this was historically considered one of the firm's core competencies that gave the firm a competitive advantage; being "global" was a Nortel trademark. To reduce costs, Nortel cut headcount horizontally across the organization, thereby reducing the overall size of the firm but not its scope. This tactic reduced the cost base (from 90,000 employees to 30,000 employees) but employees were left to deliver upon the same customer commitments.

Although Nortel struggled to recover from the dot.com bust, with revenues dropping by more than 50% from 2001 to 2002, Dunn's cost cutting strategy appeared successful; he declared profitability by mid-2003. The financial restatement and his consequent firing, however, triggered a confidence issue amongst the financial and industry analysts. With the restatement ongoing and the firing of Dunn, the market began to blame Nortel's performance on not only on the economic environment but also the company's internal management. The restatement triggered issues with the firm's equity position and led to costly repairs in the firm's financial structure, eventually reducing their financial flexibility for mergers or acquisitions.

#### ***5.4.2 A Critical Juncture***

With the change of CEO in April 2004, Nortel had an opportunity to affect strategic change. Owens, as successor, could have positioned the event as a failure of his predecessor and implemented drastic changes. Instead, Owens pointed to the firm's financial model and financial processes as the source of the problem, and elected not to



undertake strategic change. He directed tremendous resources to resolve the financial issues, including the attention of his Top Management Team.

The hiring of Gary Daichendt as President and Chief Operating Officer suggested a second opportunity for affecting strategic change. As a former Cisco executive, Daichendt was known in the industry for his innovative and strategic customer-focused thinking. At a time when Owens was criticized for a lack of firm strategy (and, as he admitted himself, primarily focused on financial restatements), the addition of Daichendt expanded strategic options and was positioned as such in the CEO narratives and by the media and analysts. The hiring was considered an opportunity for Nortel to establish a concrete strategy in the wake of the financial restatements.

Daichendt's departure, so soon after his hiring, reduced the perceived options that his hiring had alluded to. Although the details behind the departure were not provided, Owens stated that he and Daichendt had a difference of opinion on management style and strategy. Had Daichendt's departure followed with the introduction of a new strategy (or even a revised strategy), the event would not have been pertinent. However, Owens did not set a new strategy; four months later he implemented organizational restructuring but did not change the corporate or business level strategies themselves. Nortel remained on the strategic path that Dunn had put in place years prior.

The hiring of Zafirovski in November 2005 presented another option for strategic change. Zafirovski was known as a strategic decision maker who had led Motorola's success in the telephone handset market. Zafirovski's hiring renewed investor confidence; the industry and the organization were ready for change.

Zafirovski, however, did not change the corporate or business level strategies. As with Owens, he continued to implement the strategies set out by Dunn years earlier (e.g. the movement from products to solutions; the shift into the Enterprise business). Although Zafirovski's strategy was positioned by Nortel and the media as "new," the objectives were tactical in nature: emphasis was on cost reduction, quality improvement (i.e. six sigma) and process efficiency.

The class action settlements of early 2006, although positioned as a historical issue, triggered further problems with the firm's equity position (dilution) and cash reserves (dropped by \$0.5B). Although Zafirovski chose to report results that excluded the cash payout, the company was significantly impacted from a financial perspective. The settlement was a triggering event that further reduced Nortel's ability to use acquisitions for growth. Whether Zafirovski understood this limitation, however, is not clear. When prodded by analysts about growth through acquisitions, Zafirovski repeatedly stated that he believed organic growth was preferred (as he felt that acquisitions often failed). However, with the reduction in cash reserves and the ongoing financial challenges, internal growth was questionable. Zafirovski chose to manage internal growth through cost-cutting by outsourcing manufacturing, offshoring R&D (i.e. engineers) to lower-cost labour regions, and selling off components of the business (e.g. UMTS).

The financial restatements of 2006 and 2007 indicated that Nortel continued to incur costs in their financial restructuring activities. The restatements also caused concern in the business community, putting into question Zafirovski's ability, or anyone's ability for that matter, to strategically move away from the financial problems that plagued the

company. Although Zafirovski positioned the third and fourth financial statements as routine, the persistence of the financial restatement narrative led to negative responses by the media, analysts and employees.

### **5.4.3 Lock-in**

According to the theory, when lock-in occurs, the organization cannot move off path; even new members are forced to join the path (Sydow et al., 2012). Actors are either unable to affect strategic change or believe that no other options remain.

The September 2008 economic meltdown was the major event that effectively eliminated Nortel's strategic options. Although Zafirovski communicated to the market in June 2008 that Nortel's business outlook was positive and that the third quarter results would be better than industry average, options at that time were limited by the firm's limited cash reserves and pending debt repayments. The day before the global markets collapsed, Zafirovski issued a warning and restated the quarter's outlook. At the same time, he communicated that Nortel was interested in divesting its core asset, the optical portfolio. But with the market crash on the following day, any interested parties no longer had the ability to purchase the portfolio at Nortel's asking price; the firm was unable to sell and apparently unwilling to reduce the price. By the end of 2008, Nortel's cash reserves were depleted, due to significant reduction in sales revenue.

In January 2009, Nortel was forced into bankruptcy protection, unable to pay back outstanding debt. Although Zafirovski positioned the event as short term, and (for the first few months) spoke about the creation of a "New Nortel" with a new strategy, Nortel

was unable to acquire capital or garner customer confidence. By May of 2009, the firm had restructured into separate business units and only one option remained: liquidation.

#### **5.4.4 Summary**

A series of events established Nortel's organizational path, some of which expanded strategic options, while others reduced them. Nortel had the opportunity to change its strategic path not only during the CEO successions of Dunn, Owens, and Zafirovski, but also upon the hiring of Daichendt. Executive succession, especially following poor performance (firm and industry), offers firms a chance to change strategy (Hutzschenreuter et al., 2012).

None of the CEOs, however, chose to change the firm's strategy. The initial strategy of the firm, when Dunn became CEO, was one of corporate related diversification, with a business level differentiation strategy. The firm's core competencies were innovation, R&D, and a global reach. Innovation was the firm's self-proclaimed competitive advantage. The organization was structured as a transnational firm, with global product development and regional sales. Over the course of the eight years, this strategy and structure changed very little. But does strategy alone lock in a firm? The CEOs had choices on how to implement the strategy but, over time, these options were reduced. Why? The following section discusses the self-reinforcing process that may have led to lock-in.

## 5.5 Self-Reinforcing Processes

This section discusses the self-reinforcing processes at Nortel that initially appeared to be rent-seeking but, over time, became deeply imbedded into the organization. The resultant web of processes created rigidity in the organization, reducing flexibility of moving off path and limiting the apparent options available to strategic decision makers (i.e. although different options were available, they were not chosen).

The self-reinforcing processes presented here were identified from the event data (qualitative and quantitative). The CEO narratives were not used in this analysis, to separate the analysis of the narratives in path dependence from the determination of the path's constitution itself. Four overarching firm-level processes were found in the analysis including: cultivation of core assets, the market model, the financial model, and growth modes. These processes are summarized in Table 25, including their effects as it relates to organizational path dependence theory, and discussed as follows. For each process, the analysis considers when the process was initiated, the expected resultant effects (coordinating, complementarity, learning and adaptive expectation), and the outcomes related to the firm's organizational path. The section concludes with a synthesis of the analysis, to illustrate how the processes became embedded into the organization and contributed towards strategic lock-in.

**Table 25: Self-Reinforcing Processes in Nortel's Path**

| Process                    | Initiated by      | Description  | Coordinating | Complementarity | Learning | Adaptive Expectation |
|----------------------------|-------------------|--|--------------|-----------------|----------|----------------------|
|                            |                   |  |              |                 |          |                      |
| Cultivation of core assets | Initial Condition | Innovation, R&D and technology leadership  |              | X               | X        | X                    |
| Market model               | Initial Condition | Broad market portfolio, serving carriers and enterprises, world-wide   | X            | X               | X        | X                    |
| Financial model            | Dunn              | Improve operating margin through reduced sales, general and administrative costs – downsizing, offshoring, outsourcing, focused R&D, six sigma | X            |                 | X        | X                    |
| Growth modes               | Dunn              | Organic growth through partnerships  |              | X               |          |                      |

### ***5.5.1 Cultivation of Core Assets: Innovation, R&D and Technology Leadership***

Throughout Nortel's history, innovation, research and development, and technology leadership were a central tenant for the firm. These capabilities were identified as the firm's core assets, long attributed as the key capabilities that provided competitive advantage. In its self-reported history (see Appendix F), the company clearly position's Nortel as an ongoing leader in telecommunications.

From Alexander Graham Bell's original telephone patents to the anywhere, anytime connections of today, Nortel has been at the forefront of innovation in the ever evolving history of communications. Since its 1895 founding as Northern Electric and Manufacturing, supplying telecommunications equipment for Canada's fledgling telephone system, Nortel has grown to become a global leader in delivering communications capabilities that enhance the human experience, power global commerce, and secure and protect the world's most critical information. (Nortel self-reported history, from [www.nortel.com](http://www.nortel.com), downloaded May 11, 2011)

As an initial condition, these core assets were positioned as capabilities that required protection and nurturing. Nortel's marketing and advertising consistently focused on the innovation capabilities of its products and of its role in the industry. Through the latter part of the 20<sup>th</sup> century, Nortel's operating environment supported a culture of innovation and R&D, where ideas were rewarded with generous bonuses and promotions. During this time, Nortel had led a number of telecommunication revolutions (i.e. Digital World, Fibre World). With thousands of patents, the firm was considered a leader in the industry; Nortel was often being first to market with products that revolutionized voice and data solutions, and led to the convergence of technologies and multimedia applications.

The processes and procedures that existed at Nortel supported the development of differentiated products through extended time-to-market processes, with resource-intensive research. Employees were some of the highest paid in the industry, in particular the engineers. University engineering graduates, at all levels, were targeted by the firm even prior to graduation.

When the industry started to shift in the first few years of the 21<sup>st</sup> century, customers were no longer willing to pay a premium for the high technology equipment. New competitors joined the industry and with a lower cost base. With the advancements in technology, new entrants were able to copy the solutions in which Nortel had heavily invested. Huawei, for example, a Chinese company, entered the industry at the turn of the century and was an immediate competitor. Huawei's ability to provide the same quality of products at a lower cost meant they could compete on price in an industry that traditionally competed on quality and innovation. Capital-poor customers started to demand lower prices.

As core assets, however, innovation, R&D, and technology leadership were deeply embedded into Nortel's culture and operating structure. Nortel engineers were not only highly paid, but also afforded a work environment that supported their innovation. They were encouraged to attend industry seminars and conferences, which often included Nortel employees as key note speakers. Thousands of patents had been built up over the years, some of which had received awards. Relationships with university engineering faculties existed throughout North America; Nortel engineers and researchers worked together on new innovations.

The effects of these core assets over the decades were beneficial: Nortel created new product markets such as fibre and optical networking, and led the industry globally in this area. The processes created complementarity effects through Nortel's industry partnerships in terms of development standards, education, patents, and innovations. The firm's relationships with university researchers, industry experts, standards bodies, and user groups were deeply rooted into the firm's culture and operations.



Learning effects influenced the ongoing persistence of these core assets as well. The firm's R&D processes had been developed over decades and were deeply rooted into the operating processes. Although the development process had been modified over the years (with an effort to reduce time to market), it was dominated by a theme of innovation and technology leadership; employees accepted and supported the need to produce innovative and high quality products, even if they incurred more resources. Over the years, employees became so proficient in the process that it was the standard way of doing business.

Adaptive expectation effects were realized through the culture of innovation and technology leadership. Nortel engineers were admired by industry, customers, and employees alike. R&D employees and teams were respected and rewarded. The emphasis on the powerful position of R&D encouraged others in the organization to be creative and innovative in their work.

Throughout the period of the case, these core assets remained at the forefront of the firm's strategy. Nortel continued to pursue competitive advantage through differentiation, stressing the importance of innovation and technology leadership. Although Nortel had lost its position as a market leader, its primary objective was to return to that position.

### **5.5.2 *Market Model***

The market model at Nortel, which consisted of the product markets and geographic markets, was an initial condition, developed in the 1990s by both CEO Jean Monty and CEO John Roth. In the mid-nineties, Jean Monty internationalized the firm,

establishing sales offices through the world and creating manufacturing centres of excellence outside of North America. John Roth furthered this strategy by continuing to expand not only throughout all five continents, but also into the enterprise and wireless product markets.

As discussed previously, all CEOs pursued this market model. Nortel consistently referred to itself in historical reports and material filings as a global telecommunications equipment manufacturer. In all of its material press releases and securities filings, Nortel characterized its market model (and leadership position) in the same (repeated) way. The following “About Nortel” extracts, the first from 2002 and the second from 2009, support this finding.

Nortel Networks is an industry leader and innovator focused on transforming how the world communicates and exchanges information. The company is supplying its service provider and enterprise customers with communications technology and infrastructure to enable value-added IP data, voice and multimedia services spanning Metro and Enterprise Networks, Wireless Networks and Optical Long Haul Networks. As a global company, Nortel Networks does business in more than 150 countries. (News Release, “About Nortel” extract, dated January 17, 2002)

Nortel is a recognized leader in delivering communications capabilities that make the promise of Business Made Simple a reality for our customers. Our next generation technologies, for both service provider and enterprise networks, support multimedia and business critical applications. Nortel’s technologies are designed to help eliminate today’s barriers to efficiency, speed and performance by simplifying networks and connecting people to the information they need, when they need it. Nortel does business in more than 150 countries around the world. (News Release, “About Nortel” extract, dated January 14, 2009)

The market model was deeply ingrained into Nortel's operations for two reasons. First, the carrier business was Nortel's traditional customer segment, and the area in which Nortel had made significant contributions (e.g. fibre world in the 1980s and optical world in the 1990s). Nortel's R&D capability was grounded in this product market. Second, in the late 1990s, John Roth spent over \$45B on acquisitions to supplement the Enterprise and Wireless portfolios, including the \$9B purchase of Bay Networks, a leader in the Enterprise market.

This market model was established in the 1990s in response to the commercialization of the internet. As the industry predicted significant bandwidth requirements for the turn of the century, John Roth positioned Nortel for growth. As a global business serving multiple product and geographic markets, Nortel had an opportunity to realize synergy through the transfer of both operational resources from the front end of the value chain (production, manufacturing, shopping, sales, customer service) and core competencies from the back end of the value chain (research and development). Nortel foresaw the merging of voice and data into multimedia solutions, and with a core competency in both of these areas (especially with the acquisition of Bay Networks), the firm was positioned for the future.

When Dunn became CEO he started to shift the market model from a focus on products to one on solutions (a combination of services and applications). He also increased investment in Enterprise, which was expected to grow faster than the Carrier business. Owens continued this approach, as did Zafirovski.

The effects of the market model, as a self-reinforcing process, touched upon all four types: (1) coordinating – transnational organization serving multiple product and

geographic markets; (2) complementarity – synergies across business units and markets; (3) learning – delivery of complex, high technical solutions; and, (4) adaptive expectations – a culture of being “all things to all people.” The market model dominated Nortel’s position as a global provider of telecommunications solutions to all types of businesses, and this model persisted throughout the period of the case.

### ***5.5.3 Financial Model***

The financial model was initiated by Frank Dunn, when he took over as CEO. His predecessor, John Roth, had begun to make changes in the financial model, in direct response to the industry changes; as Nortel revenue dropped by 50% in 2001, the necessity to reduce costs was obvious.

Frank Dunn, however, had options. Nortel’s cost base had high fixed costs for two reasons: the market model and the operating model. Not only did Nortel serve businesses worldwide, it also had offices in over 150 countries and manufacturing facilities the world over. Additionally, Nortel employees were paid above the industry average. Added to this challenge was the lagging time-to-market for many of Nortel’s products. At a time when competitors were developing new products quickly and at a low cost, Nortel continued to deliver later and at a higher cost, but with little differentiation, or at least differentiation that the customer was willing to pay for.

Dunn chose to pursue higher operating margins by reducing sales, general, and administrative expenses. To do so, he used cost cutting measures such as reducing travel costs and broad downsizing. The downsizing, however, was not based on product or geographic markets, it was done horizontally across the firm; departments were tasked

with eliminating employees, not particular functions. This resulted in a reduction in the workforce but not in customer deliverables. With fewer employees available to create, build and deliver solutions, sales and delivery of contracts were negatively affected.

Dunn also pursued outsourcing as a means to lower costs, starting with the outsourcing of most manufacturing facilities to Flextronics. Additionally, a large portion of the firm's Information Technology organization was outsourced at the turn of the century. Nortel chose to protect its core R&D assets and outsource complementary assets that other firms could perform at a lower cost.

The financial model stayed in place during Owens' tenure. As with Dunn, Owens continued to restructure the organization, lay off employees, and implement rules and procedures that would reduce costs (i.e. travel policies, restructuring of the stock option plans). He continued to focus on increasing the operating margin by reducing expenses.

Zafirovski, faced with the same challenges as his predecessors, also tackled the financial model in the same way. He continued to restructure the organization and downsize the number of employees. Additionally, he relocated employee functions to lower cost areas and redirected R&D investment towards growth areas (but also reduced the overall R&D investment). The decision to reduce and redirect R&D resources eroded the firm's competency in this area. The decision was also in direct conflict with the firm's desire to cultivate R&D as a core asset and to serve a broad range of customers and product markets. While the firm continued to emphasize its position as a global leader in both the carrier and enterprise businesses, the reduction in R&D and the relocation to areas away from the knowledge base reduced the firm's capability to deliver innovative products in a timely manner.

Zafirovski also implemented a form of six sigma; a quality and cost initiative that he adopted from GE and Motorola. 'Lean Six Sigma' was implemented within the firm as a key driver for process improvement, with the goal of reducing costs, increasing time to market and improving overall quality. The program became central to Nortel's efforts of reducing expenses and was complemented by 'Own it' – an employee-driven (grass roots) cost-cutting program.

The elimination of costs had the desired effect of reducing the overall cost base, however, the firm struggled with the rate at which it was able to realize the benefits. Regardless, the model became ingrained into the firm's operations in two ways. First, the model had a coordinating effect, in that the entire firm became critically cost conscious. Transparency and scrutiny in financial reporting (primarily due to the financial restatement process) was prevalent throughout the organization.

Second, the model had a learning effect. While the industry slowly recovered, the pressure to reduce costs was ongoing. Restructuring, downsizing, offshoring, and outsourcing became familiar mechanisms to the Nortel executive and the employees. Nortel streamlined processes in each of these areas: reorganizations happened frequently and were expected, employee layoffs and restructure of work was habitual, moving headcount to lower-cost areas was initially resisted but became a standard tactic (especially in Zafirovski's tenure), and outsourcing of non-core activities had been used since the late 20<sup>th</sup> century.

Finally, the model had adaptive expectation effects, specifically as it related to the Lean Six Sigma program. Zafirovski promoted the importance of this initiative not only

within the firm but also with analysts and in material documents. A six sigma black belt (level of achievement) was considered a top honour.

#### **5.5.4 Growth Modes**

In the late 1990s, Nortel grew exponentially. As discussed previously, CEO John Roth spent over \$45B acquiring companies that would allow Nortel to grow the enterprise and wireless businesses. When the dot.com bust hit, however, and industry revenues declined by half, growth became less of a priority for all industry players, who were seeking ways to simply sustain the business. Some firms merged, while others restructured their business operations or changed their product focus. Nortel did neither, opting instead for the cost cutting approaches explained in the previous section.

When Dunn began his tenure, the firm started focusing on partnerships, mainly strategic alliances, for growth. With little cash available for acquisitions, Nortel chose to grow organically and through partnerships. The only exception to this was the purchase of Nortel Government solutions (PEC) by Owens, a firm that served the US military market. Nortel also pursued some formal arrangements such as the joint venture with LG and a strategic alliance with Microsoft (the performance of which was never quantified).

The need for growth became increasingly important as Nortel pushed further into the Enterprise and Services businesses. Zafirovski managed this need by restructuring the organization such that headcount was reduced in slow growth areas and increased in services. In some cases employees simply moved from a product organization into a services function, even if they lacked the expertise. This was problematic for Nortel, as

the firm sought to become a solutions provider when its strength lay in product development.

The partnership growth strategy had a complementarity effect: by combining resources and capabilities with others in the industry, Nortel was able to provide solutions to customers without significant investment. Given that Nortel's cash position was strained, this approach provided flexibility and opportunity. The Microsoft relationship, in particular, signalled to the market that Nortel had valuable resources and capabilities.

The growth strategy also had learning effects. Partnerships with industry players, formed through not only formal relationships but also strategic relationships, became embedded into the firm's operating environment. Nortel's firm boundaries became blurred. With resources lacking, this became the model for growth.

#### ***5.5.5 A Deep Structure of Embedded Processes***

The four processes discussed in this section were each deeply embedded into the organization. Core assets and the market model were initial conditions that had been part of the fabric of Nortel for at least a decade. The financial model and growth modes were new, initiated by Dunn when he began his tenure (and spurred by the industry malaise). Owens and Zafirovski continued to embed these processes within the firm throughout their tenures as well, as evident in the firm's material reports. In combination, these processes became tangled together, but not as a complementary group of processes, rather they were in conflict. As show in Table 26, each of the processes had positive effects but, in combination, they worked against each other. The effect of this web of processes is discussed in the following section.



**Table 26: Outcomes of Nortel's Self-Reinforcing Processes**

| Type of Effect              | Self-Reinforcing Process  |   |   |  | Cumulative Outcome  |
|-----------------------------|---|---|---|--|---|
|                             | Core Assets   | Market Model  | Financial Model                               | Growth Modes   |   |
| <b>Coordinating</b>         | n/a   | Transnational operating model: global product development and regional sales. | Focus on reducing expenses in all operations. | n/a  | Insufficient resources to serve customer needs.   |
| <b>Complementarity</b>      | Industry embeddedness in areas of innovation and technology leadership. | Sharing of resources and capabilities across organization                     | n/a   | Partners became critical to Nortel's ability to provide solutions. | Complex set of products and solutions, with delivery around the globe. Difficult to manage. |
| <b>Learning</b>             | Processes driven around innovation as desired outcome.                  | Complex solutions to serve as many markets as possible.                       | Repeated same mechanisms due to familiarity   | n/a  | Conflicting objectives, stuck in the middle, lack of resources to innovate.                 |
| <b>Adaptive Expectation</b> | R&D was the "crown jewel."  | Nortel as a global leader.  | Recognition for reducing costs.               | n/a  | Identity crisis: innovative or low-cost providers?  |

## 5.6 Organizational Path Dependence and Strategic Lock-in at Nortel

The two processes that were initially present when Dunn began his tenure –core assets (innovation, R&D, technology leadership) and the market model (global, carrier and enterprise) – emphasized Nortel's historical corporate and business level strategies.

The company was a multinational that used a transnational structure to deliver high

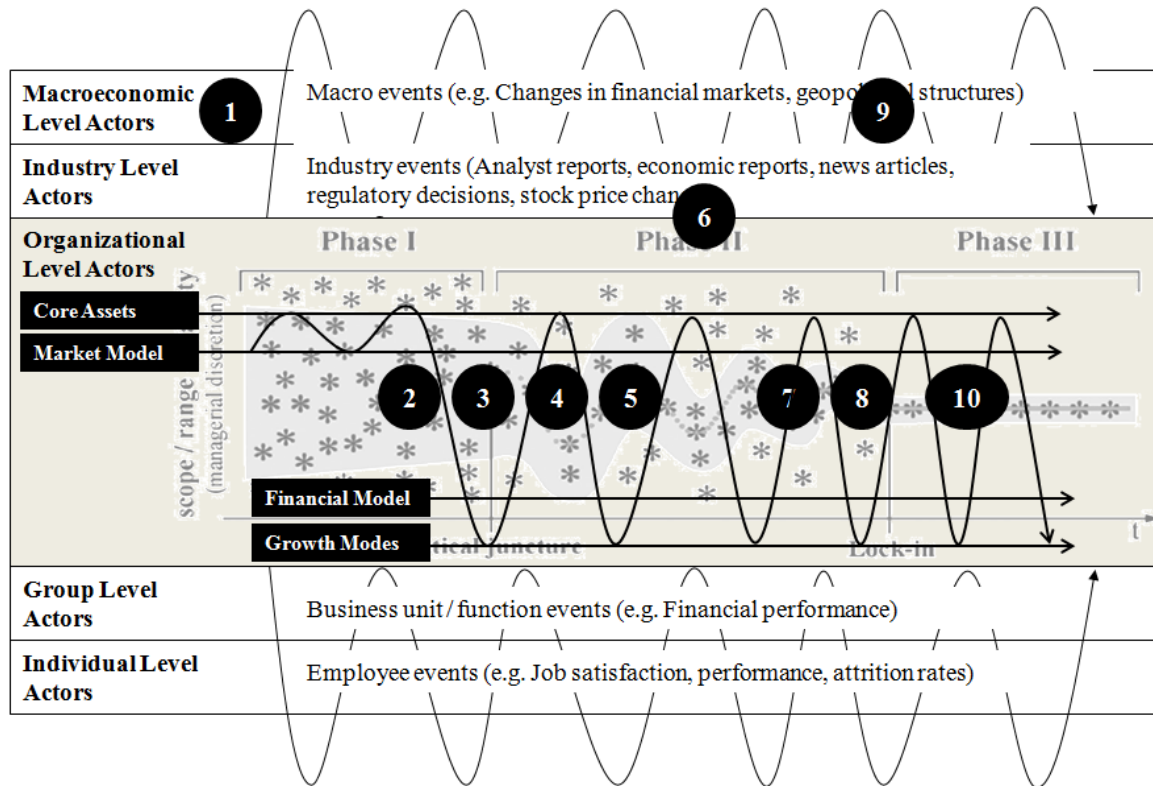
technology solutions worldwide. Innovation was at the core of the firm's competitive advantage and R&D was the firm's core asset.

The two processes that were initiated by Dunn and cultivated by the remaining CEOs – the financial model (cost reduction) and growth model (partnerships) – were in response to the industry conditions and the firm's lack of cash. These processes became just as embedded as the previous two, however they were in direct conflict. The horizontal workforce reductions eroded capabilities across the firm, as did the relocation and reduction of R&D resources. The emphasis on streamlining processes and removing costs out of the business went against Nortel's culture of innovation. In terms of growth modes, although partnerships for Nortel were not new, Nortel was historically the leader of industry partnerships, whereas in this case, Nortel was required to partner to deliver solutions. Nortel's culture of "not invented here" made this growth mode strategy challenging.

The interaction of these processes resulted not only in a lack of resources to deliver innovative solutions but also an inability (or desire) to move from a differentiated business strategy to one of low cost. Nortel, therefore, became stuck on a path where they were unable to provide either differentiation that the customer was willing to pay for or low cost commodity products. Nortel's culture of innovation was challenged, leaving the firm (and the industry) questioning Nortel's identity. Customer needs were no longer being met and the challenge of delivering solutions to such a broad (global) portfolio was a strain on the organization. The ongoing interaction between these four processes and the triggering events (discussed previously) led Nortel down an increasingly rigid path that resulted in lock-in (see Figure 19).

**Figure 19: Constitution of Nortel's Organizational Path**

Overlaid on Sydow et al.'s (2009: 692) Constitution of an Organizational Path



As illustrated, the constitution of Nortel's organizational path involved a complex interplay between levels, actors, processes, and events. The path constitution analysis indicates that the actors at the focus level of analysis (the CEOs) were, at times, aware of the options to move off path, but chose to invest (from one tenure to another) in the self-reinforcing processes that appeared to be rent-seeking but were often in direct conflict with each other.

The initial event (#1) of the dot.com bust, which was brought on by an economic downturn in 2001, initiated the implementation of the financial model and growth mode processes, by Dunn. Although these processes were mutually exclusive from the market model and focus on innovation and R&D (initial conditions), Dunn chose to run the

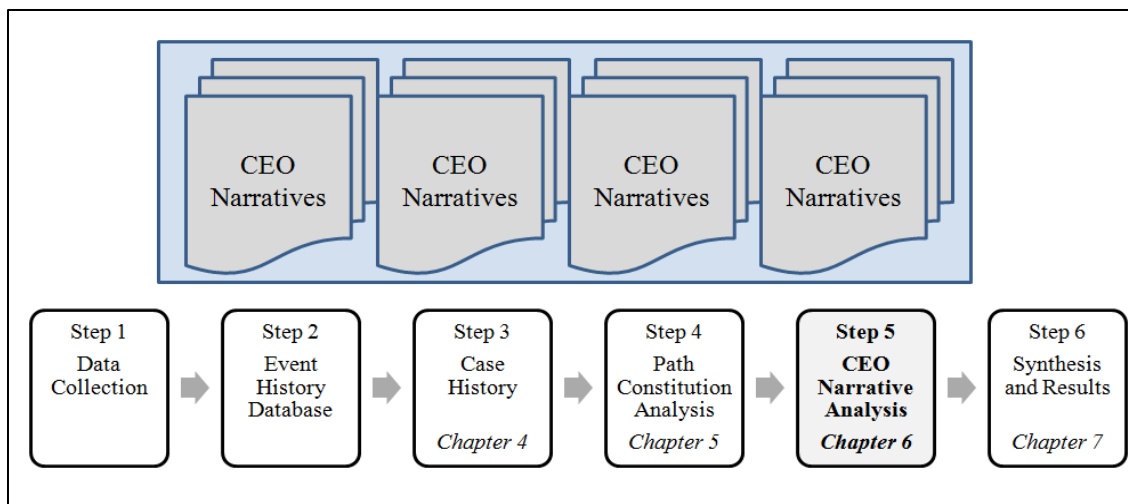
business with this dual focus, as did Owens and Zafirovski. The structure of the firm, however, could not support it. Dunn's efforts to manage the financial model in such a way that led to his dismissal (event #2) is symptomatic of his struggle to manage the organization as an innovation engine (differentiation strategy) while emphasizing the need for efficiency (low-cost strategy). Although Owens had an opportunity to change the strategy during his tenure (event #3), the dismissal of Daichendt (event #4) reinforced the current market model while the cost of restructuring the finance organization reduced flexibility. Zafirovski was positioned as the turn-around CEO (event #5) but he too was constrained by the conflicting self-reinforcing processes. On the one hand, he emphasized Nortel's innovation capability, but on the other hand, he had to reduce costs in order to meet debt repayments. The class action lawsuit (event #6) came at an inopportune time, drastically reducing Nortel's cash position. The financial restatements that followed (event #7 and #8) further eroded investor confidence, making it difficult for Nortel to raise funds. But Zafirovski persisted with the four processes, still operating with the same broad customer base, product portfolio, and global scope; he stressed innovation, R&D and technology leadership, while promising to reduce costs and leverage partnerships. By the time the economy collapsed (event #9), Nortel was stuck; the firm could not move off path and fell into bankruptcy protection (event #10).

## CHAPTER 6. CEO Narrative Infrastructure and Intertextuality

### 6.1 Introduction

In the previous chapter, a path constitution analysis on Nortel indicated that the firm became stuck on an organizational path that resulted in bankruptcy protection (and eventually, liquidation). The analysis showed that at the centre of the path were the organizational level actors, namely the CEOs, who chose to pursue similar courses of action. In combination with triggering events that occurred both within the firm and outside of the firm, Nortel was eventually unable to move off path (although the opportunities did exist initially). The CEOs could have chosen a different market model and invested in new core assets, but they chose to stay with historical assets, which were in conflict with the newly initiated financial model and growth modes. The question remains if whether or not the CEO narratives also influenced Nortel's strategic path, and if so, how.

To determine the answer to the research question, the narratives themselves must be investigated for their textual characteristics. This chapter therefore presents the preliminary step in answering the research question by first identifying the textual relationships between the different sources of CEO narratives, over time and between CEOs (see Figure 20). The chapter is divided into two sections: first, the structural relationships between the sources of narratives are explored (Genette, 1997); second, using the results of the grounded coding, a discursive analysis is performed on the CEO narratives, identifying the mechanisms employed by the CEOs to implement the firm's strategy.

**Figure 20: CEO Narrative Analysis (Step 5)**

Results indicate that CEO narratives create an infrastructure that represents CEO strategizing; narratives build from the past into the present and provide a discourse of direction on the future. Even through CEO succession, intertextuality remains high. CEOs draw on themes that represent the self-reinforcing processes of path dependence, further solidifying the processes in the organization. These results are discussed as follows.

## 6.2 Structural Textuality

In this first of two sections, the structural characteristics of the sources of CEO narratives are presented, using Genette's (1997) approach discussed in the theory chapter (see Table 27). The purpose of this analysis is to understand the extent of structural relationships between the texts. As suggested in Figure 21, the CEO narratives theoretically create a narrative infrastructure, but the characterization of this infrastructure is unknown. It's only through an analysis of intertextuality that it is possible to determine the extent to which the texts are related. This section therefore

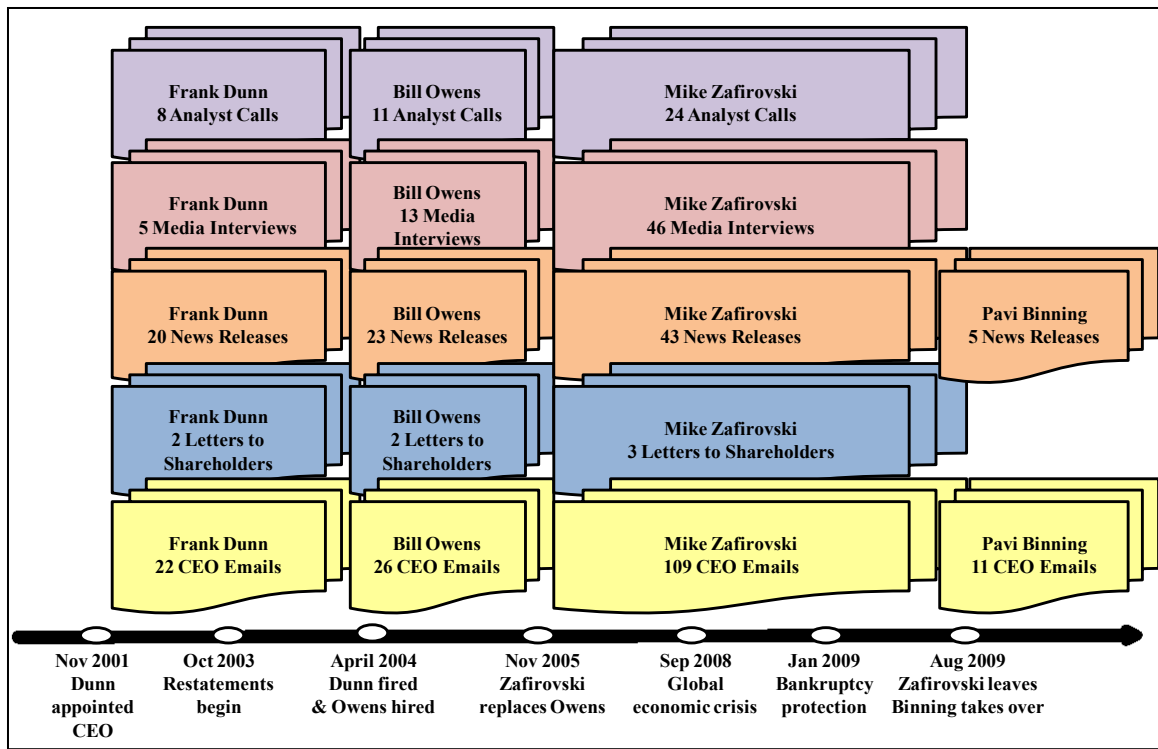
looks at structural characteristics in the following order: how the narratives are produced and in what context (paratextuality and architextuality); and, the connection of narratives between each other, either implicitly (metatextuality) or directly (hypertextuality).

**Table 27: Genette's Types of Transtextuality**

(As summarized by Allen, 2000: 98-104)

| <b>Textual Characteristic</b> | <b>Genette's definition, as quoted by Allen (2000)</b>   |
|-------------------------------|--|
| Intertextuality               | "a relationship of copresence between two texts or among several texts" (Genette, 1997: 1)   |
| Metatextuality                | When a text "unites a given text to another, of which it speaks without necessarily citing it (without summoning it), in fact sometimes even without naming it" (Genette, 1997: 4)       |
| Hypertextuality               | "any relationship uniting a text B... to an earlier text A... upon which it is grafted in a manner that is not that of commentary" (Genette, 1997: 5)                                    |
| Paratextuality                | "elements which lie on the threshold of the text and which help to direct and control the reception of a text by its readers" (Allen, 2000: 100) – e.g. titles, sub titles, book jackets |
| Architextuality               | "the reader's expectations, and thus their reception of a work" (Genette, 1997: 5)   |

**Figure 21: Nortel CEO Narrative Infrastructure (Descriptive)**



### 6.2.1 Paratextuality and Architextuality

In this section, each of the different sources of CEO narratives is discussed in terms of descriptive features (paratextuality) and how they were generally accepted (architextuality). The purpose is to position the texts within a narrative framework, for the subsequent discursive analysis.

**Analyst Calls.** Generally, participation on analyst calls is controlled; only registered analysts covering the firm are authorized to ask questions, although the public can listen in on the calls. With Regulation Fair Disclosure (SEC, 2000), the call transcripts must be made available after the call, thereby ensuring full disclosure with all stakeholders. Transcripts are available through Fair Disclosure Wire, for a fee. They



include both the opening narrative from the CEO and CFO, and the question and answer period.

The analyst call transcript itself is broken down into two sections: the first section is a summarized version of the call, including a bulleted list of any documentation used in conjunction with the call (e.g. PowerPoint slides); and, the second section is the verbatim transcript, about 10 to 15 pages long, Arial 10 point font, 8x11 ½ . In the case of Nortel, the PowerPoint slides were made available on the Nortel website (in the Investor section).

Analysts typically filed a report soon after an earnings call, often quoting portions of the call and the associated 10-K (or 10-Q). Media would also file articles soon after the call, using direct quotes from the call and quoting analysts who they had interviewed soon after. Stock price often moved if there was analyst consensus on either positive or negative news.

Within the firm, analyst calls themselves were rarely discussed. CEO narratives, however, would reference an analyst report or news article produced after the call to either legitimize a decision or argue its validity.

*Letters to Shareholders.* Letters to Shareholders were made available in the firm's marketing version of the annual report (not the official 10-K). In all but one case, the CEO letter followed the Chairman's letter (the exception was the combined letter in 2001). The annual report was primarily a marketing document, with supporting financial information, whereas the 10-K was primarily a financial (regulatory) document. The Letter itself included a picture of the CEO, a salutation, pictures, tables and figures, a complementary close, and a hand written signature. In one instance, Zafirovski included his Letter in one of his CEO Emails, below his complementary close, and encouraged all

employees to read it. The Letter was not considered newsworthy by the media or analysts.

*News Releases (8-Ks).* Corporate news releases were issued by Nortel when a material change occurred within the firm. The company would issue the release on the newswire and also file an 8-K, which would detail the material change (as per SEC regulations) and attach the news release as an appendix. In certain instances when the news was not considered financially material, a news release was issued without a corresponding 8-K. Most news releases that included CEO narrative (i.e. CEO quotes) reported on one (or more) of the following: financial performance (announcement of quarterly or annual reports), the financial restatement process, a change in executive leadership, a business acquisition or partnership, a divestiture, or a major material event such as bankruptcy protection or change in financial guidance.

All news releases were made available on the firm's public website. News releases were also posted internally on the employee 'Global Web' home page, the main webpage for the firm's corporate intranet. Due to regulations, material information had to be communicated to all stakeholders at the same time; therefore, when the firm issued material information through a news release, it was posted on the business wire and on Global Web in parallel. Soon after a release was issued, a CEO Email was sent to employees to introduce the material information and provide a hyperlink to the news release; as such, employees found out about material information at the same time as the market, and no sooner. If an employee was not near his or her computer at the time, it was possible that a customer or other external stakeholder would receive the news first.

CEO quotes in news releases were similar in nature from one news release to the next, depending on the type of information being communicated. For example, upon releasing financial results, all three CEOs upon started their quotes with “I’m very pleased...” The quotes usually confirmed the material information being presented. Sometimes quotes used in the news releases were also repeated in the CEO Emails.

**Media Interviews.** Most of the interviews were with Zafirovski and contained a small number of quotes (with only a few exceptions). Quotes rarely offered a new perspective on firm strategy or direction, focusing more on either the personal background of the CEO or reinforcing narrative previously shared elsewhere.

**CEO Emails.** CEO Emails were electronic in nature, using HTML coding once it became available. Zafirovski’s emails were also made available on the firm’s intranet (i.e. Global Web). Links to these archived emails were included in later CEO Emails.

Although the emails were distributed internally, some of them made their way into the public domain<sup>20</sup>. The emails were signed by the CEOs; they did not contain a confidentiality disclosure. Once the emails were distributed, there were often follow-on emails from other Nortel executives reinforcing the CEO’s original narrative and providing additional narrative specific to the leader’s area of responsibility.

---

<sup>20</sup> Mark Evans, a Canadian blogger and journalist, published seven of Mike Zafirovski’s emails on his blog, All About Nortel, which was hacked in August 2012. All data was lost.

The CEOs issued emails, on average, every 4 to 6 weeks, with the exception of Binning, who issued an email only when a purchase offer was made on a business unit or the business unit was actually sold. The emails were triggered either by material information (coupled with a news release) or by an internal event such as the annual sales conference, annual leadership meeting, strategy planning process launch, annual compensation review, or job satisfaction survey. These events served as the narrative plot.

Findings from the detailed CEO Email analysis (see Appendix G) suggest that the CEO Email represents an intraorganizational strategy narrative, whereby the CEO attempts to establish a one-on-one discourse with every employee. Using rhetorical history, the Nortel CEOs defined, developed and confirmed organizational norms, values and beliefs to shape employee behaviour and reconstructed past events to legitimize executive decisions and actions.

The informal and personal nature of the CEO Email also allowed CEOs to develop their own individual identity within the organization, in context to the organization's identity. However, with the communicative purpose being to shape employee thinking and behaviour, the CEO Email retained a monological tone that reaffirmed the CEO's role as the master architect of the firm's strategy, even with attempts at levelling.

The CEO Email narratives were found to be both optimistic and inclusionary. They had temporal awareness and concern for the past, present and future, were realism-based, and emphasized present-day activity. The narrative, however, had limited spatial awareness, even though Nortel was a global enterprise.

The tone of the emails displayed minimal certainty. Although the CEO's tone was highly familiar, with a significant use of the first person, all four CEOs were cautious in their narratives.

**Conclusion.** Through analysis of paratextuality and architextuality, this section has provided context on the five sources of CEO narratives included in this study. Findings indicate that each of the different types of texts had a unique purpose. Although each contained strategy narrative, the readership differed: analyst calls were a live discussion with the analyst community, CEO Emails were a one-way narrative with employees, the Letter to Shareholders was directed to shareholders in general, news releases had an even broader appeal and, finally, media interviews were directed towards the readership of the media source (who brokered the conversation). Follows is an analysis on the textual relationships that may have existed both *within and between* each of these sources.

### **6.2.2 Metatextuality and Hypertextuality**

**Metatextuality** refers to the reference of one narrative to another, although not necessarily explicitly. Within their own narratives, the CEOs often referred to other narratives, including both their own and those produced by others within and external to the corporation (see Table 28). The texts, in this case, went beyond the different sources of CEO narratives and included narratives produced through events, such as sales conferences, analyst events, leadership meetings, and the annual general meeting. These references were made consistently over time and between CEOs within three sources of

narratives: shareholder letters, analyst calls, and CEO Emails. References to other texts within CEO news release or media interview quotes were minimal.

**Table 28: References to other Texts**

| <b>References to:</b>        | <b>Total<br/>References</b> |
|------------------------------|-----------------------------|
| Sales Conference             | 19                          |
| Annual General Meeting       | 24                          |
| Analysts/investors/events    | 97                          |
| Board Meetings and Decisions | 130                         |
| Employee Survey              | 73                          |
| Industry Data                | 27                          |
| Leadership Meeting           | 60                          |
| Media Articles               | 63                          |
| Corporate News Releases      | 167                         |
| External Experts             | 84                          |
| <b>Total</b>                 | <b>744</b>                  |

These findings suggest that the shareholder letters, analyst calls and emails all contained metatextual characteristics with other types of texts, while the news release quotes and media interview quotes did not. For example, shareholder letters often referred to industry data on market positioning, technology innovations, and product leadership. On the analyst calls, the CEOs referred to quarterly and annual reports, corporate events, Board meetings, news releases, external experts, and the annual general meeting. Within the CEO Emails there were references to both internal and external events and reports produced by external analysts and experts.

Between CEOs, Dunn differed from Owens and Zafirovski in his references to other texts. While the latter two had the highest references in analyst calls, Dunn's were greatest in the Letters to Shareholders.

In all cases, the CEOs referenced other texts within their emails consistently. As the main written text between CEO and employee, this finding suggests that the CEO Emails were positioned within the organization as central narratives, drawing in other texts to form a foundation for the narrative, and connecting to supporting texts to expand the narrative's reach.

*Hypertextuality* exists when there are explicit references within a text to another text. In totality, this occurred 205 times within the texts, with 189 of them in the CEO Emails. Hypertextuality increased over time within the emails, likely due to advancements in technology; once Zafirovski was CEO, embedded hyperlinks to a website, document, previously issued email, and other electronic sources became common email practice.

### **6.2.3 CEO Narrative Infrastructure**

The analysis of structural textuality suggests that the sources of CEO narrative were interconnected through either direct or indirect references and also through events. As suggested in Figure 22, the CEO narratives were produced as a form of conversation with actors within and external to the organization, at varying levels. The infrastructure created by the narratives suggests interaction between the levels over time, as recursive activity initiated by events, and leading to further events. Although Figure 22 illustrates the pattern of narrative activity only over a 6-month period (due to visual limitations),

this pattern is evident throughout the entire 8-year period. In most cases, CEO narratives were triggered by either an internal event or an external event, and usually when the event had material consequences. The obligation of the firm to communicate material events was a significant impetus for CEO narrative production.



Figure 22: CEO Narrative Infrastructure - Levels & Actors

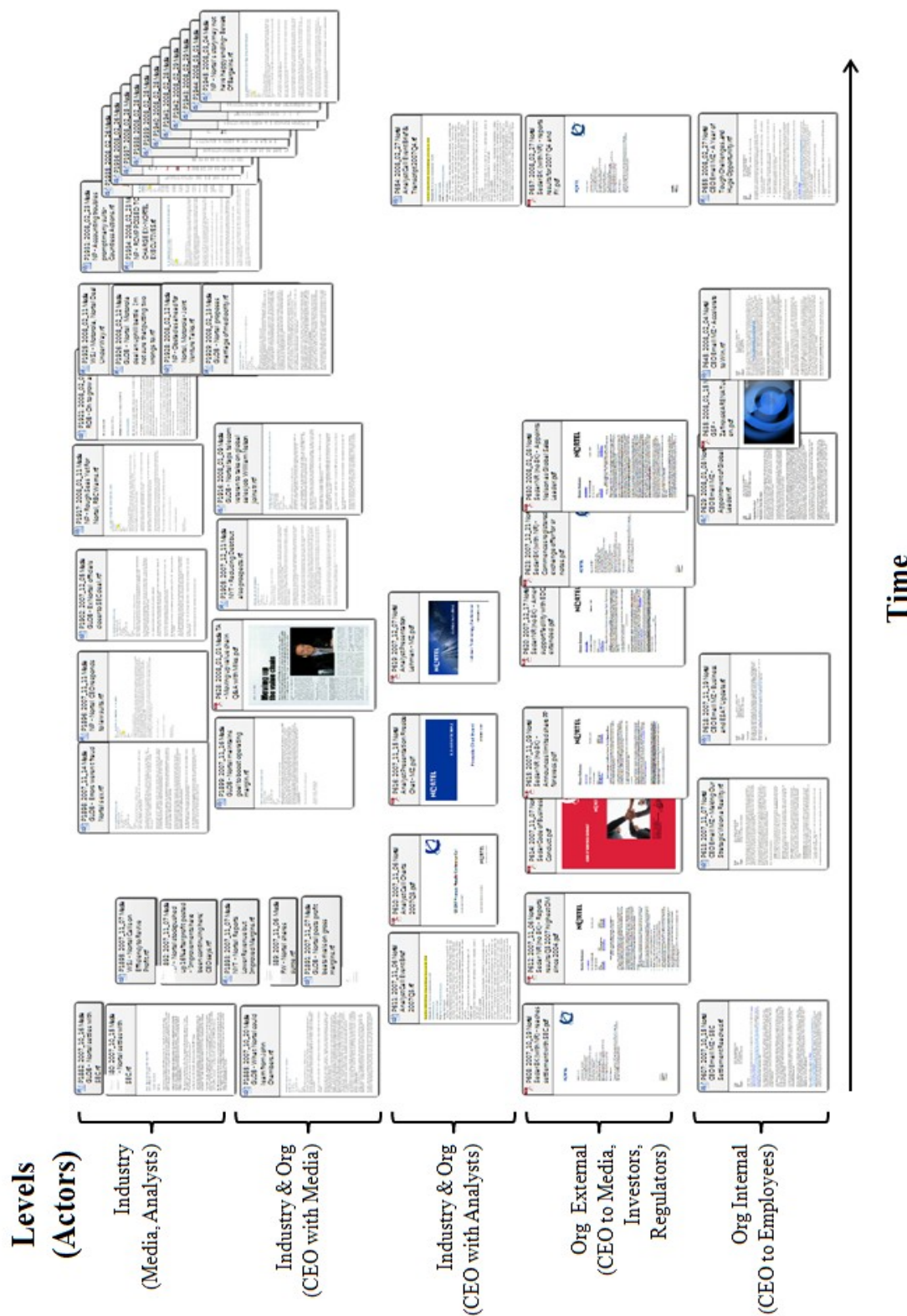
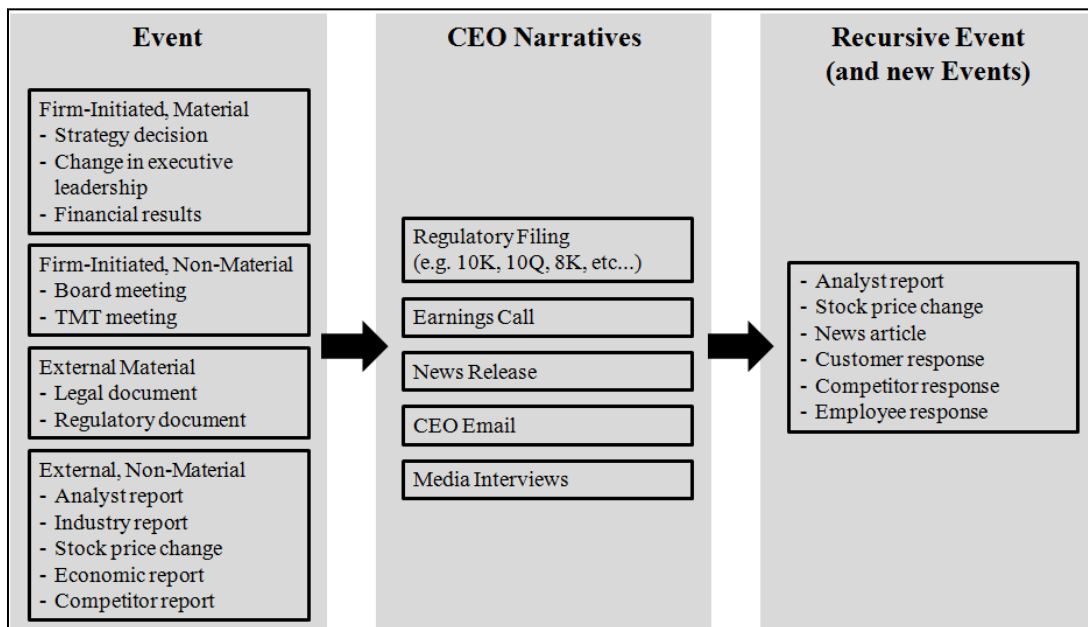


Figure 23 proposes a model on how CEO narratives are initiated by events. As the model suggests, events can be initiated either by the firm or by external actors. Although material events will initiate narratives, other events may also be the impetus, such as a legal or regulatory decision (e.g. the class action lawsuit, Standard and Poor's decision to remove Canadian companies for the S&P 500), or even a media article written about the firm.

These textual relationships suggest that a CEO narrative infrastructure existed at Nortel, through structural relationships. The question that remains: were they also connected through discursive themes? Follows is this analysis.

**Figure 23: Event-initiated CEO Narratives**



### 6.3 Discursive Themes

#### 6.3.1 *The Centrality of Actors*

Before discussing the discursive themes themselves, it's important to draw upon an earlier finding on the centrality of actors within the CEO narratives. The Path Constitution Analysis used the grounded coding from the CEO narratives to determine how the central actors in the analysis (i.e. the CEOs) interacted with the various levels of analysis (macroeconomic, industry, firm-level and intraorganizational). The CEO narratives were dominated with references to actors, but most specifically customers, employees and the Top Management Team. In addition, the CEOs frequently referred to themselves within their narratives in terms of their role and responsibilities, their expectations of employees and their emotions (e.g. confidence, assurance, and commitment). See Table 29.

**Table 29: CEO Narratives and the Centrality of Actors**

| Narrative                          | Illustrative Quote  |
|------------------------------------|---|
| Dunn, CEO Email, October 11, 2002  | I thank you for your energetic efforts, and I ask you to join me in renewing your commitment to rebuilding our foundation for the future around our four core businesses and our ability to deliver value to our customers.   |
| Dunn, Letter to Shareholders, 2002 | You might say these are Nortel Networks family values – guiding how we do business and behave as a company. Going to the heart of our culture and corporate governance, these values revolve around always putting the customer first, striving for industry-leading quality in every aspect of our business, pursuing breakthrough innovations that benefit our customers, always acting with integrity, and being an employer that treats its people as its strength. |

| Narrative                               | Illustrative Quote  |
|---|---|
| Owens, CEO Email, April 29, 2004        | It will take some time to reestablish our complete credibility, but there are certain truths. First and most importantly, we are blessed with a wonderful group of people -- strong, smart, and devoted to our company. Second, I want you to know how committed and confident I am in working with you to grow our business to an even stronger level. Third, while confidence has been shaken, I know we will work to restore it for our customers, our suppliers and our many shareholders.            |
| Zafirovski, CEO Email, October 25, 2006 | There is nothing more important than an absolute and unwavering focus on the customer. One of the ways I try to remain true to that principle is by spending at least 50% of my time focused externally, including talking to the people who have put their trust in us: the companies whose businesses depend on our products. I don't think that there's anything more important to the success of our business than listening to the voice of the customer. And I encourage you to think the same way. |
| Zafirovski, CEO Email, March 13, 2006   | I have great expectations of our people to make Nortel better. However, to truly maximize Nortel's strength, we must develop a mindset where we seamlessly work together to put our customers ahead of all else. For this to occur, we must knock down the silos and perhaps, remove some layers. We can't have the passion of our leaders/employees diluted by too many filters.   |
| Zafirovski, CEO Email, May 4, 2007      | So let me be clear. My executive team and I are not the ones who will ensure a bright future for Nortel alone. Each and every one of you has a part to play. Each and every one of you is part of team Nortel. We need you in the game. 100%. Without reservation. The sum of all of your efforts, if channeled with the right attitude in the right places, can make an incredibly powerful difference.  |

The centrality of actors within the narratives suggests two important findings: first, CEOs embed their narratives within a specific context, and second, this context may reflect the CEOs' strategic focus. Although numerous actors were mentioned in the narratives, the focus on customers, employees, and top management suggests that the CEOs, during the period of the case, were exceptionally concerned about meeting customer needs, and were taking an authoritative approach to the implementation of the firm's strategy.

### 6.3.2 Major Discursive Themes and Primary Narratives

Through the grounded coding and first order concepts, second order themes were identified to understand the general nature of the CEO narratives and the persistence of themes over time and between narrative sources (see Table 30). As the table indicates, some sources of narrative had a higher prevalence of discursive themes than others, for two reasons: (1) how frequently the source text was issued, and (2) the length of the source's text. For example, analyst calls were held relatively frequently (at least once per quarter) and lasted over an hour. The CEO quotes from the analyst calls were robust, consisting of about 75% of the total content. On the other hand, the CEO quotes from the news releases and interviews were limited. Letters to Shareholders were issued only once per year, but the dominant themes occurred frequently in these specific narratives from one CEO to the next. The Letters, compared to the other narratives, were traditional stories, telling the "tale" of the previous year and of the future to come.

**Table 30: Discursive Themes in CEO Narratives**

| <b>Major Discursive Themes</b><br>(From most dominating) |  | <b>Analyst calls</b> | <b>CEO Emails</b> | <b>Interviews</b> | <b>News Releases</b> | <b>Letters to Shareholders</b> |
|--|--|----------------------|-------------------|-------------------|----------------------|--------------------------------|
| Mechanisms   | Processes and practices of strategy implementation | High                 | High              | Low               | Low                  | High                           |
| Customers  | Needs, satisfaction, value, engagement             | Med                  | Med               | Low               | Low                  | High                           |
| Financial Issues   | Performance, restatements, structure, objectives   | High                 | Med               | Low               | Low                  | High                           |

| <b>Major Discursive Themes</b><br>(From most dominating) |  | <b>Analyst calls</b> | <b>CEO Emails</b> | <b>Interviews</b> | <b>News Releases</b> | <b>Letters to Shareholders</b> |
|--|--|----------------------|-------------------|-------------------|----------------------|--------------------------------|
| Strategy   | Corporate and business strategies, business model, mission and vision, synergy, competitive advantage, performance, growth modes | High                 | High              | Low               | Low                  | High                           |
| Employees  | Expectations, responsibilities, recognition, satisfaction, engagement  | Low                  | High              | Low               | Low                  | High                           |
| Top Management Team and Board of Directors               | Roles and responsibilities, authority, decisions   | High                 | High              | Low               | Low                  | High                           |
| Industry and Economy                                     | Conditions, challenges, opportunities, competitive behaviour   | Med                  | Med               | Med               | Med                  | High                           |
| Organizational Change                                    | Business transformation, restructuring, downsizing   | Med                  | Med               | Low               | Low                  | High                           |
| Organizational Identity                                  | Core values, corporate behaviour, culture, history, reputation, vision, identity   | High                 | High              | Low               | Low                  | High                           |

Although the consistency of themes across all narrative sources suggests the existence of a narrative infrastructure through textual relationships, the relative occurrence between sources suggests that some sources of CEO narratives had a greater influence than others. The Letters to Shareholders are rich narratives, which embody the firm's performance and strategic direction, within the context of the industry. The Letters, however, are issued only once per year, and as suggested in the previous discussion on structural relationships, they were minimally related to any other sources of narrative. The Letters neither referred to other sources of narratives nor were referred to

by others, with one exception: the CEO Email, which either linked to the Letter when it was issued, or directly included it (in one instance).

The CEO quotes from the news releases and interviews were relatively few and contained minimal reference to the discursive themes, suggesting that these two sources of narratives were relatively inconsequential. However, the entire news release (not just the CEO quote) was strongly structurally linked to the CEO Emails, not only through textual references but also with electronic hyperlinks.

The analyst calls and the CEO Emails frequently and consistently contained narrative around the discursive themes. Although these two narrative sources were not strongly structurally related, they were both laden with text about strategy formulation and implementation. Notably, the intended audiences for these two narratives were different. The analyst calls were directed not only directed at analysts but also at shareholders and the business media; the business media frequently quoted the CEO's narrative from the analyst calls, within their articles, when reporting on the firm's material reports. The CEO Emails were directed at employees.

Through the analysis of structural relationships and discursive themes, this section concludes that a narrative infrastructure existed at Nortel, through the CEO narratives, and that this infrastructure was dominated by two primary sources of narratives: the CEO analyst call and the CEO Email. The other three sources of narratives – the Letter to Shareholders and the quotes from the CEO news releases and media interviews – included supporting narratives that reinforced the discursive themes but were less consequential.

### 6.3.3 *The Dominant Narrative*

The dominant narrative that occurred throughout the period of the case was the influence of the economy on the telecommunications industry, the customers changing needs, and the changes required by Nortel to meet those needs. In particular, the CEOs reinforced the firm's corporate and business level strategies repeatedly, identified the firm's strengths and competitive advantages, and the processes that were required to succeed. As part of this rhetoric, they emphasized the important of leadership, responsibility, and accountability in terms of not only financial transparency but also leading change. Employees were encouraged to take action, to lead, and to push ahead in the face of adversity. The undertone in this narrative was the need to achieve results quickly and at the lowest cost possible, through downsizing, restructuring, offshoring, outsourcing, and partnerships. A selection of illustrative quotes, from both CEO Emails and the analyst calls, with a few from the Letters to Shareholders, provides insight into how this narrative unfolded over time (see Table 31). Using quotes from each of the CEO's narratives, the consistency in the narrative from one CEO to the next is demonstrated.

**Table 31: CEO Narratives and the Dominant Theme**

| Theme / Narrative                                       | Illustrative Quote   |
|---|--|
| <b>Influence of the global economy and the industry</b> |  |
| Dunn, Analyst Call, July 24, 2003                       | The real question, at what pace do they start moving forward on those programs, and that's going to be determined in the shorter term by the -- some external forces such as the economic -- the global economic situation which is still uncertain. |



| Theme / Narrative  | Illustrative Quote   |
|--|--|
| Owens, CEO<br>Email,<br>December 17,<br>2004                           | But I will tell you that competition has been difficult in our marketplace, not only for us but for our competitors. We have seen consolidation of major telecoms companies, which gives them more profound bargaining power, and we are seeing the real presence of the new Chinese competitors, Huawei, ZTE and UTStarcom. Nevertheless, we are doing well even through the difficulties of the last nine months   |
| Zafirovski, 2007<br>Letter to<br>Shareholders                          | Our transformation and renewal will continue to unfold against a backdrop of not just industry, but global business and economic change. I realize the world will not stand still and neither will Nortel. We will continue to take bold and difficult steps to ensure we are in control of our destiny  |
| <b>Customers' changing needs</b>                                       |  |
| Dunn, CEO<br>Email, January<br>20, 2003                                | Technology Leadership -- We must strengthen our position as an industry leader and innovator that's ahead of the curve. Our commitment to innovation has to intensify. We must be an influential "thought leader" of innovation by stimulating a creative culture in our labs that recognizes and rewards new ideas and inventiveness. We have to translate our innovations into solutions that our customers see as second to none in addressing their needs. |
| Owens, Analyst<br>Call, April 28,<br>2004                              | To our Nortel Networks customers, we will not let this distract us. We remain committed to our business strategy of technology and solutions leadership, and in helping customers drive their business success, reduce costs, and improve productivity.  |
| Owens, 2003<br>Letter to<br>Shareholders                               | Globally, carriers then and today continue to face increasing volumes of traffic and mounting operating costs without commensurate revenue growth. Their challenge is to manage investment and drive out operating costs. Enterprises facing increasing growth in their traffic need to see distinct productivity improvements from the network capabilities they are deploying in order to drive substantial new network investment.                          |
| Zafirovski, CEO<br>Email, August<br>15, 2006                           | The writing is on the wall: customers want to see their business applications integrated with their telephony systems. Microsoft, IBM, SAP, and others are integrating their desktop interface with telephony capabilities using Service-Oriented Architecture (SOA).  |
| <b>Corporate and business levels strategies, competitive advantage</b> |  |
| Dunn, 2001<br>Letter to<br>Shareholders                                | As an industry leader, we're committed to designing and building the next-generation Metro Optical Ethernet, optical long-haul, and wireless networks that will provide infinite bandwidth-on-demand and always-on wireless access.  |
| Dunn, 2002<br>Letter to<br>Shareholders                                | We continued fostering a vibrant culture of innovation in our labs and business units, maintaining significant R&D investments. Investment in R&D fuels the future – it's the lifeblood of our industry and company. Very little is accomplished in this industry without R&D investments that create value for our customers.   |

| Theme / Narrative                                   | Illustrative Quote  |
|---|---|
| Dunn, CEO<br>Email, January 30, 2003                | We'll start out on our journey toward this envisioned future confident in Nortel Networks ability to achieve even the most audacious challenges. We certainly demonstrated this capability the past year, as well as in years gone by, when we undertook such bold missions as Digital World, OPEN World, and FiberWorld, to mention just a few of the pace-setting achievements that earned us our well-deserved reputation as an industry leader and innovator.   |
| Dunn, CEO<br>Email, January 29, 2004                | Because of our heritage and our solutions portfolio, we have an enormous competitive advantage in moving this opportunity forward.  |
| Owens, CEO<br>Email, August 19, 2004                | I want to talk about our strategy going forward. We are organizing Nortel around the converged networks of the future. We will go from 4 principle business units to 2. One is a carrier-focused organization, the other is the enterprise-focused organization. We'll have a strong element of customer-facing emphasis.   |
| Owens, Analyst<br>Call, May 2, 2005                 | Nortel continues to spend on R&D at a higher percentage than our other competitors do. We take science and technology as something very special at Nortel. It's a bit of a -- the franchise and the legacy of Nortel will continue to spend strongly on R&D as we go forward. I'd like to tell you that we're smarter and therefore we get more for every dollar. I'm not sure I can tell you that.   |
| Owens, Analyst<br>Call, June 1, 2005                | We recognize that the competition from the Chinese vendors is very strong. We believe that we have a lot of discriminators with regards to this that help us as we deal with relationships that we have held with many of these customers for years -- that is Nortel's reputation for quality, for the five 9s reliability, with our growing element of security solutions that are possible for enterprise and for carrier customers. We realize that cost structure is very important as we look at that competition in that marketplace and around the world. |
| Zafirovski,<br>Analyst Call,<br>October 17,<br>2005 | But we are a global company. And that is a compliment or a criticism to say when somebody normally says a company is American, it typically carries a negative connotation. You are provincial, you are not necessarily thinking on a global basis, so I would love for us to be known as a global company.   |
| Zafirovski,<br>Analyst Call,<br>March 10,<br>2006   | If you look at the assets, I would argue most CEO's would kill to have this on their balance sheet, a company with an innovation, DNA which has produced some of the great innovations in the communications industry over the last 110 years.  |
| Zafirovski, CEO<br>Email, January 15, 2007          | We believe that it marks a seismic change in the industry, and it can be added to the long list of Nortel innovations that have transformed networks over the years - including Digital World (the world's first line of fully digital telecom systems), FiberWorld (telecom systems based on fiber optic technology), and successive waves of next-generation wireless technology.   |
| Zafirovski, CEO<br>Email, April 3,<br>2009          | Nortel has always been at the forefront of communications innovation -- whether wireless, optical or in the enterprise space -- and it's good to see we are still getting that message out there.   |

| Theme / Narrative   | Illustrative Quote  |
|---|---|
| <b>The role of leaders, leadership and employees</b>        |   |
| Dunn, CEO<br>Email,<br>December 16,<br>2002                 | This is leadership that yields positive and profitable results, and helps inspire people to demonstrate a powerful spirit of performance. That is our style for getting things done and for winning in a highly competitive marketplace. As customers make every dollar of investment count, we're embroiled in a fierce battle for market share that shows no signs of abating.  |
| Dunn, CEO<br>Email, January<br>29, 2004                     | The bottom line is Nortel Networks is on the move again. We are well positioned to go on the offensive and continue to create new realities for ourselves, our customers and our industry in 2004 and beyond, just as we did in 2003. I look to each of you to be a leader in working to move these priorities forward.   |
| Owens, Analyst<br>Call, January<br>11, 2005                 | All of these steps are a reflection of a new tone at the top at Nortel. So too is another announcement today, the announcement by 12 members of my senior management team to return their return to profitability bonus payments, and to disclaim their remaining 2003 restricted stock units. This voluntary decision is a clear and strong statement of corporate leadership and commitment.  |
| Zafirovski, CEO<br>Email,<br>September 20,<br>2006          | I leave you this time with three actions we all must ascribe to if we are to be successful. It is my expectation that you will embrace them fully.<br><input type="checkbox"/> Lead and Energize Those Around You<br><input type="checkbox"/> Execute with Urgency<br><input type="checkbox"/> Deliver Results  |
| Zafirovski, CEO<br>Email, October<br>2, 2006                | <b>You</b> are central to the transformation of Nortel -- your teamwork, resourcefulness and dedication are among the company's most important competitive advantages.  |
| Zafirovski, CEO<br>Email,<br>September 17,<br>2007          | It's still the right time for Nortel, but only if we make it so. How do we ensure our success? I've said time and again, there is no silver bullet. It is our collective confidence, passion, leadership and accelerated execution that will get us there.<br>Each of us has a role to play in determining Nortel's future. This is a career-defining moment for all of us. It's when leaders and champions are made. It's when greatness occurs.   |
| <b>Cost reductions, efficiencies, processes, operations</b> |   |
| Dunn, CEO<br>Email, August<br>27, 2002                      | The industry continues to go through unprecedented change and challenges. This is not just a situation Nortel Networks is facing. It's reflective of the broad and deep decline the industry is going through, a decline which is deeper and certainly more extended than expected. This accounts for our decision to reduce our breakeven and take further action to reduce the workforce, as difficult as that decision is because of the disruption and stress it causes our employees and their families. Deciding to undertake additional workforce reductions was not easy, and I hope those affected will not take it in a personal way. It's an action mandated by current industry conditions. |

| Theme / Narrative                            | Illustrative Quote  |
|--|---|
| Owens, Analyst Call, June 2, 2004            | We will reduce cost as time goes on. Now, that doesn't necessarily mean employee reductions; it means processes and finding ways to get our cost levels as low as possible, because we know, in this world, that cost is an important element as we compete with not only our present competitive marketplace but also the growing presence of companies like Huawei in China, who are reducing costs and providing quality products.   |
| Owens, CEO Email, April 26, 2005             | As I communicated to the market last summer, Nortel will continue its strategy of partnerships and alliances to speed solutions to market and strengthen our competitive advantage.   |
| Zafirovski, CEO Email, May 11, 2006          | I can't underscore enough that the success of Lean Six Sigma is foundational to rebuilding Nortel as a great company. It will require commitment and sign-up by every single employee, and each of you has a very important role to play in its success. I am counting on you to drive it with forceful optimism and rigor.   |
| Zafirovski, CEO Email, September 19, 2007    | While we have accomplished a great deal over the past 18 months, there is still much to do to turn Operations into a competitive advantage for Nortel.  |
| Zafirovski, Analyst Call, February 27, 2008  | And of course any time you announce this kind of an action, 2100, net reduction additional 1,000 employees will be moving to areas with higher growth and lower cost, as I've assured the employees twice previously, we do everything possible to redeploy the impact of the employees, feel absolutely terrific that at least 30% of the jobs impacted in the last restructuring will be able to transfer and redeploy employees elsewhere. This again will be a very organized and methodical process. But we will not blink. We will ensure we can compete against any company, any place in the world, any size. |
| Zafirovski, Analyst Call, September 17, 2008 | In order to take significant costs out, we are re-examining our management cost structure, looking at our go to market processes as well as some duplications inherent in a matrix organization.  |

#### **6.3.4 Mechanisms as Self-Reinforcing Processes**

The previous section illustrated the dominant narrative that existed throughout the period of the case. The dominant narrative repeatedly provided context to both analysts and employees, along with the business media and shareholders, on Nortel's corporate and business level strategies, competitive advantage, and the mechanisms that Nortel would undertake to sustain the business and eventually grow. Each of these two sources of CEO narratives, however, appeared to have different objectives. The CEO analyst calls

were significantly related from one to the next. This textual relationship within the narrative source suggested that the analyst calls served as an ongoing discourse between the CEO, CFO, and the analysts. CEOs drew upon their earlier narratives (of previous calls). If a discrepancy existed within the narrative, from one call to the next, analysts were quick to point it out during the question and answer period. Notably, CEO succession did not influence change in this flow of discourse. The narrative on the call was presented in a standard way: the CEO and CFO provided the results in context of the industry and past performance, discussed the current performance, and reinforced the firm's strategy or described how it may have changed. These calls provided a discourse of direction.

The CEO Emails, on the other hand, not only provided a discourse of direction, but also included specific requests by the CEO. As described in Appendix G on the analysis of the CEO Email macrostructure, the CEOs closed their emails with an "ask" to reinforce urgency and importance of the issue, emphasize relevant organizational values, and define expectations of employees.

Using the grounded codes, a list of CEO Email "asks" was established to identify these mechanisms as potentially self-reinforcing processes that could have contributed to the firm's organizational path and lock-in, as outlined in Table 32. The table indicates if the mechanism was an initial condition or if it was initiated by a particular CEO. The effects of the mechanism are evaluated in the same manner as the self-reinforcing processes from the previous chapter. Follows is a discussion that illustrates how the CEOs requested employees to carry out these mechanisms, through the CEO Emails.

(Note: For this analysis, the Binning emails were not included given that Nortel had decided to liquidate by the time Binning was appointed).

**Table 32: Mechanisms in CEO Emails**

| Mechanisms  | Introduced by   |              |                 |          |                      |
|---|---|--------------|-----------------|----------|----------------------|
|   |   | Coordinating | Complementarity | Learning | Adaptive Expectation |
| Focus on return to profitability by executing on the business plan, reduce expenses | Dunn, carried on by all CEOs (using different terminology)                    | X            |                 |          | X                    |
| Live the core values  | Initial condition, carried on by all CEOs with emphasis on integrity          | X            |                 | X        | X                    |
| Support the leaders, follow the plan, lead by example                               | Dunn, carried on by all CEOs (Owens more sympathetic)                         | X            |                 |          | X                    |
| Collaborate across business units and functions                                     | Dunn, carried on by all, as necessity to achieve synergy                      |              | X               | X        | X                    |
| Understand and communicate the Nortel strategy, market Nortel                       | Owens, as part of the recovery from financial restatements, carried on by all | X            |                 |          | X                    |
| Support and seek partnerships   | Dunn, carried on by all   | X            | X               |          | X                    |
| Let go of the past negative events  | Owens and Zafirovski, look ahead  | X            |                 |          | X                    |
| Listen to and serve the customer  | Dunn  | X            | X               | X        | X                    |
| Innovate in products and solutions  | Initial condition   |              | X               | X        | X                    |
| Follow me   | Dunn, Owens somewhat, Zafirovski, strong                                      |              |                 |          | X                    |
| Work quickly  | Zafirovski  | X            |                 |          | X                    |
| Recreate Nortel   | Dunn, carried on by all CEOs  | X            |                 | X        | X                    |

Dunn's requests were dominated by a desire to restore the firm's profitability.

With the significant decline in sales, restructuring the firm's business model and preventing any further depletion of the firm's cash reserves was critical.

Restoring the company's profitability will be a major milestone, and is going to be a major focus of our attention and energy during the next six months. There's likely to be more rough pavement on our journey to profitability, but, as you know, I'm passionately committed to reaching that goal. I hope you are too, because I need your total commitment. Nortel Networks needs your commitment. This endeavor must continue to be an inspiring mission for all of us. Nothing could be more urgent for the company and its employees than its return to profitability. (Dunn, CEO Email, October 7, 2002).

Returning to Pro Forma Profitability by the Second Quarter 2003 -- This remains job #1. (Dunn, CEO Email, January 1, 2003)

While stressing the importance of profitability, Dunn continued, however, to emphasize the importance of Nortel's traditional core values (an initial condition, consisting of customers, people, quality, innovation, accountability, and integrity) and the need to draw upon the firm's core assets.

Clearly, much of our success in 2003 can be credited to the superiority of our products and solutions. Now is the time to take advantage and push the value of those tangible and intellectual assets even further. Today many of our R&D activities are structured along specific business categories working in silos. We need those teams to work together cross-functionally to develop new innovative offerings that build on our collective talent and expertise and clearly excite the market. I challenge our R&D teams and leaders to make that happen now - beginning today. (Dunn, CEO Email, January 29, 2004)

At the same time, Dunn initiated a new theme of leadership and the need for employees to be leaders themselves, a theme that was carried out by the CEOs that followed. “It’s also about leaders knowing their accountabilities and then demonstrating leadership behaviors and living our core values” (Dunn, CEO Email, June 26, 2003).

When Owens took over from Dunn, he continued the narrative on the need to return to profitability, with an emphasis on protecting the firm’s cash reserves.

Cash is king, and we need to generate and preserve cash.  
(Owens, CEO Email, May 4, 2005)

Our \$50 million travel savings goal is a company-wide challenge. We must do this and we are interested in your ideas on additional actions we can take to cut travel and living costs. (Owens, CEO Email, January 10, 2005)

Our first priority is business performance. We are all very focused on delivering our financial commitments for the fourth quarter and the year. As we wind down the year, I am asking all of you to maintain that focus and intensity on delivering the business. (Owens, CEO Email, December 2, 2005)

Owens also requested employees to help restore confidence in the firm by understanding and communicating the Nortel strategy and brand.

Please take time to familiarize yourself with our messages and recognize the very important role all of you play in being brand ambassadors for Nortel. Playing that role is a tangible way all employees can contribute to the success of our company. (Owens, CEO Email, November 8, 2004)

Please get behind this and other strategic relationships that will help define the new Nortel going forward. (Owens, CEO Email, December 7, 2004)



It is vital that all employees know our strategy so that together we can align our teams, functions, resources and objectives to achieve our goals. In addition, each and every one of us ought to be able to articulate the Nortel strategy, whether internally or externally, to any of our stakeholders. Please invest the time to view the Nortel strategy presentation and align your priorities accordingly. Doing so is an investment in our future. (Owens, CEO Email, September 21, 2005)

Zafirovski had the most employee requests, simply because his tenure lasted the longest of all CEOs. In addition, however, his requests became more specific as time went on, with a sense of urgency towards action. When he first became CEO, he immediately launched a program to reduce costs (in line with the previous CEOs) and asked employees for their support.

Bill is leading the Business Transformation project, and along with six teams who are being assisted by McKinsey consulting, we now have 35 people working full-time on these initiatives. They are meeting weekly, and every third week the teams are reporting results to me and the cabinet leadership team to ensure measurable progress. Thanks in advance for your full support in making these teams successful. (Zafirovski, CEO Email, December 20, 2005)

You can do your part by helping Nortel get the word out on Business Made Simple by downloading email signature files, using the new presentation templates and by viewing our new television and print ads we are bringing to market ([click here](#) for more information and a message from our CMO). As well, please start thinking and acting on the specific ideas you have to help our business be more simple, responsive and proactive. (Zafirovski, CEO Email, February 2, 2006)

Each of the BT teams has dedicated full-time and part-time members who provide assistance from their areas of expertise. If any of these teams contact you for assistance or information, please give your full attention and support.... There's a lot more work required than what these teams will be doing. You can begin having an immediate effect by doing your part to simplify processes in your own areas. Set aside turf issues, organization and office politics as we foster a performance-oriented culture. (Zafirovski, CEO Email, March 1, 2006)

This program eventually included Six Sigma methods, which Zafirovski encouraged employees to support. The emphasis on reducing costs was ongoing.

I can't underscore enough that the success of Lean Six Sigma is foundational to rebuilding Nortel as a great company. It will require commitment and sign-up by every single employee, and each of you has a very important role to play in its success. I am counting on you to drive it with forceful optimism and rigor. (Zafirovski, CEO Email, May 11, 2006)

Underlying all these actions is the need for every employee to stay focused on delivering superior execution and performance. We must execute our road map, which includes the 6-point plan, Business Transformation, Lean Six Sigma and the many contributions of our employee teams through our Own It! initiative. (Zafirovski, CEO Email, June 27, 2006)

As time went on, Zafirovski became clearer in terms of what he wanted from employees:

As I've said, our journey will take two to three years and it's not for the faint of heart. (Zafirovski, CEO Email, May 9, 2006)

Take individual responsibility to go above and beyond the expected to positively influence revenues and margin generation, reduce unnecessary costs, improve customer satisfaction, improve work environment, and embrace new processes like Own It!, Lean Six Sigma and the revamped time-to-market. (Zafirovski, CEO Email, June 9, 2006)

We have the right plan, and we have the right people to execute big, big things. Now, it's up to every one of us to execute on that plan. And this means YOU -- not just your leaders. (Zafirovski, CEO Email, September 20, 2006)

As with the two previous CEOs, Zafirovski continued to emphasize the need to listen to and serve customers.

There is nothing more important than an absolute and unwavering focus on the customer. One of the ways I try to remain true to that principle is by spending at least 50% of my time focused externally, including talking to the people who have put their trust in us: the companies whose businesses depend on our products. I don't think that there's anything more important to the success of our business than listening to the voice of the customer. And I encourage you to think the same way...

We listen to our customers and commit to providing them with powerful tools to help them reach their goals. I am - and we all are - on this mission. This promise is a huge responsibility, and we must all shoulder our part of the load if we are to be successful.

Every action we take in our daily jobs and every interaction with our customers needs to be focused on carefully listening to their voice. (Zafirovski, CEO Email, October 25, 2006)

As Zafirovski's tenure moved into 2007, the focus on cost reduction continued with greater urgency, an urgency which never subsided.

We must intensify our focus on the company's profitability. And that means accelerating our business transformation programs. (Zafirovski, CEO Email, November 7, 2006)

We need to keep the pressure on our Business Transformation efforts and reset our cost structure to become more competitive. We need to keep simplifying our processes, both for our own efficiency and to deliver more seamlessly for our customers. And we need to win - new clients, new battles. Now! Not tomorrow. The clock is ticking. We have strong momentum, and we must not blink, even for a minute. (Zafirovski, CEO Email, January 29, 2007)

And there is no mistake that 2007 must be a year of accelerated progress. We need to make - and we will make - the important steps forward necessary to build a Nortel that is strong, profitable and among the great places to work. (Zafirovski, CEO Email, March 16, 2007)

But let's make no mistake, the pressure is on. If we're going to deliver on the year, and on what the Street, our shareholders and all of you expect, we need to accelerate the pace of our execution. (Zafirovski, CEO Email, August 6, 2007)

But let's make no mistake, the pressure is on. If we're going to deliver on the year, and on what the Street, our shareholders and all of you expect, we need to accelerate the pace of our execution. ...I need all of your resolve to identify and drive out all unnecessary costs. (Zafirovski, CEO Email, August 6, 2007)

From sales to product engineering and operations to R&D, everything we do must start with this in mind. And, we need to buckle down and balance our expenses in line with our revenues. Clear guidelines have been communicated around managing our expenses and I expect us to all work together to follow them and achieve the savings I know we can. (Zafirovski, CEO Email, August 1, 2008)

When the class action suit was settled, however, and significantly impacted the firm's cash reserves, Zafirovski encouraged employees to focus on the future and not on the cost of the settlement.

It's important to recognize that the settlement is in relation to activities that are a part of our past, and a big part of moving forward is in closing this unfortunate chapter in our otherwise proud and distinguished history. (Zafirovski, CEO Email, February 8, 2006)

While Zafirovski was pushing employees to quickly reduce costs, he also emphasized the need to understand and implement the business strategy.

I encourage you to listen to the [analyst] presentations to learn more about our strategy and the future of Nortel. (Zafirovski, CEO Email, November 17, 2006)

Let's use this success to fuel the adoption of this important technology with other customers, and let's keep "changing the game" to benefit our customers and position Nortel to win. (Zafirovski, CEO Email, January 15, 2007)

We must also not lose sight of the fact that long-term shareholder value comes from driving customer value - and that is what we are all focused on, every day. (Zafirovski, CEO Email, May 23, 2007)

I know that you share my enthusiasm for the future of this company and will continue to work with me to restore Nortel's rightful place as a technology and thought leader. (Zafirovski, CEO Email, May 23, 2007)

But Zafirovski emphasized the need to implement innovation in a cost effective manner.

We have to be completely on our game and offer customers advantage on quality, performance, delivery, innovation, and competitive cost structure. (Zafirovski, CEO Email, January 29, 2007)

We need to stay focused on our customers, on executing our Business Transformation plan, on driving new revenues in growth areas, and on aligning costs with market benchmarks to ensure our ability to compete and to invest R&D dollars in areas with the maximum return potential. (Zafirovski, CEO Email, March 16, 2007)

Additionally, the leadership role of the employee in the turnaround of the firm was emphasized.

So let me be clear. My executive team and I are not the ones who will ensure a bright future for Nortel alone. Each and every one of you has a part to play. Each and every one of you is part of team Nortel. We need you in the game. 100%. Without reservation. The sum of all of your efforts, if channeled with the right attitude in the right places, can make an incredibly powerful difference. (Zafirovski, CEO Email, May 4, 2007)

You've often heard me say that it's important to focus on the "who" before the "what." This remains a foundational pillar of my management philosophy. This job we have undertaken, this historic effort to re-create Nortel, is one that can only be powered by you. (Zafirovski, CEO Email, July 10, 2007)

Here's what I need from you. Every day, I need you to ask yourself: "Did I do everything within my capabilities today to drive this company forward? Did I exceed my own expectations? Did I help bring in orders? Did I fix something that was broken? Did I remove obstacles for my team so they can be their best?" More than anything, every day I need you to ask yourself: "Did I have an impact?" (Zafirovski, CEO Email, June 16, 2008)

Even while Zafirovski was downsizing the employee base and moving the firm into bankruptcy protection, he continued to seek employee support (as the other CEOs did in the past).

I need your full commitment. It may sound odd since the above decisions will impact some of you. In return, you have my absolute commitment that I will continue to always put Nortel first in all my decision making, continue to look for expanded opportunities to promote our best performers, and do my very best to ensure timely communications and maximum redeployment for affected employees. (Zafirovski, CEO Email, September 17, 2008)

I ask you to maintain your focus on our objective. Work to drive down costs and drive up sales. Understand the realities of a tough marketplace, but use them to seize share and have faith that we will succeed in the end. (Zafirovski, CEO Email, November 18, 2008)

Most importantly, during this restructuring process, we must reach out to customers and explain what is taking place, and why. I want to personally assure them that Nortel is here to serve them and is dedicated to our relationship with them. Our sales teams are on the front lines, but in this environment, we must all be ambassadors for Nortel. (Zafirovski, CEO Email, January 14, 2009)

As I told you on Wednesday, our focus now must be on preserving the company. That is going to be the only way forward. To do that, I need you to focus on our customers and help each other do the work that needs to be done. (Zafirovski, CEO Email, January 16, 2009)

We must not and cannot let up on serving our customers through the integration process. The more seamless our transition to our acquirers, the more successful it will be for everyone. I ask that you do everything you can in the weeks and months ahead to ensure Nortel's legacy is a robust and vibrant one (Zafirovski, CEO Email, August 10, 2009)

On his last day at Nortel, Zafirovski once again asked employees to support the firm's leaders, as he (and the CEOs before him) had consistently requested.

These are very important and deserved moves, and my last request to you is that you support them with your best efforts and dedication. I know you will. (Zafirovski, CEO Email, August 10, 2009)

The effects of the mechanisms employed by the CEOs to encourage employee action all included adaptive expectation effects (see Table 32). The illustrative story board presented above demonstrates how the CEOs consistently asked employees cut costs, learn the strategy, innovate, lead, follow, etc... Given the strategic role of the CEO and the authoritative nature of their narratives, a request within a CEO Email, directed to an employee, likely carried significant influence within the firm. In some instances, the CEOs specified that the adoption of certain behaviours would result in recognition, career development, and promotion.

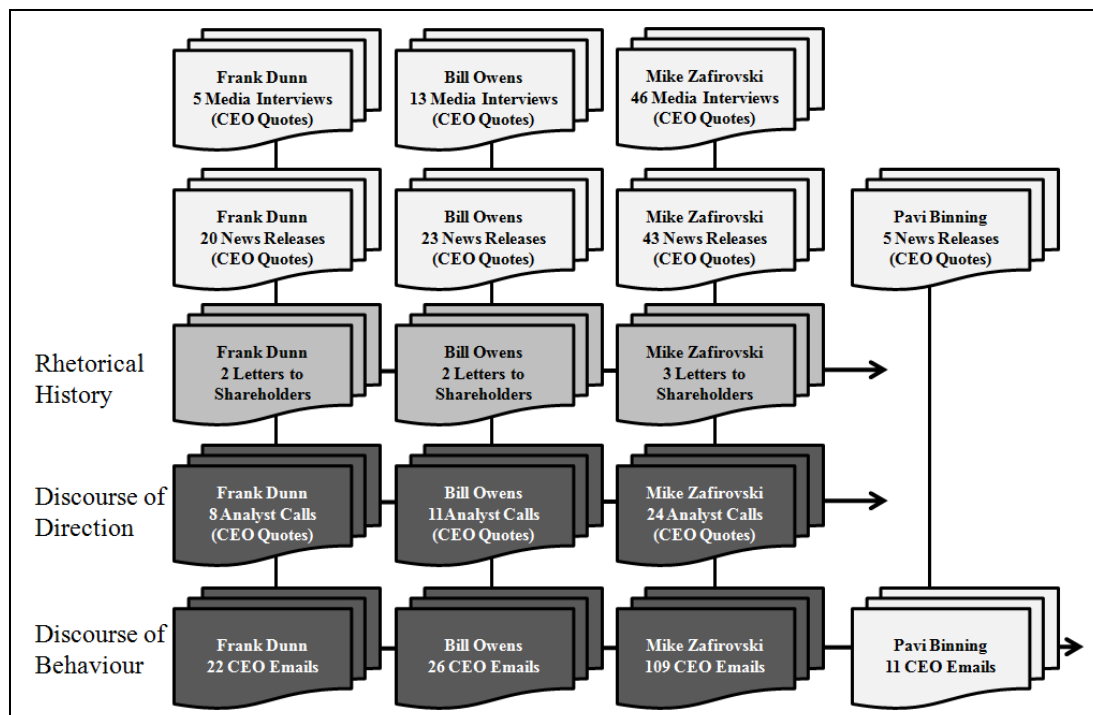
As discussed previously in the section on structural textuality, and as outlined in Appendix G, the CEO Emails were found to be an important tool in the process of strategizing. The textual analysis suggested that the CEOs used the emails to define, develop, and confirm organizational norms, values, and beliefs; to shape employee behaviour; and to reconstruct events to legitimize executive decisions and actions. With its monological tone, the CEO Email reaffirmed the CEO's role as the master architect of the firm's strategy. The CEO Email emphasized present-day activity and the need for immediate action.

When integrating the textual analysis of the CEO emails (from Appendix G) with the narrative analysis discussed here (on discursive themes), it suggests that the CEO Email, as a specific source of narrative, played a central role in not only representing the firm's organizational path but also influencing the path.



## 6.4 Summary

Findings from the narrative analysis suggest that the CEO narratives form a narrative infrastructure but that the strength of the infrastructure varies between and within sources of narratives (see Figure 24). Both the CEO Emails and the analyst calls have a strong textual relationship within their narrative types. The CEO Emails establish an ongoing discourse of behaviour between the CEO and the employees, while the analyst calls establish an ongoing discourse of direction between the CEO and the analysts (and indirectly, the investment community and the business media). The Letters to Shareholders, although published less frequently, were also connected through textual relationships; the Letter used rhetorical history to tell the Nortel story and position the firm for the future. The CEO quotes embedded within the news releases and media interviews were loosely embedded in the narrative infrastructure, lacking structural textuality with the other sources of narratives.

**Figure 24: Narrative Infrastructure at Nortel**

Note: dark shading represents stronger intertextual relationships

The discursive themes were closely connected through the sources of narrative, creating a dominant narrative that changed little throughout the period of the case. As discussed, this narrative included themes pertaining to corporate and business level strategies, the external environment (macro level and industry), the firm's competitive advantages, and the mandate to restructure the business model and reduce costs, while protecting core assets such as innovation and R&D. The mechanisms found in the CEO Email narratives, in particular, emphasized the need for employees to focus on reducing costs while satisfying customer needs through innovative solutions.

The discursive themes and mechanisms did not change over time; rather, they became deeply embedded into the CEO narratives, especially the analyst call and the CEO Email narratives. The discursive themes and mechanisms that existed prior to Dunn

remained embedded (and were reinforced) in the narratives, as did those that were introduced by each subsequent CEO. Although the CEOs had an opportunity to change the dominant narrative upon their appointment, they did not. Instead, each of them continued to emphasize the corporate and business level strategies put in place by their predecessor, and reinforced the necessity to cut costs, achieve financial objectives, and focus on the customer. All CEOs perpetuated the narrative of Nortel's history of innovation and technology leadership. *They told the same story.*

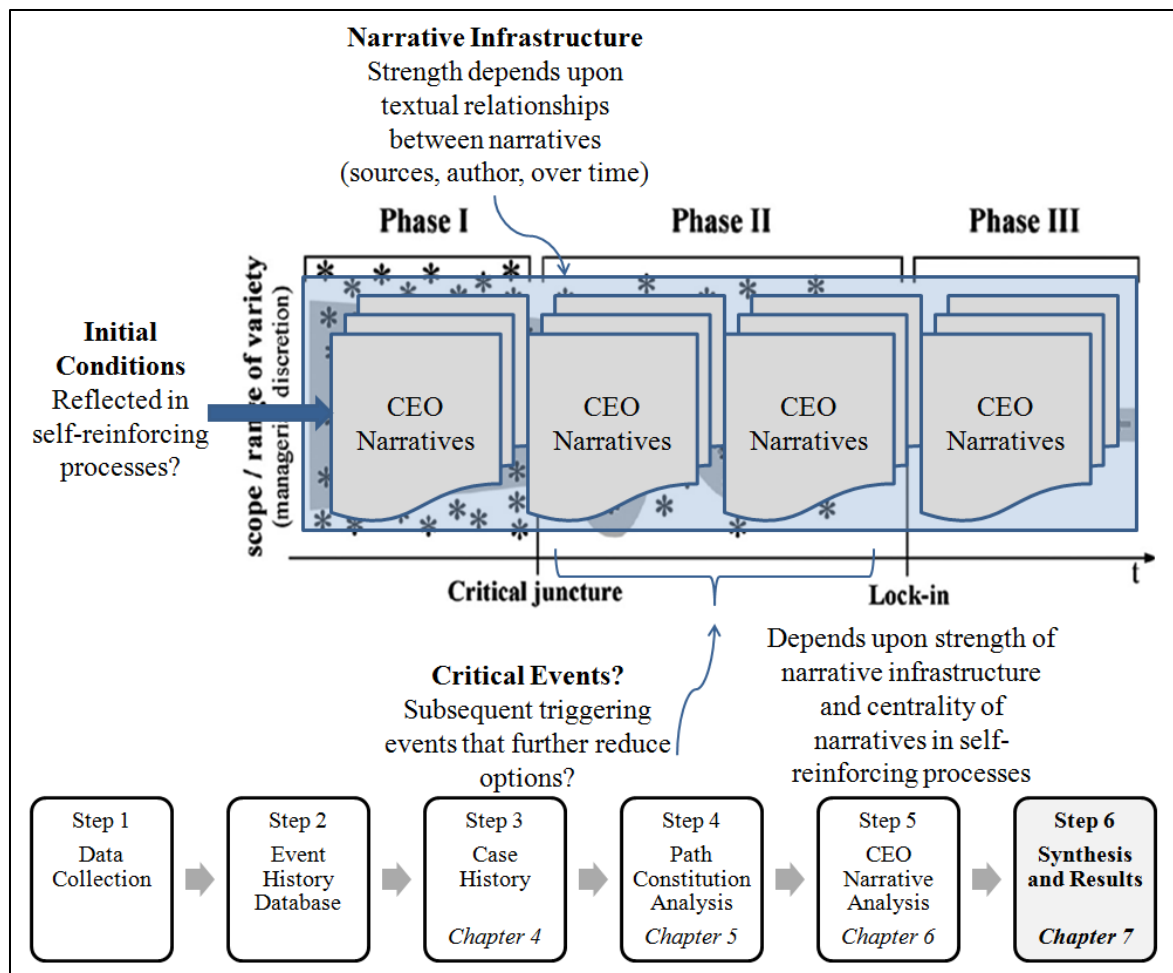
In the following Chapter, the way in which this narrative infrastructure influenced organizational path dependence will be explored.

## **CHAPTER 7. CEO Narratives and Organizational Path Dependence**

### **7.1 Introduction**

In Chapter 5, the constitution of Nortel's organizational path was identified, along with the self-reinforcing processes that led to lock-in. Chapter 6 discussed the characteristics of the CEO narratives, established the identity of the narrative infrastructure, and identified the discursive themes and mechanisms that persisted within the infrastructure over time and between sources of narratives. In this chapter, the results of the path constitution analysis and narrative analysis are joined together to understand the influence of the CEO narratives in Nortel's organizational path (see Figure 25, next page). The chapter also discusses findings on the role of self-reinforcing processes, initial conditions and critical events in the organizational path dependence process, and proposes an elaborated model of the constitution of an organizational path. The second half of the chapter further develops the findings from the research and theorizes on the influence of narratives in CEO strategizing and strategic change, and closes with a discussion on the role of rhetorical history in organizational path dependence.

**Figure 25: Conceptual Framework (Step 6)**



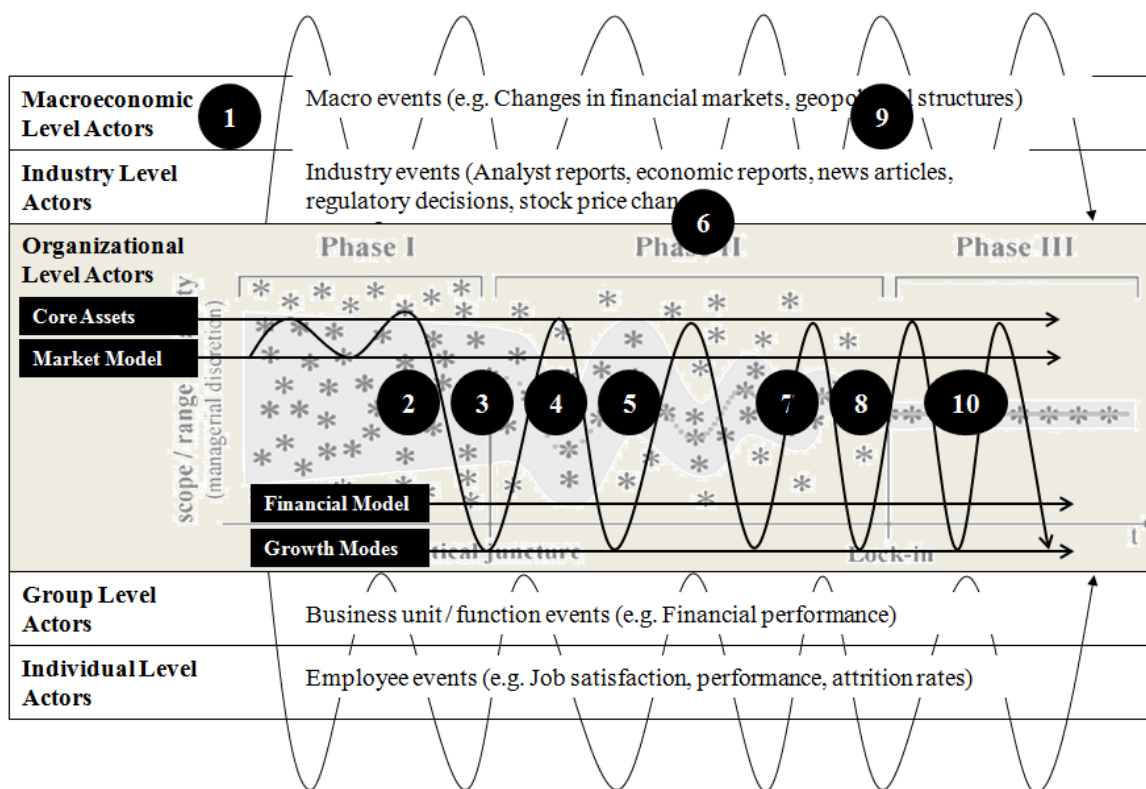
## 7.2 Summary of Findings from Path Constitution Analysis and Narrative Analysis

The Path Constitution Analysis presented in Chapter 5 (and shown here again in Figure 26) demonstrated that Nortel established an organizational path based on four self-reinforcing processes, two of which were developed prior to Dunn's appointment (preservation of core innovation assets and the market model) and two of which were initiated by Dunn and cultivated by the subsequent CEOs (the financial model and partnership growth mode). In combination with critical events, the firm's strategic

options became constrained. Even though the CEOs, at times, had opportunities to move off path (e.g. CEO succession, executive leadership additions), they either were unaware of the opportunity or unable to affect change. The large expense of the class action lawsuit, along with the collapse of the global economy, were significant critical junctures that dramatically reduced options, with the latter solidifying the firm’s path and eventual lock-in.

**Figure 26: Constitution of Nortel's Organizational Path**

Overlaid on Sydow et al.’s (2009: 692) Constitution of an Organizational Path

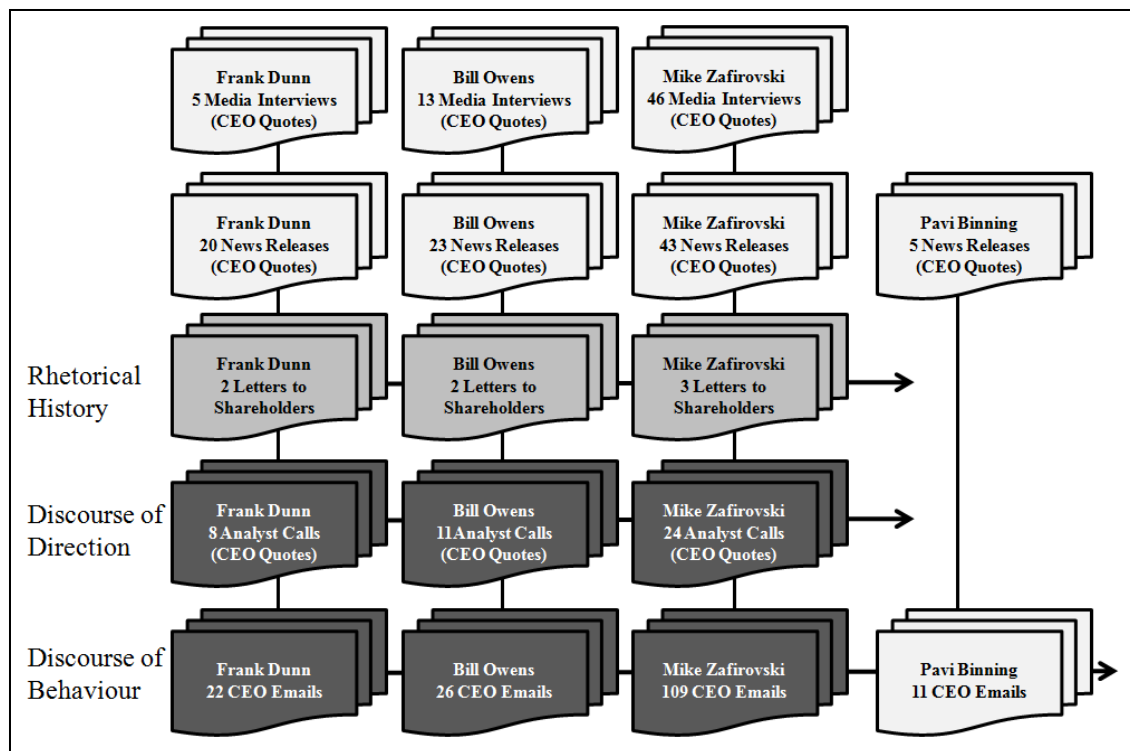


The narrative analysis in Chapter 6 found that the CEO narratives, collectively, created a narrative infrastructure, through both their structural and thematic relationships. The strength of this infrastructure (reproduced here in Figure 27), however, was

inconsistent between sources of narratives. Two types of texts were found to be dominant – the analyst calls and the CEO Emails – with the Letters to Shareholders supplementing the dominant themes, although less frequently. The CEO quotes in the news releases and media interviews were found to be secondary in nature; although they were textually connected to the other sources, their influence in creating the infrastructure was minimal.

The three primary sources of CEO narratives each had different objectives. The Letters to Shareholders told the story of Nortel through *rhetorical history*, positioning the firm and its strategy in the context of the industry, promoting the company's competitive advantages, and identifying the industry malaise as reasons for constrained growth. The Analyst Call narratives established a *discourse of direction* by identifying the firm's performance within the context of the firm's strategy and the industry dynamics, confirming or modifying the previously articulated strategy, and establishing expectations of future performance (but with minimal discussion on how). The CEO Emails established a *discourse of behaviour*, reiterating the strategy and strategic decisions made previously, and identifying the types of behaviours employees were expected to display to help the firm achieve the strategy.

**Figure 27: Narrative Infrastructure at Nortel**



### 7.3 Self-Reinforcing Processes, Dominant Themes and CEO Mechanisms

Through this narrative infrastructure a dominant theme emerged, described in terms of a strategic direction, as well as explicit mechanisms on how the strategy was to be realized. By integrating the themes discovered in the narrative analysis with the earlier path constitution analysis, a relationship is evident (see Table 33). The dominant theme expressed in the CEO narratives corresponds to the self-reinforcing processes identified through the Path Constitution Analysis. In addition, the mechanisms identified within the CEO Emails also correspond to the processes. This relationship reflects the degree in which the trajectory of the firm was not only represented in both material documents and CEO narratives, but also enacted through the mechanisms outlined in the CEO Emails.



**Table 33: The Embeddedness of CEO Narratives in Nortel's Organizational Path**

| <b>Self-reinforcing Processes</b><br>(Identified through Path Constitution Analysis, using event data; Chapter 5) |   | <b>Dominant CEO Narrative</b><br>(Identified through analysis of all CEO narratives; Chapter 6)   | <b>Mechanisms</b><br>(Identified in CEO Emails; Chapter 6)   |
|---|---|---|--|
| <b>Cultivation of core assets</b>   | Innovation, R&D and technology leadership.  | Through rhetorical history, promote Nortel's innovation and technology leadership as the firm's competitive advantage, which must be recovered.                 | <ul style="list-style-type: none"> <li>• Live the core values.</li> <li>• Recreate Nortel.</li> <li>• Innovate in products and solutions.</li> </ul>   |
| <b>Market model</b>   | Broad market portfolio, serving carriers and enterprises, world-wide.   | Emphasis on continuing to serve customers around the world, in carrier and enterprise, with an emphasis on wireless and solutions (instead of products).        | <ul style="list-style-type: none"> <li>• Collaborate across business units and functions.</li> <li>• Understand and communicate the Nortel strategy, market Nortel.</li> <li>• Listen to and serve the customer.</li> <li>• Innovate in products and solutions.</li> </ul> |
| <b>Financial model</b>  | Improve operating margin through reduced sales, general and administrative costs – downsizing, offshoring, outsourcing, focused R&D, six sigma. | New cost model given industry pressures, scrutinize spending and investment, everyone is responsible to manage costs. Sometimes drastic measures must be taken. | <ul style="list-style-type: none"> <li>• Focus on returning to profitability by executing on the business plan, reduce expenses.</li> </ul>  |
| <b>Growth modes</b>   | Organic growth through partnerships.  | Provide solutions through partnerships (not acquisitions).  | <ul style="list-style-type: none"> <li>• Support and seek partnerships.</li> </ul>   |

#### 7.4 The Influence of Material Filings

The influence of CEO narratives in organizational path dependence is complex. As Table 33 suggests, narratives produced by the organization interact to produce an organizational path through a process that can be described by first categorizing the sources of narratives into material and non-material. As a public corporation, Nortel was

required by securities regulations to produce material documentation, such as financial reports, annual reports, news releases, announcements of leadership changes, and regulatory issues. Securities rules and regulations indicated what had to be reported, by when and to whom. As the top authority within the firm, the CEO was often involved in the production of these narratives, which were shared through the news releases, analyst calls, and annual reports. These material events were likely well-orchestrated, given the legal authority of the CEO. When reporting to the financial markets, firms do not have significant leeway; they must be precise in their reporting of financials. Additionally, public firms must provide strategic direction that will be familiar to the market in order to gain legitimacy (Martens et al., 2007). Material filings, therefore, had to include an accurate representation of past events and a legitimate representation of the future.

Nortel's material filings (i.e. 8-Ks, 10-Qs and 10-Ks) clearly identified the firm's corporate and business level strategies (i.e. the market model), competitive advantage (i.e. core assets), financial performance and objectives (i.e. the financial model) and growth strategies; in other words, these filings contained specific narrative on the rent-seeking self-reinforcing processes that the firm chose to pursue (as described in Chapter 6).

Nortel's analyst calls were textually linked to other material filings. As a material event, the CEO's narrative was confined to what had been produced elsewhere in other material documents. The reporting of financials during the call had to reflect the financial reports. The strategies, as well, had to reflect the financial reports, along with the strategies that had been presented in the previous analyst calls and reports. Regardless of

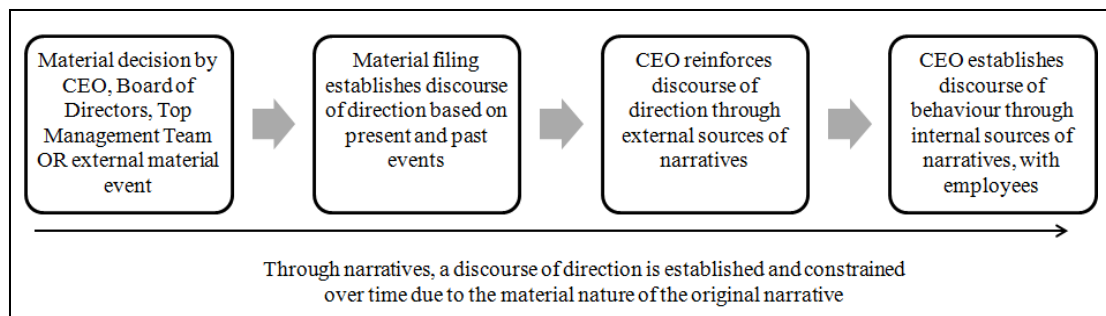
which CEO was narrating the call, the narrative itself was closely tied to the past and other material filings.

The Letters to Shareholders had more leeway in the way in which the strategy and performance story could be told, but the strategy itself was once again confined to what had already been communicated through the material filings (including the analyst calls).

The CEO Email narratives also had leeway, but were confined by the framework established through the material filings and reinforced through the analyst calls. As presented in Appendix G, CEOs used rhetorical history to shape organizational identity, legitimize decisions and actions, and decouple the identity from undesirable characteristics. At the same time, the CEOs closed the email with an “ask” as a means to reinforce the urgency and importance of an issue, emphasize relevant organizational values, and define behaviour expectations of employees.

This analysis suggests that the chain of CEO narratives is initiated within the domain of material documents, as illustrated in Figure 28. Strategy narratives are initiated (for public firms) within material documents. The publication of these documents leads to a chain of narratives, most of which are authored by the CEO. External sources of CEO narrative reinforce the original narrative, while internal sources of CEO narrative not only reinforce the narrative but also provide specificity of the mechanisms for achieving the strategy. The material nature of the initial narrative constrains future narrative, reinforcing what was previously said and making it difficult to move off path.

**Figure 28: The Constraining Nature of Material Sources of Narratives**



### 7.5 The influence of CEO Narratives in Organizational Path Dependence

In the case of Nortel, the firm's strategy was repeatedly expressed through material documents such as financial reports, Letters to Shareholders, and news releases. Even in these material documents, Nortel's historical competitive advantage of innovation and technology leadership was articulated. In parallel was the evident pressure to reduce costs, restructure the business model, and grow the business.

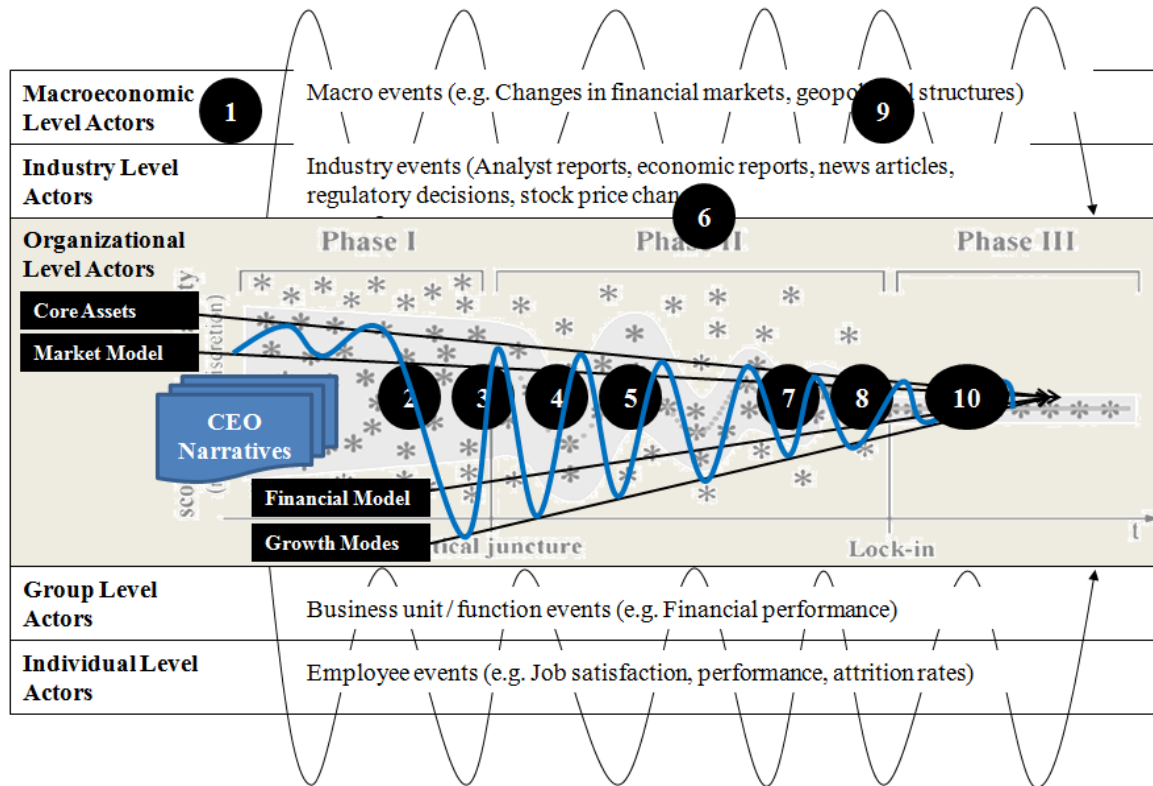
The content of the CEO analyst calls perpetuated this narrative, providing some insight into growth modes (partnerships, not acquisitions) and means to reduce costs (six sigma, reorganization, reduction in R&D, downsizing and offshoring). Due to the textual relationships from one analyst call to the other, the calls further embedded the narrative into the narrative infrastructure. Even with the change of CEO, the narrative could not be easily changed, as CEOs were constrained by what was said in the past. When Zafirovski took over from Owens, for example, he could not change the narrative on firm performance as he was constrained by how performance was narrated previously. Additionally, although he had leeway in modifying the narrative of the future, Zafirovski was still restricted by the actual resources and capabilities of the firm. Too drastic a

change in strategy would have been questioned by analysts and Zafirovski may have lost the legitimacy that they had afforded him (based on his reputation).

The CEO Email narratives reinforced the firm's strategies, competitive advantage, and financial imperatives, while at the same time, told employees what to do. CEOs specified the desired employee behaviour, emphasizing their authority by requesting employees to support their leaders, follow the plan, work quickly, and lead by example.

As a result, not only did the CEO narratives reinforce the firm's strategic path, the force of the narrative infrastructure itself acted as a self-reinforcing process that was initially rent-seeking but eventually contributed towards lock-in. Figure 29 shows how the CEO narratives pulled the four self-reinforcing processes together, like a needle and thread, further embedding them into the firms operating environment. Lock-in occurred due to the firm's inability to deliver on their corporate and business level strategies within the given financial constraints. As the dominant narrative suggests, the CEOs repeatedly emphasized the firm's need to satisfy the broad customer base through innovative solutions and technology leadership, but at a lower cost, more quickly, with less R&D investment, and with less people.

**Figure 29: The Influence of CEO Narratives on Organizational Path Dependence**  
Overlaid on Sydow et al.'s (2009: 692) Constitution of an Organizational Path



## 7.6 CEO Narratives as a Self-Reinforcing Process

The CEO narratives, expressed as a narrative infrastructure, behave as a self-reinforcing process in the organizational path dependence process due to the authoritative nature of the CEO role. As the firm's grand strategy architect (Hutzschenreuter et al., 2012), the CEO and, by extension, the CEO's narratives, are influential. For material documents, the CEO's responsibility is legal in nature, whereby the CEO is held liable for the financial reports. Within the organization, the CEO has relational-legal authority over the employees (Fanelli et al., 2009). The Nortel CEOs expressed this authority in their emails by correlating behaviours with outcomes (e.g. career development, bonuses).

The effects of the narrative infrastructure – and the narratives themselves – as a self-reinforcing process, fall into each of the four categories defined by theory: coordination, complementarity, learning and adaptive expectation. First, the narratives have a coordinating effect. By telling a consistent story about the strategy of the organization, the structure, the priorities, and the means in which to achieve the strategy, all stakeholders are drawn towards that goal. For the financial markets, the benefit is in understanding where and when to invest, and how to evaluate opportunities. For internal stakeholders, the coordinating effects are directly related to the work. Knowing the firm's strategic direction, organizational structure, priorities, systems, and processes encourages cross-functional cooperation and increases effectiveness.

Second, the narratives have a complementarity effect. CEO narratives that cross organizational boundaries connect actors through a common narrative. This encourages the interconnectivity of actors and activities. For example, if industry players understand a firm's capabilities, it may lead to collaborations and partnerships.

Third, the narratives have a learning effect. As stakeholders learn the strategy, they become proficient at both telling the strategy story and implementing it. The more adept they become at both, the more the narrative will persist. This applies not only to employees, but also to external stakeholders, who may (over time) learn to appreciate a firm's core competencies and competitive advantage. Consequently, this outcome may lead to the development of corporate reputation, which in itself can be a resource (Mahon, 2002).

Fourth, the narratives have an adaptive expectation effect, specifically as it relates to the internal sources of CEO narratives. When the CEO, through narrative, explicitly

requests employees to behave in a particular way, employees are likely to feel pressured to deliver given the power of the CEO over the employee's work environment.

Additionally, employees may be tempted to draw upon CEO narratives when trying to influence colleagues to support them. Adaptive expectation can also apply to external sources of narratives. Persistent CEO narratives that contribute towards developing a corporate identity and reputation may influence others, less familiar with the narrative, to adopt the same point of view (Mahon, 2002).

### **7.7 Initial Conditions and Rhetorical History**

The notion of corporate reputation and identity leads the discussion to initial conditions. In the case of Nortel, the CEO narratives drew upon Nortel's history to articulate its competitive advantage of innovation and technology leadership; an advantage that Nortel no longer had. The CEOs argued that, although the firm was underperforming, these core assets could still provide the type of advantage that had historically contributed to Nortel's leadership; employees simply had to "recover" it. Although the cultivation of these core assets was a self-reinforcing process used by the CEOs within their narratives, the notion that innovation was Nortel's competitive advantage was already a widespread belief in the industry – that is, the firm's corporate reputation was an initial condition. This raises the question, therefore, as to the influence of initial conditions at the initiation of an organizational path and, consequently, downstream.

At Nortel, for example, the firm's only apparent competitive advantage was its innovative capability and synergies realized by its diversified but inter-related businesses.



As a common belief, both within and external to the firm, what choice did the CEOs have when trying to promote Nortel's strengths? Although it may have been prudent to change the firm's strategy, through defamiliarization in the narrative (Barry & Elmes, 1997), Nortel's legitimacy may have been questioned if the narrative departed (too quickly) from the firm's historical advantages.

Changing the firm's competitive positioning may have raised legitimacy issues within the firm as well. Innovation was part of Nortel's culture and engrained into almost every aspect of the firm's operations. If the innovation capability at Nortel was at least ignored or, at worst, deemed no longer relevant due to the commoditization of some products, the firm's capability to operate may have been jeopardized; employees may have resisted due to the longstanding culture of innovation.

Research suggests that there may be a means for a firm to disentangle from the past, in order to move off path (or avoid creating an organizational path). Making claims, through CEO narratives, with stakeholders (internal and external) through the use of rhetorical history can be considered a strategic resource that can lead to competitive advantage (Suddaby et al., 2010). Rhetorical history is defined by Suddaby et al. (2010) as the "strategic use of the past as a persuasive strategy to manage key stakeholders of the firm" (p. 157). The authors argue that history within organizations can be used as a resource, shaped in ways that can "confer identity, motivate commitment, and frame action amongst organizational stakeholders" (Suddaby et al., 2010: 160).

In the CEOs narrative, they created a rhetorical history that reminded stakeholders of what the organization once was and what it could, once again, become. Although it was clear that the company's financial model needed to change, given the impact of the

dot.com bust, it was not clear what kind of company needed to emerge. Instead of redefining Nortel's strategy (its products and markets), the CEOs retained Nortel's historical business strategy (global reach, products in both carrier and enterprise markets) and drew on past success to emphasize capabilities and core competencies.

Golant and Sillince (2007) argue that when an organization remains faithful to its accepted archetype, it obtains legitimacy from its stakeholders. Within their narratives, the CEOs drew upon Nortel's past archetype, which external stakeholders, such as the media and analysts, had grown to not only accept but also admire. Nortel was known in the industry for critical innovations and the patents held by its engineers were a testament to its ability to innovate. By using rhetorical history whilst it was trying to recover, the CEOs were able to garner support from financial markets and its own employees. Although the firm was competing with no apparent competitive advantage, in fact at a disadvantage due to financial restatements and lack of cash and capital, analysts repeatedly graded Nortel stock as a buy or hold.

By drawing on the past, through the use of rhetorical history, the CEOs were also able to reinforce stakeholders' social judgments of Nortel's reputation. As Mishina, Block, and Mannor (2011) argue, social judgements are path-dependent. When observers have a particular understanding of an organization's reputation, they interpret cues to confirm their understanding. For example, in the case of Nortel, the firm had a reputation as a technology leader and innovator. By continuing to claim this identity, even while it was underperforming, the CEOs were able to draw upon the firm's reputation. When positive events concerning innovation or R&D occurred, it cued observers to reinforce

their previously held beliefs. This would explain why the market waited patiently (over 6 years) for the firm to recover.

Arguably, Nortel could have used rhetorical history to, over time, change the strategy narrative. As it became increasingly apparent that the cost structure was not sustainable in the given business model, it may have been wise to either merge with another firm or divest major portions of the businesses. Nortel did neither. Instead, the CEOs continued to define Nortel as a global technology leader, serving both carrier and enterprise businesses with a broad portfolio of products and solutions. Nortel never wavered from its original rhetorical account, which contributed towards lock-in.

## **7.8 Critical Events**

CEO narratives have been identified as a self-reinforcing process in organizational path dependence, in addition to the four processes identified through the path constitution analysis. The path constitution analysis also suggests that organizational path dependence may not occur in three easily identifiable stages, as theory suggests. The organizational path may, in fact, be more susceptible to events that occur not only at the initial critical juncture (when the path is initiated), but also throughout the organizational path; internal or external events may push the firm towards lock-in or provide an opportunity to move off path.

At Nortel, four events dramatically reduced Nortel's strategic options: the dot.com bust that cut the firm's revenues in half; the financial restatement problems and the firing of Frank Dunn; the class action settlement (\$500M cash and 14.5% equity

payout); and, the global economic downturn. In each of these cases, Nortel's strategic choices were reduced.

Conversely, Nortel also had opportunities to move off path. For example, each of the CEOs could have changed the firm's strategy when they began their tenure. As Hutzschenreuter et al. (2012) suggest, CEO succession after poor performance provides newly appointed CEOs with legitimacy to change the strategy. Additionally, the hiring of Daichendt was acknowledged both within the firm (by Owens himself) and outside of the firm (by the analysts and the media) as an opportunity for strategic change. These examples suggest that actors may, in fact, know that their options are being reduced and are simply incapable of changing the path. Owens tried but admittedly failed to change the strategy with the hiring and departure of Daichendt. Zafirovski tried to implement a new strategy upon his own appointment but was constrained by the firm's resources and capabilities. Additionally, although Zafirovski dismissed the lawsuit settlement as an event related to historical issues, it can be assumed that he understood the financial implications of the settlement on the firm's cash reserves and equity position.

Actors, therefore, may know very well when an event has reduced their options; they simply might not publicly admit it. CEOs may not acknowledge a critical event, even when they are fully aware of its implications.

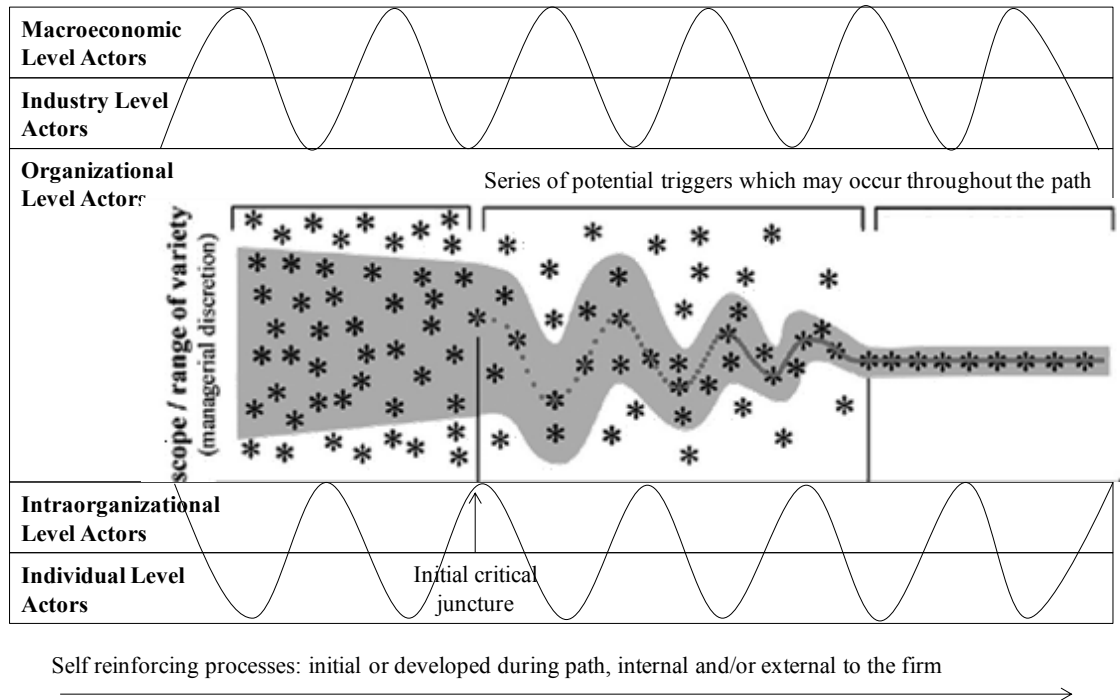
## **7.9 Actors and Path Constitution Analysis**

As the previous discussion suggests, and in line with theory, organizational path dependence has, at its core, actors. The actors exist not only within the focal level of analysis, but also in each of the levels representing the upper and lower boundaries of the

environment; they may be individuals, groups, or organizations. Regardless, they are actors thinking and acting – through text and talk. Although Path Constitution Analysis recognizes the role of actors, Sydow et al. (2012) separate this constitutive feature from level interrelatedness and suggest that actors may not “necessarily refer reflexively to contextual or situational features in their strategic behaviour” (p. 6).

The results of this research suggest that organizational path dependence is a multilevel, actor-centred process where actors are structurally embedded within multiple levels, by the very nature of the strategy process. Strategies cannot be developed in a vacuum; firm’s must position themselves within the industry and do so in light of their resources and capabilities. By forming a strategy, the firm has implicitly interacted recursively and reflexively with multiple levels both within and external to the firm. Additionally, as the discussion on corporate reputation suggests, simply through the development of an organizational identity, the constitution of a firm’s path is affected; self-reinforcing processes and critical events can occur both within and external to the firm. To recognize the multilevel, actor-centered process, an elaborated model of the constitution of an organizational path is therefore proposed in Figure 30. This model is discussed in more detail in the following chapter, as a significant academic contribution.

**Figure 30: Elaborated Model of the Constitution of an Organizational Path**  
 Overlaid on Sydow et al.'s (2009: 692) Constitution of an Organizational Path



This elaborated model highlights the multilevel nature of organizational path dependence and the recursive and reflexive interaction between actors that reside within the levels. As the Nortel case suggests, organizational path dependence occurs at the focal level of analysis (in this case, the firm level, with the CEO as the central actor), but even before the path is initiated, actors influence the range of strategic options. Self-reinforcing processes, developed in the past, may present themselves as initial conditions. Resources and capabilities, both tangible and intangible, constrain options while at the same time present opportunity for change. Organizational identity and corporate reputation, intangible assets that are brokered by employees and stakeholders respectively, can restrain options for strategic change while at the same time provide the organization with reprieve (if the reputation is outstanding).

Triggers may occur throughout the organizational path, not only at the critical juncture. These triggers may be direct outcomes of the effect of self-reinforcing process (e.g. financial restatement issues) or they may be indirectly related, initiated by external actors or events (e.g. the economic downturn). Organizational path dependence is a complex temporal process that is highly influenced by initial conditions not only at the onset but also throughout the process; the process itself is laden with the agency of actors in play at all levels that exist within the boundary of the path.

## CHAPTER 8. Conclusion

In this chapter, a summary of the research findings are provided, followed by academic contributions. The limitations of the study are then discussed, with suggestions on further research. The chapter closes with a discussion on how this research can be applied to practice.

### 8.1 Summary of Findings

The purpose of this research was to investigate the influence of CEO narratives in organizational path dependence. Findings suggest that CEO narratives, due to their authoritative nature, create a narrative infrastructure across both time and space, but the strength of this infrastructure is not evenly distributed across all narrative sources. Textual relationships exist within sources of narratives, such as material documents, whereby the narratives are interconnected over time; changing the narrative is constrained explicitly by what was said and done in the past. Non-material sources of narratives have greater intertextuality between types of texts. CEO Emails, for example, draw on other narratives, through rhetorical history, to tell the strategy story.

The narratives within material texts (in this case the analyst calls) provide a *discourse of direction* while the non-material, internal sources of narratives (in this case the CEO Emails) provide a *discourse of behavior*. The non-material, external narratives (i.e. the Letters to Shareholders) use *rhetorical history* to tell the firm's story. The initial CEO narrative, however, begins with the firm's material filings.



When the CEO narrative infrastructure is strong, defined by the degree of intertextuality and the dominant narrative, the collection of CEO narratives acts as a self-reinforcing process. This process is rent-seeking, in that the narratives are used by CEOs to give sense on the firm's strategy and other self-reinforcing processes active within the organization. The purpose of the sensegiving is to encourage both thinking and acting by organizational stakeholders, in order to influence behaviour and gain capital. The force of the narrative infrastructure, as a self-reinforcing process, results in coordinating, complementarity, learning and adaptive expectation effects. Stakeholders, through the narratives, are able to make sense of the firm's strategy, which encourages coordination of activities, collaboration across boundaries, a deeper purpose, and the development of intangible capabilities. The CEO narrative infrastructure encourages the adoption of other self-reinforcing processes at play in the organization, further embedding the processes and cementing the organizational path.

Due to the material nature of CEO narratives, however, CEOs are constrained by what they initially say and what was said before them. Therefore, although the CEO narratives are initially rent-seeking, they not only perpetuate the organizational path but also make it difficult for the organization to move off path. As such, the positive rent-seeking effects initially obtained through CEO narratives can be depleted, trapping the organization into a CEO narrative that may no longer be valid.

CEO narratives are also constrained by the firm's initial conditions, defined by their resources and capabilities. To tell the firm's "strategy story," authors can attempt to defamiliarize themselves from the past to affect strategic change (and move off path) but to obtain legitimacy they must articulate the firm's competitive advantage by drawing on

core competencies. CEO narratives, therefore, are constrained by the tensions of trying to both familiarize with the past (to gain legitimacy) and defamiliarize from the past (to affect change).

Firm resources and capabilities include not only tangible resources but also intangible resources such as corporate reputation and organizational identity. Beyond the capabilities of the firm, the perception of who the firm is and what it can accomplish can influence strategic options, either expanding them or restricting them. Corporate reputation, for example, can provide firms with room to manoeuvre if previous performance was above industry average. On the other hand, organizational identity, and more generally, corporate culture, may constrain strategic options, especially if the strategic change is significantly different than what the culture supports.

Rhetorical history, as a resource in itself, offers CEOs an opportunity, through narrative, to expand strategic options when constrained by initial conditions. By reinventing the past through a recombination of historical facts, CEOs can retell the firm's story (Suddaby et al., 2010). In the case of Nortel, rhetorical history was attempted by the CEOs within their narratives, but in lieu of leveraging history for strategic change, their narratives strengthened the firm's historical strategic position, which was at odds with its mechanisms of strategy implementation.

## 8.2 Academic Contributions

### 8.2.1 *CEO Strategizing and Firm Trajectory*

This thesis brought together two streams of research: organizational path dependence and strategy-as-narrative, to investigate how CEOs, as the grand architect of firm strategy, may strategize over time. The thesis contributes to the literature by identifying how narrative is used in strategizing activities. Due to issues of access, research on CEO activities is limited. With a unique data set of an internal source of CEO narratives (the CEO Emails), the research has illuminated how the role of narrative in strategy, as a temporal process, can influence the firm's trajectory.

The thesis also highlights the role of CEO narratives in strategic change, not only during a CEO's tenure but also in the case of CEO succession. Although research suggests that strategic change may be undertaken when firm performance is poor, this research suggests that strategic change by a new CEO is constrained by the previous CEO's narratives and the firm's resources and capabilities. In other words, with each CEO succession, there are initial conditions that may influence the CEO's strategic options. Although it may appear that the CEO can create a new path, succession implies that a path already exists. New CEOs join the path and, depending upon the strength of the path and where the path is in terms of path dependence, it may not be possible to move off path. This finding confirms, empirically, Hutzschenreuter et al.'s (2012) suspicions that path dependence may be correlated to strategic change upon CEO succession, illustrating how self-reinforcing processes, including CEO narratives, reduce the new CEO's strategic options.

### ***8.2.2 Narratives, Intertextuality and Narrative Infrastructures in Strategizing***

The research also provides further insight into the specific role of narratives in strategizing activities. As Fenton and Langley (2011) suggest, texts (and by extension, narratives) are central to strategizing activities in organizations. The influence of these narratives, however, appears to depend (in part) on two variables: first, the authoritative nature of the author and, second, the reader of the narrative. Although generally, narratives are considered as a means to gain capital, the type of capital sought will influence the content of the narrative and, by extension, the narrative infrastructure.

The research also provides insight into the characterization of the narrative infrastructure, by identifying intertextual relationships, both structural and discursive. Although some earlier studies have investigated intertextuality and the emergence of dominant themes (e.g. Deuten & Rip, 2007; Riad et al., 2012), this research was unique in that it brought together five different sources of narrative that were produced over an extended period of time, by four different authors, and supplemented by a large set of event data (both qualitative and quantitative). The scope of the dataset supported an in-depth study of how different sources of narrative are related through textual characteristics and how these relationships form a narrative infrastructure. Uniquely, this research demonstrated that, although sources of narrative can form a narrative infrastructure through intertextual relationships, some sources of narrative are more dominant than others, thereby having a greater influence. These findings provide a path to future research on how to characterize a narrative infrastructure that has multiple dimensions.

### ***8.2.3 Sources of CEO Narratives as Part of the Strategy “Genre”***

Although research in genre and genre systems was not a primary objective of this research, the results of the narrative analysis suggest that sources of CEO narratives can be considered strategy genres and part of a larger genre chain of strategizing. Genres are defined as “conventionalized discursive actions in which participating individuals or institutions have shared perceptions of communicative purposes as well as those of constraints operating on their construction, interpretation and conditions of use” (Bhatia, 2004: 87, in Cornut, Giroux & Langley, 2012). The strategic plan, as an example, is considered a strategy genre that can be used by strategists within the organization to coordinate strategy-based activities (Cornut et al., 2012), such as formulating a strategy, gaining consensus and mobilizing action.

Genre chains are created through intertextual relationships that exist between different types of genres. Paltridge (2006) illustrates this concept by identifying the genres involved in a job application: the job advertisement, the position description, the letter of application, the resume, the job interview, the offer, and the negotiation. In terms of financial management, a genre chain in financial disclosure may contain an earnings call announcement, an earnings release, an earnings call, a quarterly report, and an annual report (Crawford Camiciottoli, 2010).

The sources of CEO narratives, like strategic plans, each presented with distinctive characteristics, as explained in the structural analysis of Chapter 6. Targeted towards different audiences, for different purposes, the different types of narrative sources represented different methods of strategizing. For example, through the analyst calls, the CEO narratives developed a discourse of direction while the CEO Emails

developed a discourse of behaviour. Collectively, however, the narratives embodied dominant strategy themes that persisted over time. This finding suggests that within Cornut et al.'s (2012) strategy genre sits the Analyst Call and the CEO email, along with the Letter to Shareholders, the News Release, and the Media Interview.

Findings also suggest that there is an overlap of the strategy genre with the financial reporting genre. Analyst calls are considered to be a financial reporting genre (Crawford Camiciottoli, 2010), however this research suggests that analyst calls can also be considered a strategy genre. Similarly, the 10-K annual report is considered a financial reporting genre, while the Letter to Shareholders, embedded within the annual report, is considered a strategy genre (Segars & Kohut; 2001).

In terms of genre chains, the genre chain of financial disclosure, as described by Crawford Camiciottoli (2010), contains elements of a potential genre chain of strategizing (e.g. the earnings call, the annual report's Letter to Shareholders), suggesting that these two categories of genres and genre chains are closely intertwined.

Notably, although Letters to Shareholders are considered a strategic communication tool (Segars & Kohut, 2001), the findings from this research suggest that Letters do not persist within the genre chain of strategizing; they may be limited to a transactional activity – valuable at the point of issue but minimally thereafter. It therefore puts the value of the Letter to Shareholders into question not only for practitioners but also for researchers.

#### **8.2.4 Organizational Path Dependence**

The research contributes to the organizational path dependence literature in three ways. First, the research provides a deeper understanding of the role of self-reinforcing processes in the path dependence process and their relationship with initial conditions. Theory (Sydow et al., 2009) has discussed the role of self-reinforcing processes and their associated rent-seeking effects, but research on how these processes develop and interact has only just begun (e.g. Koch, 2011). This research was able to distinguish between self-reinforcing processes as initial conditions and those developed over time, and further investigated the interaction within the set. The findings suggest that self-reinforcing processes do not actually “take over” from initial conditions (Sydow et al., 2009) once a path is initiated, rather the processes that present themselves as initial conditions may reduce the scope of strategic choice not only at the start but also throughout the path. Additionally, the initial self-reinforcing processes may influence the way in which future processes become embedded into the organization’s environment. As in the case of Nortel, the initial self-reinforcing processes were in conflict with the newly introduced processes; in combination, the overall effectiveness of all processes (i.e. the integrated set) was reduced.

Second, the research connects organizational path dependence theory with the resource-based view (Barney, 2001), by suggesting that initial conditions, at the organizational level, can be defined as the firm’s resources and capabilities. At Nortel, the firm’s resources and capabilities had been cultivated over time to create a core competency in innovation, which was credited for the firm’s historical competitive advantage. As an initial condition, this core competency directly influenced the firm’s

strategic choice even before the path was created. It also influenced strategic options throughout the organizational path as innovation had become, over the years, a self-reinforcing process, and a core value. This finding illuminates the importance of the resource-based view in organizational path dependence theory by categorizing initial conditions at the firm level.

Third, the research investigated the role of critical events, which may either expand or reduce strategic options. Path dependence theory suggests a main critical juncture initiates an organizational path (Sydow et al., 2009). This research, however, suggests that more than one critical juncture can occur, and that a critical juncture may, in fact, trigger final lock-in.

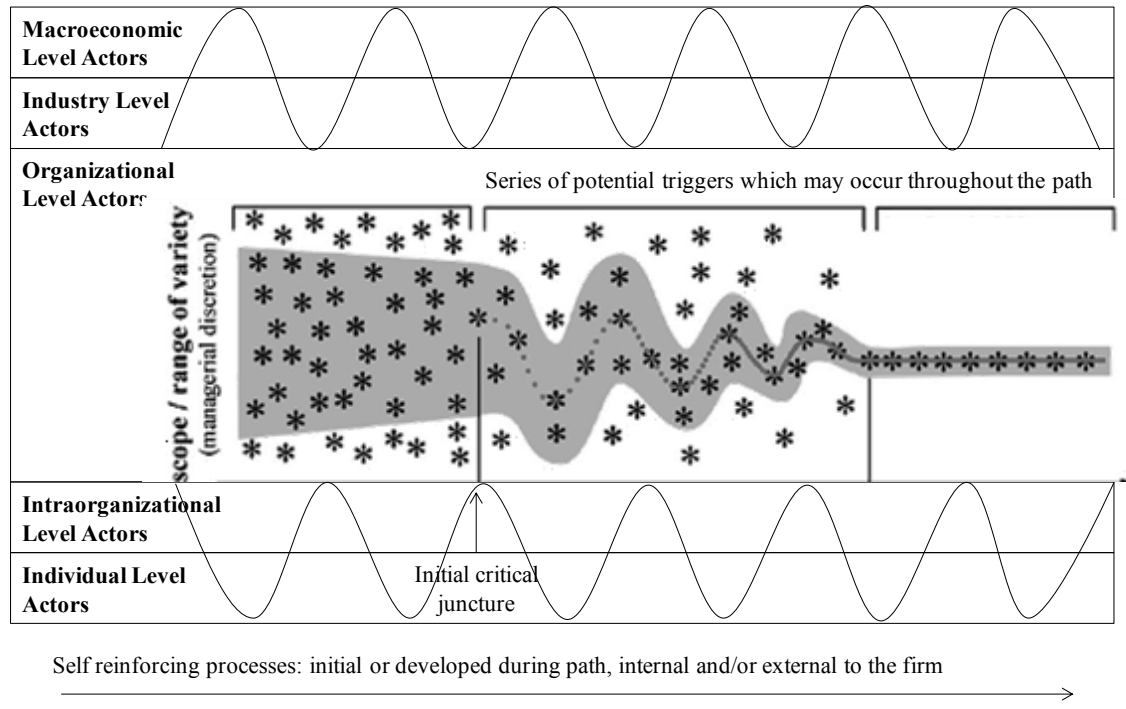
The relationship between the triggering events and the self-reinforcing processes is complex. Although a triggering event may appear distinct, the influence of an event may be different depending on the constitution of the organizational path. For example, the economic meltdown was an external event that was beyond Nortel's control and therefore could be held fully responsible for Nortel's eventual locked-in state. However, other firms in Nortel's strategic group managed through the downturn successfully (i.e. they still exist). The downturn had a greater negative influence on Nortel's strategic options due to rigidity created by the firm's self-reinforcing processes, including the CEO narratives. This finding suggests that the identification of triggering events must be based, in part, on their causal relationship with the organization's self-reinforcing processes.



**8.2.5 An Elaborated Model of the Constitution of an Organizational Path**

The research also contributes towards research methods on Path Constitution Analysis (PCA; Sydow et al., 2012) and the characterization of an organizational path. As a new method of characterizing an organizational path, the application of PCA is minimal. This research applied PCA on a complex organization, systematically identifying the constitutive features of the path, and providing a model for further research. Through the application of PCA, findings suggested that the analysis of level interrelatedness and multiple actors should be an integrative process. This led to an elaborated model of the constitution of an organizational path, as shown again in Figure 31.

**Figure 31: Elaborated Model of the Constitution of an Organizational Path**  
Overlaid on Sydow et al.'s (2009: 692) Constitution of an Organizational Path



This elaborated model highlights the multilevel nature of organizational path dependence and the recursive and reflexive interaction between actors that reside within the levels. As the Nortel case suggests, organizational path dependence occurs at the focal level of analysis (in this case, the firm level, with the CEO as the central actor), but even before the path is initiated, actors influence the range of strategic options. Self-reinforcing processes, developed in the past, may present themselves as initial conditions. Resources and capabilities, both tangible and intangible, constrain options while at the same time present opportunity for change. Organizational identity and corporate reputation, intangible assets that are brokered by employees and stakeholders respectively, can restrain options for strategic change while at the same time provide the organization with reprieve (if the reputation is outstanding).

Triggers may occur throughout the organizational path, not only at the critical juncture. These triggers may be direct outcomes of the effect of self-reinforcing process (e.g. financial restatement issues) or indirectly related, initiated by external actors or events (e.g. the economic downturn). Organizational path dependence is a complex temporal process that is highly influenced by initial conditions not only at the onset but throughout the process; the process itself is laden with the agency of actors positioned within all levels of the upper and lower boundary.

#### ***8.2.6 Rhetorical History***

Finally, the research provided insight into the role of rhetorical history in the organizational path dependence process. As a relatively new concept in the literature, rhetorical history is considered as a strategic resource (Suddaby et al., 2010). This thesis

suggests that, in the path dependence process, rhetorical history can expand the firm's strategic options and also allow the firm to disentangle itself from past events. The research also provides examples of how rhetorical history is used within different sources of CEO narratives. For example, in the CEO Emails, the CEOs often drew upon the past to recreate history through the sequencing and sensemaking of events. By reassembling events, they used narrative to suggest causality, creating room to manoeuvre and affect change.

The research also provides insight into the relationship between the ability to use rhetorical history and the firm's resources and capabilities (both tangible and intangible). The findings suggest that, although rhetorical history requires the reassembling and repositioning of the past, the firm is constrained by the degree of embeddedness of the firm's capabilities. At Nortel, for example, the CEOs could not have easily shifted their rhetoric from one of innovation to one of low cost, as they would have lost legitimacy both within the firm and outside of the firm. As Suddaby et al. (2010) suggest, rhetorical history is a strategic resource that must be developed as a capability. This research illuminates the inherent difficulties in developing this capability.

### **8.3 Limitations**

Although the research is comprehensive in nature, grounded in theoretically supported qualitative research methods, three specific limitations exist.

First, Nortel is an extreme case (Yin, 2003), which limits the transferability of the results. However, this research had multiple purposes. Although the overarching objective was to investigate the influence of CEO narratives in organizational path

dependence, the findings and academic contributions extend beyond the notion of path dependence and lock-in, to the role of CEO strategizing in organizations, sources of CEO narratives and their associated purpose, and theorizing on the influence of resources and capabilities on a firm's trajectory. Although replication of this study could be difficult due to access issues (i.e. for the CEO emails), the study's research methods could be replicated in different organizational environments, regardless of where the firm sits on the organizational path.

Second, the distinction between event data and CEO narrative data is not straightforward. Although the CEOs do not narrate all external firm-level documentation, they often participate in developing or, at the very least, approving the narrative (Chatterjee & Hambrick, 2007). For example, the material filings from Nortel, such as the financial and annual reports, are authorized by the CEO. Although the event data was kept separate from the CEO narrative data in the analysis, the CEO's influence suggests that the path constitution analysis may have been influenced, indirectly, by CEO narrative. This issue is mainly evident in the identification of actors and events and is partly a theoretical problem; in organizational path dependence, the critical events can be identified either by the researchers or the actors involved in the process. Therefore, it is necessary to use the CEO narratives during the first step of the path constitution analysis, to determine which actors (and events) the CEOs deem significant. Although the use of the CEO narratives in this case was directed by theory, it does suggest that there may be limitations to the method.

Third, the study focused specifically on CEO narratives and not the larger body of strategy narratives that exist in organizations. Although CEO narratives are considered

authoritative, the degree of their influence, given the study's focus, is not deeply understood. Therefore there is a gap in this research on how the CEO narratives were connected to other strategy narratives, and how the CEO narratives were consumed by stakeholders. In addition, due to the retrospective nature of the analysis, the research did not include the CEOs' own sensemaking and how this influenced their narratives. Notably, the analyst calls, which were added into the research only after the research proposal, contained insight into the author's sensemaking, specifically during the Question and Answer period, where in-vivo interaction between the CEO and the analysts was evident. In hindsight, the analyst calls were an important addition to the dataset.

#### **8.4 Further Research**

To further understand the role of CEO narratives in organizational path dependence or, more broadly, the firm's trajectory, research could investigate not only the narrative themselves but also the production of the narratives and the way they are consumed. Understanding how the narratives are produced, the way they are written and how they are consumed may provide a richer understanding of the role of texts in organizations, and specifically strategizing (Fenton & Langley, 2011). As suggested in the limitations, an investigation of this type must include not only reader sensemaking but also their subsequent behaviour. Such an analysis would provide a more comprehensive perspective on the role of narratives, the creation of a narrative infrastructure and firm trajectory. Although this type of research study would be complex, arms-length

observation methods would be appropriate, to ensure that the researcher and research methods do not contribute towards the narrative.

In this vein, investigation into the sensemaking of readers of the CEO narratives and sensemaking of the CEOs vis-à-vis other narratives would generate further insight into the recursive process. Why do CEOs choose to respond to some narratives over others? What influence do CEO narratives have over actors within the system? Do these narratives generate capital after all? If so, what kind of capital? This type of investigation would build a narrative model that would include both sensegiving *and* sensemaking activities, and provide further insight into *how* CEOs strategize in organizations. Notably, a sensemaking / sensegiving framework should ideally include not only written and formal CEO narratives, but also informal narratives, such as meetings and discussions (admittedly, this would be a challenge for researchers).

Further research could also be undertaken to understand the role of rhetorical history in CEO narratives and in organizational narratives generally. Given the constraints of initial conditions in the organizational path dependence process, rhetorical history is an important construct in enabling strategic change. How do firms develop the capability for rhetorical history and how do CEOs draw upon rhetorical history (as a firm resource) in their narratives? How much leeway does a CEO have in rewriting the past, in relation to the legitimacy that the CEO seeks within the narratives? On a larger scale, this research stream could investigate the use of rhetorical history across the organization and the types of conflicts that may arise between narratives due to variance in how history is retold. In larger organizations, specifically multinationals, do many versions of the firm's history exist? If rhetorical history is used to gain legitimacy, and multinationals are faced

with variance in their legitimacy issues (due to varying institutional logics), then rhetorical history might be used, through narrative, differently from one subsidiary to the next. As a result, this variance may influence a firm's corporate identity and reputation.

In terms of organizational path dependence, further research could focus more deeply on the characterization of self-reinforcing processes and their influence on both the firm's performance and trajectory. The self-reinforcing processes as defined by organizational path dependence theory (Sydow et al., 2009) are similar to Kostova's (1999) strategic organizational practices, defined as a "particular way of conducting organizational functions that have evolved over time under the influence of an organization's history, people, interests, and actions and that have become institutionalized in the organization" (Kostova, 1999: 309). By connecting these two streams of research, it may be possible to understand how institutional environments influence an organizational path, not just initially but throughout the organization's trajectory, through strategic organizational practices.

## **8.5 Implications for Managers**

Findings from this research have several practical applications, discussed as follows.

First, findings suggest that CEO narratives, specifically in public companies, are closely linked to the firm's material information. Practitioners should be aware that material filings will directly influence what the CEO can say in the future. This constraint can restrict the CEO's ability to change strategic direction, given that any contradiction between the material and non-material CEO narratives may influence the firm's ability to

attract resources. CEOs should therefore treat material events as not only a regulatory task but also an important trigger of CEO strategy narratives. For example, the class action settlement at Nortel, which occurred during Zafirovski's tenure, was a significant material event that the firm was regulated to report. However, instead of positioning the event within the context of the firm's organizational path, Zafirovski chose to downplay the impact of the event in his narrative, even though it had obvious implications on the firm's financial flexibility. This example illustrates the conflict that arises when deeply rooted organizational events are dismissed as transactional. Managers should therefore consider the implication of how events (even non-material events) are narrated to stakeholders and the influence of this narrative on the firm's organizational path.

Second, CEOs should consider the relative importance of their sources of narratives based on their intended purpose. For example, firms invest resources into their Letters to Shareholders and research has indicated that these Letters can be used as a strategic communication tool (Segars & Kohut, 2001). However, this thesis suggests that the Letters have minimal relationship to any other narrative sources and that the narrative itself provides minimal benefit to the organization. Analyst calls, on the other hand, or informal employee communication (e.g. CEO Emails), as both direction setting and behaviour setting activities, appear to be worthwhile areas of investments for the firm, given their level of influence on identifying and implementing a strategic direction. It follows, however, that CEOs need to consider their authoritative role within the organization, and the resultant influence of their words on stakeholder behaviour. As the research suggests, CEO narratives can draw coordinating, complementarity, learning and



adaptive expectation effects, but in so doing, the same narratives may contribute towards strategic lock-in.

Third, CEOs and their firms should consider characterizing their organizational path on a consistent basis. Given the authority of the CEO position and the power structures that accompany it, firms are susceptible to lock-in. This susceptibility is further amplified if the organization's culture is one that supports autocratic and hierarchical decision making. To avoid the trap of becoming locked in, CEOs must consider how they are contributing towards the development and persistence of the path in their narrative activities, whether they are text-based narratives, such as reports, or talk-based narratives, such as analyst calls, Board meetings, customer meetings, etc... The role of monitoring the firm's path should be assigned to someone (or group) that sits outside of the CEO's direct decision making body to avoid group think. Such a role would encourage the understanding of available options that may not be evident to those involved in the day-to-day and ongoing strategic leadership of the company. This role is similar to a strategy office function, however, the separation from the Top Management Team is a unique requirement that may be difficult to implement.

Fourth, CEOs should consider the way in which rhetorical history is enacted within the organization. The notion that rhetorical history is a means of strategizing highlights the importance of aligning the way in which historical events are employed to shape organizational identity. If a firm is undergoing strategic change, elements of the firm's history may continue to be important and can therefore serve as strategic resources. However, if the vision of the organization is unclear, managers may use history incorrectly (as in the case of Nortel), creating barriers to change.

Fundamentally, this research provides guidance to managers on the influence of narrative in organizations. Kuhn (2008) suggests that communication is constitutive of organization. Although findings from this research do not go that far, the research does suggest that what is said, by whom, when and how, can explain and influence future behaviour. In terms of the CEO narratives, due to the authoritative role of the CEO, the content of these narratives should be carefully considered, as they can shape firm trajectory and contribute towards strategic lock-in. *Be careful what you say.*

## REFERENCES

- Abrahamson, E. (1996). Management fashion. *Academy of Management Review*, 21(1), 254–285.
- Abrahamson, E., & Park, C. (1994). Concealment of negative organizational outcomes: an agency theory perspective. *Academy of Management Journal*, 37(5), 1302–1334.
- Ackoff, R. L. (1970). *A concept of corporate planning*. New York: Wiley-Interscience.
- Allen, G. (2000). *Intertextuality*. London: Routledge.
- Andrews, K. R. (1987). *The concept of corporate strategy* (3rd ed.). Homewood, Ill.: R. D. Irwin.
- Ansoff, H. I. (1965). *Corporate strategy; an analytic approach to business policy for growth and expansion*. New York: McGraw-Hill.
- Arthur, W. B. (1989). Competing technologies, increasing returns, and lock-in by historical events. *Economic Journal*, 99(394), 116–131.
- Arthur, W. B. (1994). *Increasing returns and path dependency in the economy*. Ann Arbor, MI: University of Michigan Press.
- Barnard, C. (1938). *The functions of the executive*. Cambridge: Harvard University.
- Barney, J.B. (1991). Firms resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Barr, P. S., Stimpert, J. L., & Huff, A. S. (1992). Cognitive change, strategic action, and organizational renewal. *Strategic Management Journal*, 13(S1), 15–36.
- Barry, D., & Elmes, M. (1997). Strategy retold: Toward a narrative view of strategic

- discourse. *Academy of Management Review*, 22(2), 429–452.
- Baum, J., & Silverman, B. (1999). Complexity in the dynamics of organizational founding and failure. In M. Lissack & H. Gunz (Eds.), *Managing complexity in organizations* (pp. 292–312). Westport, Conn: Quorum Press.
- Baum, J. A. C., & Silverman, B. S. (2001). Complexity, attractors, and path dependence and creation in technological evolution. In R. Garud & P. Karnøe (Eds.), *Path dependence and creation* (pp. 169–209). Mahwah, NJ: Lawrence Erlbaum.
- Bennett, A., & Elman, C. (2006). Qualitative research: Recent developments in case study methods. *Annual Review of Political Science*, 9, 455–476.
- Bhatia, V. (2004). *Worlds of written discourse: A genre-based view*. New York, NY: Continuum.
- Boje, D. (2001). *Narrative methods for organizational communication research*. London: Sage.
- Boje, D. M., Rosalie, G. A., Durant R. A., & Luhman, J. T. (2004). Enron spectacles: A critical dramaturgical analysis. *Organization Studies*, 25(5), 751–774.
- Bowen, R. M., Davis, A. K., & Matsumoto, D. A. (2002). Do conference calls affect analysts' forecasts? *Accounting Review*, 77(2), 285–316.
- Brown, S., Hillegeist, S. A., & Lo, K. (2004). Conference calls and information asymmetry. *Journal of Accounting and Economics*, 37(3), 343–366.
- Burgelman, R. A. (2002). Strategy as vector and the inertia of coevolutionary lock-in. *Administrative Science Quarterly*, 47(2), 325–357.

- Byron, K. (2008). Carrying too heavy a load? The communication and miscommunication of emotion by email. *Academy of Management Review*, 33(2), 309–327.
- Carroll, P. B., & Mui, C. (2008). 7 ways to fail big. *Harvard Business Review*, 86(9), 82–91.
- Chatterjee, A., & Hambrick, D. C. (2007). It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. *Administrative Science Quarterly*, 52(3), 351–386.
- Child, J. (1972). Organizational structure, environment and performance: The role of strategic choice. *Sociology*, 6(1), 2–22.
- Clapham, S. E., & Schwenk, C. R. (1991). Self-serving attributions, managerial cognition, and company performance. *Strategic Management Journal*, 12(3), 219–229.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: a new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152.
- Cornut, F., Giroux, H., & Langley, A. (2012). The strategic plan as a genre. *Discourse & Communication*, 6(1), 21–54.
- Craig, R., & Amernic, J. (2011). Detecting linguistic traces of destructive narcissism at-a-distance in a CEO's letter to shareholders. *Journal of Business Ethics*, 101(4), 563–575.
- Crawford Camiciottoli, B. (2010). Earnings calls: Exploring an emerging financial reporting genre. *Discourse & Communication*, 4(4), 343–359.

- Crossland C., & Chen, G. (2013). Executive accountability around the world: Sources of cross-national variation in firm performance—CEO dismissal sensitivity. *Strategic Organization*, 11(1), 78–109.
- D’Aveni, R. A., & MacMillan, I. C. (1990). Crisis and the content of managerial communications: a study of the focus of attention of top managers in surviving and failing firms. *Administrative Science Quarterly*, 35(4), 634–57.
- David, P. A. (1985). Clio and the economics of QWERTY. *The American Economic Review*, 75(2), 332–337.
- David, P. A. (1994). Why are institutions the ‘carriers of history’?: Path dependence and the evolution of conventions, organizations and institutions. *Structural Change and Economic Dynamics*, 5(2), 205–220.
- David, P. A. (2001). Path dependence, its critics and the quest for ‘historical economics.’ In P. Garrouste & S. Ioannides (Eds.), *Evolution and path dependence in economic ideas: Past and present* (pp. 15–40). Cheltenham: Edward Elgar.
- David, P. A. (2007). Path dependence: A foundational concept for historical social science. *Cliometrica*, 1(2), 91–114.
- Deuten, J. J., & Rip, A. (2007). Narrative infrastructure in product creation processes. *Organization*, 7(1), 69–93.
- DiMaggio, P. J., & Powell, W.W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.

- Fairclough, N., (1992). *Discourse and social change*. Cambridge: Polity Press.
- Fanelli, A., & Misangyi, V. F. (2006). Bringing out charisma: CEO charisma and external stakeholders. *Academy of Management Review*, 31(4), 1049–1061.
- Fanelli, A., Misangyi, V. F., & Tosi, H. L. (2009). In charisma we trust: The effects of CEO charismatic visions on securities analysts. *Organization Science*, 20(6), 1011–1033.
- Fenton, C., & Langley, A. (2011). Strategy as practice and the narrative turn. *Organization Studies*, 32(9), 1171–1196.
- Fiol, C. M. (1995). Corporate communications: comparing executives' private and public statements. *Academy of Management Journal*, 38(2), 522–36.
- Fisher, W. R. (1987). *Human communication as narration: Toward a philosophy of reason, value and action*. Columbia, SC: University of South Carolina Press.
- Gardner, H. (1995). *Leading minds: An anatomy of leadership*. New York: Basic Books.
- Garud, R., & Karnøe, P. (Eds.) (2001). *Path dependence and path creation*. Mahwah, NJ: Lawrence Earlbaum.
- Garud, R., Kumaraswamy, A., & Karnøe, P. (2009). Path dependence or path creation? *Journal of Management Studies*, 47(4), 760–774.
- Genette, G. (1997). *Paratexts (Volume 20)*. Cambridge: Cambridge University Press.
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley: University of California Press.
- Golant, B. D., & Sillince, J. A. A. (2007). The constitution of organizational

- legitimacy: A narrative perspective. *Organization Studies*, 28(8), 1149–1167.
- Graffin, S. D., Carpenter, M. A., & Boivie, S. (2011). What's all that (strategic) noise? Anticipatory impression management in CEO succession. *Strategic Management Journal*, 32(7), 748–770.
- Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review*, 32(2), 334–343.
- Hambrick, D. C., & Finkelstein, S. (1987). Managerial discretion: A bridge between polar views of organizational outcomes. *Research in Organizational Behavior*, 9, 369–406.
- Hannan, M. T., & Freeman, J. (1977). The population ecology of organizations. *The American Journal of Sociology*, 82(5), 929–964.
- Hart, R. D. (2001) Redeveloping diction: Theoretical considerations. In M. D. West (Ed.) *Theory, method and practice in computerized content analysis* (pp. 26–55). Santa Barbara, CA: Greenwood Publishing Group.
- Hart, R. P., & Carroll, C. E. (2012) *DICTION 6: The text analysis program help manual*. Austin, TX: Digitext, Inc.
- Hutzschenreuter, T., & Kleindienst, I. (2006). Strategy-process research: What have we learned and what is still to be explored. *Journal of Management*, 32(5), 673–720.
- Hutzschenreuter, T., Kleindienst, I., & Greger, C. (2012). How new leaders affect strategic change following a succession event: A critical review of the literature. *Leadership Quarterly*, 23(5), 729–755.



- Jarzabkowski, P. (2004). Strategy as practice: Recursiveness, adaptation, and practices-in-use. *Organization Studies*, 25(4), 529–560.
- Kaplan, S. (2011). Strategy and PowerPoint: An inquiry into the epistemic culture and machinery of strategy making. *Organization Science*, 22(2), 320–346.
- Koch, J. (2011). Inscribed strategies: Exploring the organizational nature of strategic lock-in. *Organization Studies*, 32(3), 337–363.
- Kostova, T. 1999. Transnational transfer of strategic organizational practices: A contextual perspective. *Academy of Management Review*, 24(2), 308–324.
- Kuhn, T. (2008). A communicative theory of the firm: Developing an alternative perspective on intra-organizational power and stakeholder relationships. *Organization Studies*, 29(8-9), 1227–1254.
- Langley, A. (1999). Strategies for theorizing from process data. *Academy of Management Review*, 24(4), 691–710.
- Larcker, D. F., & Zakolyukina, A. A. (2012). Detecting deceptive discussions in conference calls. *Journal of Accounting Research*, 50(2), 495–540.
- Leitch, S., & Palmer, I. (2010). Analysing texts in context: Current practices and new protocols for critical discourse analysis in organization studies. *Journal of Management Studies*, 47(6), 1194–1212.
- Lieberman, M. B., & Montgomery, D. B. (1988). First-mover advantages. *Strategic Management Journal*, 9(S1), 41–58.
- Liebowitz, S. J., & Margolis, S. E. (1990). The fable of the keys. *Journal of Law and Economics*, 33(1), 1–25.

- Lincoln, Y. S., & Guba, E. G. (Eds.). (1985). *Naturalistic inquiry*. Newbury Park, Calif.: Sage Publications.
- Lounsbury, M., & Glynn, M. A. (2001). Cultural entrepreneurship: Stories, legitimacy, and the acquisition of resources. *Strategic Management Journal*, 22(6-7), 545–564.
- Mahon, J. F. (2002). Corporate reputation: A research agenda using strategy and stakeholder literature. *Business and Society*, 41(1), 415–445.
- Maguire, S. (2004). The coevolution of technology and discourse: a study of substitution processes for the insecticide DDT. *Organization Studies*, 25(1), 113–134.
- Martens, M., Jennings, J., & Jennings, P. (2007). Do the stories they tell get them the money they need? The role of entrepreneurial narratives in resource acquisition. *Academy of Management Journal*, 50(5), 1107–1132.
- Mayew, W. J. (2008). Evidence of management discrimination among analysts during earnings conference calls. *Journal of Accounting Research*, 46(3), 627–659.
- McClelland, P. L., Liang, X., & Barker, V. L. (2010). CEO commitment to the status quo: Replication and extension using content analysis. *Journal of Management*, 36(5), 1251–1277.
- Meinhof, U., & Smith, J. (2000). The media and their audience: intertextuality as paradigm. In U. H. Meihof & J. Smith (Eds.), *Intertextuality and the media* (pp. 1–17). Manchester, UK: Manchester University Press.
- Miller, D. (1981). Toward a new contingency approach – the search for organizational

- gestalts. *Journal of Management Studies*, 18(1), 1 – 26.
- Miller, D., & Friesen, P. H. (1977). Strategy-making in context: Ten empirical archetypes. *Journal of Management Studies*, 14(3), 253–280.
- Miller, D., & Friesen, P. H. (1978). Archetypes of strategy formulation. *Management Science*, 24, 921–33.
- Mishina, Y., Block, E. S., & Mannor, M. J. (2011). The path dependence of organizational reputation: how social judgment influences assessments of capability and character. *Strategic Management Journal*, 33(5), 459–477.
- Orlikowski, W. J. (1992). The duality of technology: Rethinking the concept of technology in organizations. *Organization Science*, 3(3), 398–427.
- Palmer, I., King, A. W., & Kelleher, D. (2004). Listening to Jack: GE's change conversations with shareholders. *Journal of Organizational Change Management*, 17(6), 593–614.
- Paltridge, B. (2006). *Discourse analysis: An introduction*. New York, NY: Continuum.
- Pettigrew, A. M. (1990). Longitudinal field research on change: Theory and practice. *Organization Science*, 1(3), 267–292.
- Pierson, P. (2000). Increasing returns, path dependence, and the study of politics. *American Political Science Review*, 94(2), 251–267.
- Pierson, P. (2004). *Politics in time: History, institutions, and social analysis*. Princeton: Princeton University Press.
- Ragin, C. C. (2006). Case-Oriented Comparative Methods. In D. de Vaus (Ed.), *Research design: Volume IV* (pp. 21–41). London: Sage.

- Riad, S., Vaara, E., & Zhang, N. (2012). The intertextual production of international relations in mergers and acquisitions. *Organization Studies*, 33(1), 121–148.
- Rhodes, C., & Brown, A. D. (2005). Narrative, organizations and research. *International Journal of Management Reviews*, 7(3), 167–188.
- Schreyögg, G., & Kliesch-Eberl, M. (2007). How dynamic can organizational capabilities be? Towards a dual-process model of capability dynamization. *Strategic Management Journal*, 28(9), 913–933.
- SEC (United States Securities Exchange Commission) (2000). Final Rule: Selective Disclosure and Insider Training. Retrieved from <http://www.sec.gov/rules/final/33-7881.htm>.
- Scott, W. R. (2008). *Institutions and organizations: Ideas and interests*. Los Angeles: Sage Publications.
- Segars, A. H., & Kohut, G. F. (2001). Strategic communication through the World Wide Web: An empirical model of effectiveness in the CEO's letter to shareholders. *Journal of Management Studies*, 38(4), 535–556.
- Selznick, P. (1957). *Leadership in administration: a sociological interpretation*. Harper & Row.
- Short, J. C., & Palmer, T. B. (2008). The application of DICTION to content analysis research in strategic management. *Organizational Research Methods*, 11(4), 727–752.
- Smircich, L., & Stubbart, C. (1985). Strategic management in an enacted world. *Academy of Management Review*, 10, 724–736.

- Stinchcombe, A. (1965). Social structure and organizations. In J. March (Ed.), *Handbook of organizations* (pp. 142–193). Chicago: Rand McNally.
- Suddaby, R., Foster, W. M., & Trank, C. Q. (2010). Rhetorical history as a source of competitive advantage. In J. Baum & A. C. Lampel (Eds.), *Advances in strategic management, volume 27: The globalization of strategy research* (pp. 147–173). Bingley, UK: Emerald Group Publishing Limited.
- Sydow, J., Schreyögg, G., & Koch, J. (2009). Organizational path dependence: Opening the black box. *Academy of Management Review*, 34(4), 689–709.
- Sydow, J., Windeler, A., Müller-Seitz, G., & Lange, K. (2012). Path constitution analysis: A methodology for understanding path dependence and path creation. *BuR Business Research Journal*, 5(2), 155–176.
- Taylor, J. R. (1999). What is "organizational communication"? Communication as a dialogic of text and conversation. *The Communication Review*, 3(1-2), 21–63.
- Taylor, J. R., & Van Every, E. J. (2000). *The emergent organization: Communication as its site and surface*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Thompson, J. D. (1967). *Organizations in action: social science bases of administrative theory*. New York: McGraw-Hill.
- Vaara, E. (2010). CDA as methodology in SAP research. In D. Golsorkhi, L. Rouleau, D. Seidl & E. Vaara (Eds.), *Cambridge handbook of strategy as practise* (pp. 217–229). Cambridge: Cambridge University Press.
- Van de Ven, A. H., & Huber, G. P. (1990). Longitudinal field research methods for studying processes of organizational change. *Organization Science*, 1(3), 213–

219.

- Van de Ven, A. H., & Poole, M. S. (1990). Methods for studying innovation development in the Minnesota Innovation Research Program. *Organization Science, 1*(3), 313–335.
- Vergne, J. P., & Durand, R. (2010). The missing link between the theory and empirics of path dependence: conceptual clarification, testability issue, and methodological implications. *Journal of Management Studies, 47*(4), 736–759.
- Weick, K. (1995). *Sensemaking in organizations*. Thousand Oaks, Calif.: Sage Publications.
- Whittington, R. (2006). Completing the practice turn in strategy research. *Organization Studies, 27*(5), 613–634.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, Calif.: Sage Publications.

### APPENDIX A. CEO Email List

| CEO Email (ATLAS.ti number, date, CEO, Email title)  | CEO   |
|--|-------|
| P20: 2002_05_29 Nortel CEO Email FD - Important Announcement Today.rtf                             | Dunn  |
| P27: 2002_07_10 Nortel CEO Email FD - Response to SP's Announcement.rtf                            | Dunn  |
| P29: 2002_07_17 Nortel CEO Email FD - Announcement of a new CFO.rtf                                | Dunn  |
| P32: 2002_07_19 Nortel CEO Email FD - Second Quarter Results.rtf                                   | Dunn  |
| P34: 2002_08_20 Nortel CEO Email FD - Kember Retirement.rtf  | Dunn  |
| P35: 2002_08_27 Nortel CEO Email FD - Important Actions Announced Today.rtf                        | Dunn  |
| P38: 2002_09_10 Nortel CEO Email FD - September 11.rtf   | Dunn  |
| P39: 2002_09_25 Nortel CEO Email FD - Two Important Announcements.rtf                              | Dunn  |
| P43: 2002_10_03 Nortel CEO Email FD - Important Announcement.rtf                                   | Dunn  |
| P46: 2002_10_07 Nortel CEO Email FD - OUR RESOLVE AND WILL TO WIN.rtf                              | Dunn  |
| P47: 2002_10_11 Nortel CEO Email FD - A Financial Update.rtf                                       | Dunn  |
| P55: 2002_11_13 Nortel CEO Email FD - Return to Profitability Bonus.rtf                            | Dunn  |
| P59: 2002_12_16 Nortel CEO Email FD - Reflections on 2002.rtf                                      | Dunn  |
| P64: 2003_01_30 Nortel CEO Email FD - Turning the Page.rtf   | Dunn  |
| P77: 2003_06_26 Nortel CEO Email FD - Employee Survey Results.rtf                                  | Dunn  |
| P82: 2003_08_27 Nortel CEO Email FD - Guide to Ethical Business Practices at Nortel Networks.rtf   | Dunn  |
| P83: 2003_09_29 Nortel CEO Email FD - Announcing the Quality Award of Excellence.rtf               | Dunn  |
| P84: 2003_10_01 Nortel CEO Email FD - Maintaining the Confidentiality of Sensitive Information.rtf | Dunn  |
| P95: 2004_01_29 Nortel CEO Email FD - 2003 Results and 2004 Priorities.rtf                         | Dunn  |
| P102: 2004_03_10 Nortel CEO Email FD - Update on Restatement of Financial Results.rtf              | Dunn  |
| P104: 2004_03_15 Nortel CEO Email FD - Today's Announcement.rtf                                    | Dunn  |
| P107: 2004_03_29 Nortel CEO Email FD - A Message from Frank Dunn Bill Kerr.rtf                     | Dunn  |
| P116: 2004_04_29 Nortel CEO Email WO - A Message from Bill Owens.rtf                               | Owens |
| P121: 2004_05_10 Nortel CEO Email WO - Letter from Bill Owens.rtf                                  | Owens |

| <b>CEO Email (ATLAS.ti number, date, CEO, Email title)</b>                           | <b>CEO</b> |
|--|------------|
| P132: 2004_06_18 Nortel CEO Email WO - My thoughts and activities.rtf                | Owens      |
| P137: 2004_07_06 Nortel CEO Email WO - 2004 Employee Survey.rtf                      | Owens      |
| P139: 2004_07_13 Nortel CEO Email WO - Our Latest Update.rtf                         | Owens      |
| P158: 2004_10_28 Nortel CEO Email WO - Checkpoint.rtf                                | Owens      |
| P163: 2004_11_02 Nortel CEO Email WO - Business Ethics Certification.rtf             | Owens      |
| P164: 2004_11_08 Nortel CEO Email WO - This is the Way.rtf                           | Owens      |
| P170: 2004_12_07 Nortel CEO Email WO - Nortel's Alliance with Symantec.rtf           | Owens      |
| P173: 2004_12_14 Nortel CEO Email WO - Today's Announcements.rtf                     | Owens      |
| P176: 2004_12_17 Nortel CEO Email WO - A Challenging but Promising Year.rtf          | Owens      |
| P178: 2004_12_31 Nortel CEO Email WO - Responding to the Tragedy.rtf                 | Owens      |
| P181: 2005_01_10 Nortel CEO Email WO - A Challenge to All Employees.rtf              | Owens      |
| P184: 2005_01_12 Nortel CEO Email WO - Showing your Spirit.rtf                       | Owens      |
| P192: 2005_01_24 Nortel CEO Email WO - Standing Tall.rtf                             | Owens      |
| P202: 2005_03_04 Nortel CEO Email WO - Executive Appointments.rtf                    | Owens      |
| P216: 2005_04_26 Nortel CEO Email WO - Today's Strategic Acquisition.rtf             | Owens      |
| P245: 2005_05_04 Nortel CEO Email WO - The Challenges Ahead.rtf                      | Owens      |
| P270: 2005_06_10 Nortel CEO Email WO - Today's Announcement and the Organization.rtf | Owens      |
| P285: 2005_08_31 Nortel CEO Email WO - Hurricane Katrina.rtf                         | Owens      |
| P288: 2005_09_13 Nortel CEO Email WO - Checkpoint on Ethics and Compliance.rtf       | Owens      |
| P289: 2005_09_16 Nortel CEO Email WO - Update on Hurricane Katrina Relief.rtf        | Owens      |
| P291: 2005_09_21 Nortel CEO Email WO - Nortel's Strategic Direction.rtf              | Owens      |
| P294: 2005_09_30 Nortel CEO Email WO - New Organizational Alignment.rtf              | Owens      |
| P296: 2005_10_12 Nortel CEO Email WO - Answering the Call Once Again.rtf             | Owens      |
| P299: 2005_10_13 Nortel CEO Email WO - The 2005 Employee Survey.rtf                  | Owens      |
| P313: 2005_11_15 Nortel CEO Email MZ - Employee Engagement.rtf                       | Zafirovski |
| P315: 2005_11_28 Nortel CEO Email MZ - Organization Announcements.rtf                | Zafirovski |
| P316: 2005_12_02 Nortel CEO Email MZ - Employee Update.rtf                           | Zafirovski |



| <b>CEO Email (ATLAS.ti number, date, CEO, Email title)</b>   | <b>CEO</b> |
|--|------------|
| P317: 2005_12_08 Nortel CEO Email MZ - Global GE Executive Joel Hackney joins Nortel to lead Global Supply Chain and Quality.rtf | Zafirovski |
| P318: 2005_12_12 Nortel CEO Email MZ - Drinkwater Appointed Chief Legal Officer.rtf  | Zafirovski |
| P319: 2005_12_12 Nortel CEO Email MZ - TAKE ACTION NOW -- Please Complete Ethics Recertification by January 15 2006.rtf          | Zafirovski |
| P320: 2005_12_20 Nortel CEO Email MZ - Clent Richardson to Leave Nortel March 1.rtf  | Zafirovski |
| P321: 2005_12_20 Nortel CEO Email MZ - ZMAIL year-end letter.rtf   | Zafirovski |
| P322: 2006_01_19 Nortel CEO Email MZ - Dennis Carey Appointed EVP of Corporate Operations.rtf                                    | Zafirovski |
| P325: 2006_02_01 Nortel CEO Email MZ - Today's Nortel-Huawei Announcement.rtf  | Zafirovski |
| P330: 2006_02_02 Nortel CEO Email MZ - Business Made Simple.rtf  | Zafirovski |
| P333: 2006_02_06 Nortel CEO Email MZ - Post-sales conference momentum.rtf  | Zafirovski |
| P334: 2006_02_08 Nortel CEO Email MZ - Class Action Lawsuit Settlement.rtf   | Zafirovski |
| P336: 2006_02_12 Nortel CEO Email MZ - Reidel Appointed CSO.rtf  | Zafirovski |
| P338: 2006_02_14 Nortel CEO Email MZ - Nortel Win!.rtf   | Zafirovski |
| P350: 2006_02_24 Nortel CEO Email MZ - Bartzokas appointed Chief Compliance Officer.rtf  | Zafirovski |
| P353: 2006_03_01 Nortel CEO Email MZ - Nortel's Business Transformation.rtf  | Zafirovski |
| P354: 2006_03_07 Nortel CEO Email MZ - International Women's Day.rtf   | Zafirovski |
| P357: 2006_03_10 Nortel CEO Email MZ - Today's Announcements.rtf   | Zafirovski |
| P360: 2006_03_13 Nortel CEO Email MZ - 6-Point Plan.rtf  | Zafirovski |
| P361: 2006_03_13 Nortel CEO Email MZ - MacKinnon to lead LG-Nortel.rtf   | Zafirovski |
| P369: 2006_04_03 Nortel CEO Email MZ - Session 1.rtf   | Zafirovski |
| P374: 2006_04_11 Nortel CEO Email MZ - Former IBM exec Wendt to lead Global Services.rtf   | Zafirovski |
| P375: 2006_04_17 Nortel CEO Email MZ - New Chief Marketing Officer.rtf   | Zafirovski |
| P376: 2006_04_19 Nortel CEO Email MZ - Please take the Quick Pulse ESAT Survey.rtf   | Zafirovski |
| P379: 2006_04_28 Nortel CEO Email MZ - A Special Update on Restatement SUCCESS.rtf   | Zafirovski |
| P391: 2006_05_09 Nortel CEO Email MZ - ESAT results.rtf  | Zafirovski |

| <b>CEO Email (ATLAS.ti number, date, CEO, Email title)</b>  | <b>CEO</b> |
|---|------------|
| P402: 2006_05_11 Nortel CEO Email MZ - Lean Six Sigma.rtf   | Zafirovski |
| P406: 2006_05_16 Nortel CEO Email MZ - Metro Ethernet Networks Organization Notice.rtf  | Zafirovski |
| P412: 2006_05_25 Nortel CEO Email MZ - Mike Pangia to Lead Nortel in Asia Region.rtf  | Zafirovski |
| P419: 2006_06_09 Nortel CEO Email MZ - Mission Possible.rtf   | Zafirovski |
| P428: 2006_06_22 Nortel CEO Email MZ - New Chief Technology Officer.rtf   | Zafirovski |
| P430: 2006_06_27 Nortel CEO Email MZ - Action Plan to Improve Operating Margins and Business Performance.rtf                                    | Zafirovski |
| P449: 2006_07_11 Nortel CEO Email MZ - Nortel Win!.rtf  | Zafirovski |
| P451: 2006_07_17 Nortel CEO Email MZ - Impressions from the Road.rtf  | Zafirovski |
| P453: 2006_07_18 Nortel CEO Email MZ - Nortel Microsoft Announcement.rtf  | Zafirovski |
| P455: 2006_08_01 Nortel CEO Email MZ - Edwards appointed President of EMEA.rtf  | Zafirovski |
| P459: 2006_08_15 Nortel CEO Email MZ - ZMAIL Session II Strategic Roadmap.rtf   | Zafirovski |
| P460: 2006_09_01 Nortel CEO Email MZ - MoU reached with Alcatel for sale of UMTS Access business.rtf  | Zafirovski |
| P464: 2006_09_20 Nortel CEO Email MZ - Executing with Excellence.rtf  | Zafirovski |
| P465: 2006_09_21 Nortel CEO Email MZ - New Code of Business Conduct.rtf   | Zafirovski |
| P468: 2006_10_02 Nortel CEO Email MZ - Fall 2006 Employee Survey.rtf  | Zafirovski |
| P469: 2006_10_25 Nortel CEO Email MZ - ZMAIL Delighting Customers.rtf   | Zafirovski |
| P470: 2006_10_30 Nortel CEO Email MZ - Bovarnick joins Nortel as VP Lean Six Sigma Global Quality.rtf   | Zafirovski |
| P474: 2006_11_07 Nortel CEO Email MZ - 3Q2006 Business Update.rtf   | Zafirovski |
| P479: 2006_11_13 Nortel CEO Email MZ - Building a Positive Work Environment.rtf   | Zafirovski |
| P480: 2006_11_15 Nortel CEO Email MZ - Nortel Government Solutions Update.rtf   | Zafirovski |
| P498: 2006_11_17 Nortel CEO Email MZ - Investor Conference Update.rtf   | Zafirovski |
| P508: 2006_12_19 Nortel CEO Email MZ - Our Time to Lead.rtf   | Zafirovski |
| P512: 2007_01_15 Nortel CEO Email MZ - BT's selection of Metro Ethernet solution demonstrates that Nortel is committed to changing the game.rtf | Zafirovski |

| <b>CEO Email (ATLAS.ti number, date, CEO, Email title)</b>  | <b>CEO</b> |
|---|------------|
| P516: 2007_01_17 Nortel CEO Email MZ - Nortel and Microsoft Alliance Comes Out of the Gate Strong.rtf     | Zafirovski |
| P517: 2007_01_29 Nortel CEO Email MZ - Our Must Do's for 2007.rtf   | Zafirovski |
| P520: 2007_02_06 Nortel CEO Email MZ - Peter Currie to Step Down as CFO.rtf                               | Zafirovski |
| P524: 2007_02_27 Nortel CEO Email MZ - Transforming Nortel into a High-Performance Enterprise.rtf         | Zafirovski |
| P525: 2007_02_28 Nortel CEO Email MZ - Message from Mike Z.rtf  | Zafirovski |
| P527: 2007_03_01 Nortel CEO Email MZ - Today's Announcement.rtf   | Zafirovski |
| P533: 2007_03_16 Nortel CEO Email MZ - Our 4Q2006 and Full-year Financial Results.rtf                     | Zafirovski |
| P552: 2007_03_23 Nortel CEO Email MZ - Announcement of Senior Convertible Notes Offering.rtf              | Zafirovski |
| P553: 2007_03_26 Nortel CEO Email MZ - My Letter to Shareholders.rtf                                      | Zafirovski |
| P558: 2007_03_28 Nortel CEO Email MZ - More on the \$1.15 billion Convertible Senior Notes.rtf            | Zafirovski |
| P563: 2007_04_02 Nortel CEO Email MZ - April 2007 Quick Pulse Employee Survey.rtf                         | Zafirovski |
| P564: 2007_04_02 Nortel CEO Email MZ - CFO Transition Update.rtf  | Zafirovski |
| P575: 2007_05_04 Nortel CEO Email MZ - Back on Offense.rtf  | Zafirovski |
| P577: 2007_05_09 Nortel CEO Email MZ - Barrios appointed President Caribbean and Latin America Region.rtf | Zafirovski |
| P578: 2007_05_11 Nortel CEO Email MZ - Mark your Calendars - Special webcast with Mike Zafirovski.rtf     | Zafirovski |
| P582: 2007_05_23 Nortel CEO Email MZ - Ontario Securities Commission Settlement Approved.rtf              | Zafirovski |
| P586: 2007_06_05 Nortel CEO Email MZ - Nortel's Enterprise Momentum and Today's Industry News.rtf         | Zafirovski |
| P590: 2007_07_10 Nortel CEO Email MZ - The New Nortel Powered by You.rtf                                  | Zafirovski |
| P591: 2007_07_31 Nortel CEO Email MZ - Landmark win for Nortel Government Solutions.rtf                   | Zafirovski |
| P592: 2007_08_01 Nortel CEO Email MZ - Dion Joannou Org Notice.rtf  | Zafirovski |
| P597: 2007_08_06 Nortel CEO Email MZ - Accelerating the Pace.rtf  | Zafirovski |
| P599: 2007_09_17 Nortel CEO Email MZ - Our Call to Action.rtf   | Zafirovski |

| <b>CEO Email (ATLAS.ti number, date, CEO, Email title)</b>   | <b>CEO</b> |
|--|------------|
| P600: 2007_09_19 Nortel CEO Email MZ - Organization Announcement.rtf   | Zafirovski |
| P604: 2007_10_01 Nortel CEO Email MZ - Pavi Binning to join Nortel as EVP and Chief Financial Officer.rtf    | Zafirovski |
| P607: 2007_10_15 Nortel CEO Email MZ - SEC Settlement Reached.rtf  | Zafirovski |
| P613: 2007_11_07 Nortel CEO Email MZ - Making Our Strategic Vision a Reality.rtf                             | Zafirovski |
| P618: 2007_11_19 Nortel CEO Email MZ - Business and ESAT Update.rtf  | Zafirovski |
| P622: 2007_12_20 Nortel CEO Email MZ - A few final words....rtf  | Zafirovski |
| P629: 2008_01_08 Nortel CEO Email MZ - Appointment of Global Sales Leader.rtf                                | Zafirovski |
| P645: 2008_02_04 Nortel CEO Email MZ - Accelerate to Win.rtf   | Zafirovski |
| P655: 2008_02_27 Nortel CEO Email MZ - A Year of Tough Challenges...and Huge Opportunity.rtf                 | Zafirovski |
| P680: 2008_03_26 Nortel CEO Email MZ - ZMAIL State of the Business and The Road Ahead.rtf                    | Zafirovski |
| P688: 2008_05_05 Nortel CEO Email MZ - ZMAIL Making 2008 a Breakout Year.rtf                                 | Zafirovski |
| P694: 2008_05_20 Nortel CEO Email MZ - Nortel Response to Tragedies in Asia.rtf                              | Zafirovski |
| P719: 2008_06_16 Nortel CEO Email MZ - The Power of Momentum.rtf   | Zafirovski |
| P725: 2008_08_01 Nortel CEO Email MZ - ZMAIL Driving Growth and Profitability.rtf                            | Zafirovski |
| P729: 2008_09_17 Nortel CEO Email MZ - ZMAIL Shaping a Clear Strategic Path for Growth and Profitability.rtf | Zafirovski |
| P731: 2008_09_18 Nortel CEO Email MZ - The Path Forward.rtf  | Zafirovski |
| P734: 2008_11_10 Nortel CEO Email MZ - Moving Forward.rtf  | Zafirovski |
| P736: 2008_11_18 Nortel CEO Email MZ - The Path Ahead.rtf  | Zafirovski |
| P743: 2008_12_18 Nortel CEO Email MZ - Moving Nortel Forward.rtf   | Zafirovski |
| P745: 2009_01_14 Nortel CEO Email MZ - Mike Zafirovski Message to Employees.rtf                              | Zafirovski |
| P748: 2009_01_16 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P750: 2009_01_23 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P751: 2009_01_30 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P752: 2009_02_06 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |

| <b>CEO Email (ATLAS.ti number, date, CEO, Email title)</b>   | <b>CEO</b> |
|--|------------|
| P755: 2009_02_13 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P758: 2009_02_25 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P761: 2009_03_02 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P765: 2009_03_12 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P767: 2009_04_03 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P768: 2009_04_09 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P772: 2009_05_11 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P779: 2009_06_19 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P784: 2009_07_20 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P788: 2009_07_21 Nortel CEO Email MZ - Organization Notice.rtf   | Zafirovski |
| P789: 2009_07_22 Nortel CEO Email MZ - Statement on Wireless Asset Auction.rtf   | Zafirovski |
| P791: 2009_07_25 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P797: 2009_08_10 Nortel CEO Email MZ - Message to Employees.rtf  | Zafirovski |
| P798: 2009_08_10 Nortel CEO Email PB - Today's Organizational Announcement.rtf   | Binning    |
| P804: 2009_09_14 Nortel CEO Email PB - Nortel Selects Avaya as Successful Bidder for Enterprise Solutions Business.rtf | Binning    |
| P812: 2009_10_07 Nortel CEO Email PB - Today's Announcement.rtf  | Binning    |
| P822: 2009_11_13 Nortel CEO Email PB - Nortel concludes sale of CDMALTE Access to Ericsson.rtf                         | Binning    |
| P826: 2009_11_16 Nortel CEO Email PB - Q3 2009 Financial Results.rtf   | Binning    |
| P830: 2009_11_23 Nortel CEO Email PB - Today's Announcement.rtf  | Binning    |
| P837: 2009_11_25 Nortel CEO Email PB - Today's announcement.rtf  | Binning    |
| P841: 2009_12_08 Nortel CEO Email PB - Today's announcement.rtf  | Binning    |
| P844: 2009_12_18 Nortel CEO Email PB - Today's Announcement.rtf  | Binning    |
| P850: 2009_12_23 Nortel CEO Email PB - Today's Announcement.rtf  | Binning    |
| P860: 2010_02_24 Nortel CEO Email PB - Today's Announcement Related to the CVAS Business.rtf                           | Binning    |

## APPENDIX B. CEO Email Samples

### Frank Dunn

**From:** FrankDunn, OfficeOf [NASH:8442:EXCH]  
**Sent:** October-07-02 3:07 PM  
**To:** All Nortel Networks Employees  
**Subject:** OUR RESOLVE AND WILL TO WIN

Audience: All Nortel Networks Employees

Fellow Employees,

There's a sentiment I've been hearing a lot recently in e-mails and conversations across the company. It was nicely summed up in an e-mail I got from an employee last week:

"Hey Frank, we don't seem to be getting the credit we deserve for all the hard work and progress we've made during the past year...a lot of us in my group are feeling wounded by negative reports that would have us believe the industry and the company are going to the dogs. It's frustrating and demoralizing. It's leaving many of us feeling a little depleted. Isn't it time for us to get more aggressive in communicating our story -- the progress we've made and how we're building a strong market position?"

The answer to that question is "yes." So let me start with a few salient facts.

#### THE STATE OF NORTEL AND THE INDUSTRY

Despite the fact we're going through the worst slowdown in the industry's history, we are making significant progress, and you have my personal assurance we're going to be more aggressive in getting our story out. The constant second-guessing, wrong-headed speculation, and pessimistic assessments of people outside the company cannot continue to go unanswered. I've recently given a series of interviews making it clear we've bolstered the company's staying power and are executing a sound strategy to rebuild our foundation for the future.

We've made solid progress in terms of our top priority -- returning the company to profitability before the end of June 2003 -- particularly when it comes to reducing our cost structure. As you know, I'm driving to a breakeven business model at less than US\$2.6 billion in quarterly revenue.

As for our long-term viability, the facts speak for themselves. We expect to end this year with more than \$3 billion in cash and to have a breakeven and better business model for 2003. I believe we have the ability to weather a downturn.

But there's more to our story than financials:

\* We have streamlined and simplified our corporate structure as part of our performance-based business model, a structure tightly aligned with our customers through four clear, accountable business units -- Wireless Networks, Wireline Networks, Enterprise Networks, and Optical Networks.

\* We have a powerful vision of network transformation driving our innovation. We're enabling the multiple networks of the past to converge into single packet-based networks that are more

intelligent, cost-effective, and easier to manage. Make no mistake: being a key player in this transformation is a big opportunity for us, one you'll be hearing a lot more about very soon.

\* We have the right product mix and product quality to generate cost savings and profitable revenue streams for service providers and to deliver value-added capabilities for enterprises.

\* Most important, underpinning it all, we have a base of talented employees. I've said many times that our customers tell us we have the best people in the business. It bears repeating. You remain our strongest competitive advantage.

We need to stay focused on these real and lasting strengths and not be distracted by misguided speculation and misinformation circulating in the market and in our own rumor mills. We're rebuilding our foundation for the future and we need to concentrate.

I'm not saying we should be blind to realities. No one knows better than you how tough things are right now for our industry and our company. It's a frustrating, demoralizing time in telecom. Hardly a week goes by without another round of news about stagnant revenues, falling stock prices, bankruptcies, or corporate scandals. But the state of our industry and the state of Nortel Networks are not as gloomy as you so often hear.

Yes, it's going to take new thinking for the industry to regain its momentum. Yes, we all need to address new challenges. There are legitimate questions about the right business models, the demand for products and services, where investment will come from to fund future growth, and what will get the growth engine humming again.

But we should be inspired by these challenges and by the rewards of getting the industry and Nortel Networks moving ahead. We can't allow the negative news and speculation about our viability to destroy our optimism or our faith in our industry or our company.

#### RESOLVE, CONFIDENCE, AND STRAIGHT TALK

On September 25, I had the opportunity to address a public policy forum in Washington attended by regulators and government and industry representatives. One of my key messages was that everyone associated with telecom has to show resolve to make the changes needed to get the full power of communications back to work, driving economic growth and innovation.

In the same way, we have to demonstrate resolve, confidence, and the will to win to ensure Nortel Networks remains an industry leader, an innovator, and a company that's synonymous with the future of telecom. Our resolution and will to win must be grounded in consistency and unity of purpose, strong and visible leadership, and a total conviction that rebuilding for the future is a mission worth fulfilling and worthy of our very best efforts.

Resolution, confidence, willpower, and unity of purpose are the means to get us through the current downturn and to keep our spirits up as we look to the longer term. It's critical to keep our spirits up. Very little is achieved without confidence in the future and a spirit of great performance.

I'd like to summarize our situation by providing straight, to-the-point answers to what I think are the key questions on people's minds today:

\* Do we have staying power? Yes we do.

\* Do we have the financial strength to execute our business plan? Yes we do.

\* Are we winning new business? Yes we are.

\* Are we making progress in restoring profitability by June 2003? Yes we are.

\* Do we have a strategy for rebuilding for the future? Yes we do, and we're making progress. Let me assure you our business model is positioned for success, not bankruptcy.

\* Is it time for us to be more aggressive in telling our story? Yes it is, and our communications will shift into overdrive as we announce third quarter results on October 17.

I believe in the long-term success of this company. I'm charged up and energized by the progress we're making. We've managed to do more with less and are meeting industry-wide challenges head on. With your help, we've become more efficient, more disciplined, and more focused on customer needs.

We continue to deliver value to our customers, and we will not let anything deflect us from this mission.

My confidence in your abilities is unwavering. Your talent, ingenuity, hard work, and dedication are why we continue to succeed. Your efforts day in and day out are giving us a strong foundation for the future. Don't ever overlook the significance of your personal contributions, and always maintain your resolve and will to win. Above all, don't stop believing in our industry and don't stop believing in Nortel Networks.

As we move ahead, we need you to help us communicate the facts about Nortel Networks. Neither I nor the senior leadership team can do it alone. We're always looking for feedback, so feel free to send me an e-mail if you have any questions or comments or suggestions on how we can improve our communications within the company. Thanks.

Frank Dunn

### William Owens

**From:** CEO, OfficeOf [NASHF:8442:EXCH]  
**Sent:** December-17-04 11:27 AM  
**To:** The People of Nortel  
**Subject:** A Challenging but Promising Year

Audience: The People of Nortel

It's been a few months since I last wrote to you at length, and as we near the end of what I'd characterize as a "challenging but promising year," I want to share my thoughts with you. When I joined you, I realized that one of the great strengths of Nortel was its people, and my thinking on this is unchanged. You have stuck with the company during these most difficult of times. We are very near the end of our restatement period, and we are now on the cusp of a very special time for Nortel as we enter 2005. A lot has happened.

Importantly, our customers have been very loyal to us, and our business is solid. I have visited with most of our major customers. While they watch the progression of our restatement, they have the faith that we will handle it correctly, that we will be there for them for the long-term, and that we will continue to develop and support them with the quality products we've brought them for decades. Sometimes, keeping them with us hasn't been a given. Our competitors have attempted to benefit from our problems, and many of them have been aggressive in their



attempts to do so. But through your efforts we have, as far as I can tell, held onto all existing contracts and have seized some new opportunities.

But I will tell you that competition has been difficult in our marketplace, not only for us but for our competitors. We have seen consolidation of major telecoms companies, which gives them more profound bargaining power, and we are seeing the real presence of the new Chinese competitors, Huawei, ZTE and UTStarcom. Nevertheless, we are doing well even through the difficulties of the last nine months.

Bill Kerr and our financial teams have done a splendid job and have now brought us to a point that we can see the light on the restatement finality. We have also enlisted Accenture to help us establish the process and install SAP throughout our global Nortel organization to make us a truly world-class Finance organization.

As you know we have announced that we expect to file our financial statements for 2003 and for the first and second quarter of 2004, commencing January 10, 2005, and the financial statements for the third quarter of 2004 as soon as practicable thereafter. I know that there has been great frustration with the delays. As you can imagine, I am one of those most frustrated (and embarrassed) by the delays. I can tell you, though, that the most important thing for us to do is to do them RIGHT! Nothing would be worse than not completing them thoroughly and accurately, and later having to redo them again. We must start from a fully audited, accurate basis as we go into 2005, and we will!

Having said that, MY principal focus is on doing business! Many important initiatives are now in process. As you know, we have brought Clent Richardson on board as our Chief Marketing Officer and Dion Joannou as our Chief Strategy Officer. We have been especially well-served by their efforts. Together with the rest of the senior team, we are working on a number of strategic initiatives from partnerships to acquisitions -- many of which are "company changing." As time goes on you will be more aware of these, but you're seeing signs already as we closed on the agreement for "securing the Internet" with new partner Symantec. Clent has been of central importance with many new and exciting developments, including our ingenious "This is the Way" campaign. He has been on the road continually, speaking both internally and externally about our new directions and our new messaging. Dion, Clent, Brian McFadden and Albert Hitchcock have also been working with the rest of the senior team to explore new futures -- looking forward and determining whom we need to partner with and where Nortel will place its bets. This executive team will be more and more visible as we chart our path to a new Nortel.

Services, one of our strategic new initiatives, is converging on a business that will involve significant revenue in the future. Our Federal business is well on its way to a substantial acquisition that will put us on the map quickly in this most important \$60B market. With Security, we are now in a position where we can genuinely "see the future" as we provide (with Symantec) a solution set that will involve an architecture for "securing the Internet." Our broadband access solution with our partners Calix and ECI has resulted in nine wins in the last nine months, and while it will be a challenge as competition stiffens, I think this will be a very important initiative in 2005. All of our business presidents have been leading our business to a very good close for 2004.

We are well on our way to resetting the business model with the reduction of over 3,200 of our people. This has been painful for me and all of us. These people are in general very respected employees, and we will miss them. By the end of the year about 2,200 will have departed, and we will complete the remaining 1,000 reductions in the first few months of 2005. The senior management team has spent considerable time to develop the 2005 plan, and we are optimistic

about the new year. We must now commit our efforts to closing 2004 successfully and making 2005 the year that will be the demonstration of our successful transition.

As for me, I have been on the road a lot and have enjoyed visiting the great majority of you in your locations. I have also taken important decisions on Ethics and Integrity. Scot McCauley has done a superb job in setting up the position of Corporate Ethics and Compliance Officer (CE & CO), which will report in to the Chairman of Nortel and to me. Scot has put in place a core organization, charter, and an understanding of how we can ensure that our organization is standing at the forefront in this important area. Scot is the acting CE & CO, and we are indebted to him for his work on our behalf.

I've also been traveling to be with the CEOs of our major customers around the world, many of them multiple times. I tell analysts that I spend 40 percent of my time on the activities associated with the restatement and the actions to make our financial accounting first-class going forward, 40 percent on implementation of 2004 business and development of the 2005 business plan, and 20 percent on the strategy for the future. I meet with our 16 senior executives two hours a week, and we have an in-person meeting for a full day every other month. With our executive team, I'm spending a lot of my time on the technology and geographic strategy as we see (1) Asia and China emerging, (2) the marketplace in significant turbulence as Carriers convert to VoIP and evolve to broadband access, and (3) our Enterprise customers starting to appreciate the fact that their business efficiency can be truly enhanced with "solution packages." We are well placed and very well prepared to play successfully in this changing marketplace.

Also, I have spent a lot of time on "processes." I've brought the consulting firms of Bain and McKinsey on board to help us study the processes of (1) administering R&D for optimal returns and (2) overall cost reduction in the \$6B of business we do with our vendors. We have also done a lot of work on a CEO dashboard (an approach to look at how we roll up the principal parameters to allow me and the Senior Leadership Team to manage our business).

Our board of directors is standing strongly behind our efforts from the restatement to the broadest new initiatives. We are fortunate to have such a special group of men and women with us as we transition this company. I know that if you could be present in the boardroom, you would share the great satisfaction I have in their stalwart presence for the best interests of Nortel. In over 80(!) board and committee meetings in the last year, they have shown a special dedication and commitment to doing the right thing for us and our shareholders. When you see one of our board members, I hope that you'll express your thanks for their service.

Much has happened, much has been done, and we are on a journey that will put this company where it should be... at the forefront of our marketplace. I think of you, our greatest asset, a lot. You have remained loyal without condition, and you have delivered well throughout this period. I have learned of the many wonderful things that you do to make our business successful, and you embody the credo "capability with character." You are the major part of my satisfaction as the CEO of this great company. And under Bill Donovan's Human Resources leadership, we will continue the focus on our employees -- moving forward with people programs, leadership training and a focus on diversity in 2005.

I extend to you and your families my warmest wishes for a blessed Holiday Season.

This is the Way. This is Nortel.

Bill Owens

**Mike Zafirovski**

**From:** CEO, OfficeOf (NASHF:8442)  
**Sent:** July-17-06 11:17 AM  
**To:** All Nortel Employees  
**Subject:** Impressions from the Road

We spend a lot of time in the corporate world talking about our responsibilities to our shareholders, and about generating shareholder confidence and value. I have been on the road, as usual, over the last few weeks. But my participation in a few, very key activities has really made the challenges and the opportunities we face in earning that confidence and delivering that value much more tangible.

It began with a day spent with a hundred or so of our most important Enterprise customers at our annual CIO Forum. I then made the rounds to potential investors for the \$2B debt offering we recently closed. More recently, I stood up and talked to hundreds of our most engaged shareholders, in the flesh, at our Annual General Meeting in Toronto. And most recently, I began visiting and talking with some of our most important customers, the ones that I have not previously been able to engage due to my separation agreement with Motorola.

Armed with the keen insight these impassioned individuals have provided to us, I remain confident that we're on the right track with our short- and long-term plans. Let me share with you some of my impressions, and more importantly, the realities of our current situation. It is easy to get frustrated with our progress and/or to expect that our company can become hugely successful overnight. The reality of our starting point is different (note my comments below on the investor road show). But make no mistake, I am very confident that we are moving forward, and the magnitude and speed of our progress will be dependent solely on the sum of all of our performances.

Here then are my impressions and key takeaways:

Let me start with my favorite stakeholders, the customers. They remain firmly committed to Nortel and the company's success. It would be disingenuous to tell you that there are no skeptics out there. There are, both for some of our performance issues -- quality, delivery, and plan of record for new products and releases -- and for our longer term plans. But the vast majority has expressed strong confidence that we are doing the right things not only to put this company back on track, but also to deliver on a vision of convergence that will provide them with the mobility and productivity they need to propel their business. Our customers want us to succeed, and they are really pulling for us. We can't ask for anything more. But, of course, we have to deliver for them, including very specifically on the identified operational and product issues that are receiving appropriate investments and high visibility. Non-performance for our customers is not an option.

Let me move to the investors in the "high yield" market, the ones who invested in our \$2 billion debt offering. This is not a warm and fuzzy crowd. They provide financing to what are considered high-risk companies, and of course, they charge high rates. For your information, at our current credit rating of B-, we are fifteen notches below the top AAA rating, and only three notches above the lowest CCC- rating. Companies with high ratings can typically raise funds more quickly and easily, maybe with a conference call and a brief road show. For our team, including CFO Peter Currie, Treasurer Kate Stevenson, Investor Relations leader Terry Glofcheskie and me, it took seven full working days traveling to many locations for more than 25 meetings with individual investors, five group presentations, and three teleconferences. We presented our story, and we tried to answer all their questions, including the three most frequently asked ones:

1. Are you really committed to profitability and to the \$1.5 billion business transformation initiative?
2. Are you really committed to turning cash flow positive -- which you haven't achieved since 1998? And,
3. With all that has transpired in your company and its impact on your employees, are they committed for the big job ahead?

We answered the questions in a straightforward and transparent way. The results of the road show were good. We secured the \$2 billion in senior notes that will give us the additional financial flexibility we need in the coming years. We had an excellent track record in converting our meetings with investors into orders. They had confidence in our story. But I look forward to the day when we are healthy enough to deal with the "low yield" crowd.

Lastly, what I've heard from our shareholders. We are starting to make progress in earning back their confidence (and I know you can't tell that by looking at our stock price, not yet anyway). Last year's AGM was quite contentious. Shareholder lawsuits were very much in the air; we were in the middle of financial restatements; and we hadn't reported our earnings on a timely basis. I found it quite humbling to talk to a number of individual investors at this year's AGM who are still reeling from post-bubble losses and then our restatements. They asked tough questions ranging from what happened to their investment to my resolve and long-term commitment to the company. The last question was much easier to answer -- they and you have my full commitment. At all the meetings with our customers, the debt investors and our shareholders, I told the story that we've developed together and that we are ALL now in the process of implementing.

I told them that it will be a three-to-five-year process to bring us back to greatness. That we are in month eight of that process, and it will be a combination of short- and long-term actions to make it happen. I explained that we have a roadmap, and that we are intensely focused on executing. It's a plan that you've helped create and that you're familiar with:

- Our conviction is that we can and will re-create a great company. Our commitment is that we will be transparent, that we will show unmatched drive, and that we will be driven by a high "say/do" ratio.
- Our litmus test is the financial strength of the company. We are aiming for double-digit margins, strong cash generation and credit rating, consistent revenue growth that's better than the market, and a better share price.
- There's no silver bullet on the near horizon that will promise in one swoop to transport this company past our challenges. Our transformation is a careful mix of organic growth, continued commitment to innovation and R&D, our extensive ecosystem of partnerships and other opportunities designed to maximize our effectiveness, and successes in the market.

I was impressed, quite frankly, by how well this straight-forward approach was received and by the confidence that our shareholders are still willing to give us to deliver on these promises. Our slate of directors was accepted by overwhelming majorities, and we were given permission for a reverse stock split to make our shares more attractive to institutional investors.

Over the past few weeks, we have made a tremendous amount of progress. We have also made some difficult decisions that are key to our roadmap, namely the changes to the North American pension plans and the reductions in managerial and other positions. They will affect many of you who have been giving your best efforts toward the re-creation of this great company. Thanks to all of you who provided me with candid feedback concerning these changes. The decisions were not made quickly or easily. But in the end, they are essential to our competitiveness in this industry,

and they are a measure of the resolve that our customers, the investment community, and the shareholders I met at the AGM expect from us.

As always, I thank you for all you're doing as we continue to drive the momentum for this company's transformation. The period ahead of us is very important. To use a sports analogy, I am looking forward to active participants rather than idle spectators. And please, continue to share your ideas, both through the Own It! program as it ramps up and directly through emails to me.

Mike Z

### Paviter Binning

**From:** PaviBinning, OfficeOf (TORWM:0197)  
**Sent:** August-10-09 9:46 AM  
**To:** All Nortel Employees  
**Subject:** Today's Organizational Announcement

Today Nortel announced important organizational changes, including a new organizational structure. These changes are a critical step on our path to maximizing value through the sale of our businesses. The new structure will ensure we continue on the direction that has been laid out, effectively close sales transactions as they occur and enable a smooth transition to the purchasers of our businesses.

With sale agreements for our CDMA and LTE Access business in place, as well as a stalking horse agreement for our Enterprise business, the Board of Directors decided the time was right to transition to a smaller Board of Directors and a streamlined management team focused on driving key areas of the business. We therefore announced today the departure of President and CEO Mike Zafirovski and the reduction in size of our Board of Directors from nine to three members. As well, Executive Vice President, Corporate Operations, Dennis Carey is also leaving Nortel. I would like to thank Mike, our outgoing board members, and Dennis for their tireless dedication to Nortel. We wish them all the very best for the future.

Furthermore, we have also decided to further decentralize corporate functions. All corporate roles will transition into either specific business units, Nortel Business Services or the newly formed Corporate Group. The new organizational structure, effective concurrently with the changes noted above, will consist of four pillars:

- **Nortel's business units** – Wireless Networks, Enterprise Solutions, Metro Ethernet Networks, Carrier VoIP and Application Solutions and the LG-Nortel joint venture. These will report to me in my role as Chief Restructuring Officer and Chief Financial Officer. Also reporting to me is the Business Transformation team led by Bill Donovan; Darryl Edwards will work with me to ensure we remain focused on our Global Carrier customers, and he will also play a leadership role in EMEA.
- **The Mergers and Acquisitions teams** will continue to report to Chief Strategy Officer George Riedel.
- **Nortel Business Services (NBS)** will continue to provide efficient and flexible support for the ongoing shared needs of Wireless Networks, Enterprise Solutions, Metro Ethernet Networks, Carrier VoIP and Application Solutions and the LG-Nortel joint venture. NBS

consists of Human Resources Shared Services, Finance Shared Services, Information Technology, Global Real Estate, and Procurement and Manufacturing Support. Joe Flanagan will continue to lead NBS.

- **A core Corporate Group** is established that will be primarily responsible for the management of ongoing restructuring activities during the sales process as well as post business dispositions. This group will include the following teams: Treasury, Legal, Corporate Control, Tax, Pensions, Government Relations, Corporate Communications, Corporate FP&A and Internal Audit. The responsibilities and structure of the team will evolve as we progress through the overall restructuring efforts. John Doolittle will lead this group.

As stated in the press release, the company will be seeking court approvals for Ernst & Young Inc., the company's Monitor, to take on an enhanced role with respect to the oversight of the business, sales processes and other restructuring activities under the CCAA proceedings. Further, Nortel is in the process of identifying a principal officer for the Nortel companies in U.S. Chapter 11 proceedings who will work in conjunction with the U.S. Creditors' Committee (UCC), ad hoc bondholders group and the Monitor. George, Joe, John and I will report to the NNC and NNL Boards of Directors, the Monitor and the proposed U.S. principal officer.

The UK Administrators, who have ultimate executive responsibility for the 19 EMEA companies to which they are appointed, will assess the need for alterations to the EMEA management structure to align with these changes.

Over the next few days, OSM will be offline while the HR team updates the database. In the meantime, I encourage you to review the organizational charts, which provide the structure for the new organization. Teams that have been moved or changed as a result of today's announcement can expect to hear from their leaders over the course of the week.

These are challenging times for everyone in the company, and I want to assure you that we will continue to share information and provide more clarity as we move forward. There is much work to be done in the coming months to ensure we continue to support our customers, place the businesses into safe hands and importantly protect as many jobs as possible.

Thank you for your on-going efforts.

Pavi Binning

### APPENDIX C. CEO Narratives First Order Concepts

|  |  |  |
|--|--|--|
| Accountability, ownership                    | Confidentiality, IP                                | Employee engagement                              |
| Actors - Analysts & Shareholders             | Core Values (corporate)                            | Employee recognition                             |
| Actors - Board                               | Corporate behaviour                                | Employee satisfaction                            |
| Actors - CEO                                 | Corporate CA - actual use of term                  | Employee survey                                  |
| Actors - Customer                            | Corporate capability, asset, competitive advantage | Employee thank you                               |
| Actors - Economy                             | Corporate Challenge                                | Employees  |
| Actors - Employees                           | Corporate Culture                                  | Ethics and compliance                            |
| Actors - Industry                            | Corporate Culture, Vision, Identity, Reputation    | Execs (Sr), cabinet, team                        |
| Actors - JVs                                 | Corporate Governance                               | Execution of the work                            |
| Actors - Media                               | Corporate history                                  | External non-market event                        |
| Actors - R&D                                 | Corporate marketing, brand mgmt                    | External speculation about company's success     |
| Actors - Sales and channels                  | Corporate Mission                                  | Filing Expectations (when, delays, etc)          |
| Actors - TMT                                 | Corporate operations, NBS                          | Financial (S)G&A                                 |
| AGM - Reference to                           | Corporate opportunity                              | Financial accountability                         |
| Alignment                                    | Corporate planning (op rhythm)                     | Financial Balance sheet                          |
| Analyst Calls                                | Corporate Reputation                               | Financial Book2Bill FIX by checking book-to-bill |
| Analyst calls, comment to analyst            | Corporate strategy, plan, S2                       | Financial Break-even                             |
| Analyst calls, direct comment about events   | Corporate synergy                                  | Financial Capital / equity                       |
| Analysts/investors/events, reference to      | Corporate Vision                                   | Financial Cash flow / management / position      |
| Audit, audit reviews, controls               | Corporate Vision Infostructure                     | Financial Cost reduction, spend                  |
| Bankruptcy                                   | Corporate, social responsibility                   | Financial Cost structure, budget, S4             |
| Board member announcement                    | Customer's support, loyalty                        | Financial Credit / support facility              |
| Board members thank you                      | Customer benefits                                  | Financial Credit rating, downgrade               |
| BOD engagement                               | Customer contracts, wins                           | Financial Creditor protection, process           |
| Bondholders                                  | Customer engagement, relationships                 | Financial Creditors, committees                  |
| Business model                               | Customer needs                                     | Financial Debt                                   |
| Business strategy                            | Customer order backlog FIX                         | Financial Deferred Revenue                       |
| Business Transformation                      | Customer orders                                    | Financial Earnings or loss                       |
| Business units, LOBs                         | Customer pricing                                   | Financial  |
| CEO Assurance                                | Customer responsiveness                            | flexibility/strength/model                       |
| CEO commitment                               | Customer satisfaction                              | Financial Liquidity                              |
| CEO confidence                               | Customer spending                                  | Financial Margin, gross, operating               |
| CEO emotion negative                         | Customer thank you                                 | Financial market event                           |
| CEO Emotion positive                         | Customer value                                     | Financial market reference                       |
| CEO Employee Expectation-request             | Customers  | Financial Objectives (FIX)                       |
| CEO ref to self                              | Decisions, decision making                         | Financial performance                            |
| Change                                       | Decline  | Financial Reporting                              |
| Changes plus                                 | Difficult situation                                | Financial Restatement activity                   |
| Channels, resellers                          | Diversity  | Financial Results (check that this works)        |
| Code/Guide Bus conduct/ethical bus practices | Divestiture, sale, sale process                    | Financial Results Accuracy                       |
| Collaboration, teamwork                      | Employee attributes-behaviours                     | Financial Return to profitability                |
| Commitment, devotion, passion, determination | Employee career dev, trg, SI                       | Financial Revenue                                |
| Competitor, competition                      | Employee Communications                            |  |
| Confidence                                   | Employee Comp, \$, rewards, benefits, pension      |  |
|  | Employee Empowerment                               |  |

|                                       |   |  |
|---------------------------------------|---|--|
| Financial Revitalization (?)          | Organizational Identity                           | Success, winning                                       |
| Financial transformation              | Outlook negative                                  | Suppliers, vendors                                     |
| Financial transparency                | Outlook positive                                  | Supply chain   |
| Focus                                 | Own It  | Tech reputation  |
| Forecast/guidance                     | Partners LG Joint Venture                         | Technology   |
| Global economy                        | Partners, JV, strategic relationships             | Technology patents                                     |
| Global, world wide                    | Performance                                       | Thought leader(ship)                                   |
| Government                            | Priorities  | Trust, honesty   |
| Growth, speed                         | Priority initiative BIG                           | Uncertainty, caution                                   |
| Guidance adjusted down                | Priority initiative                               | Workforce and reductions                               |
| Guidance adjusted up                  | CashCostRevenue                                   | Z - AC Presentation Quote 1 - FD                       |
| Industry Acquisitions, consolidation  | Process, procedures, guidelines, programs         | Z - AC Presentation Quote 2 - WO                       |
| Industry challenge                    | Product introduction, TTM,                        | Z - AC Presentation Quote 3 - MZ                       |
| Industry data                         | Productivity                                      | Z - AC Q&A Quote 1 - FD                                |
| Industry opportunities                | Products/solutions portfolio, S3 (Nortel)         | Z - AC Q&A Quote 2 - WO                                |
| Industry position, Nortel's?          | Profitability                                     | Z - AC Q&A Quote 3 - MZ                                |
| Industry reference (condition?)       | Progress  | Z - Annual Letter - Subtitle CODE                      |
| Innovation                            | Quality, 6 sigma, reliability                     | Z - Annual Letter 1 - Title                            |
| Integrity                             | R&D   | Z - Annual Letter 2 - Salutation                       |
| Investment (spend)                    | Ref to event - future                             | Z - Annual Letter 3 - Opener                           |
| Key success factors                   | Ref to event - past                               | Z - Annual Letter 4 - Close                            |
| Leader bio, character, contribution   | Ref to time period - future                       | Z - Annual Letter 5 - Comp Close                       |
| Leader thank you                      | Ref to time period - past                         | Z - Email 1 - Title                                    |
| Leadership                            | Reference to ext experts                          | Z - Email 2 - Salutation or 1st line                   |
| Leadership change/resp                | Reference to more information                     | Z - Email 3 - opening paras                            |
| Leadership Managers                   | Reference to other texts                          | Z - Email 4 - closing paras                            |
| Leadership Meeting                    | Regions   | Z - Email 5 - Comp Close or signature block (if no CC) |
| Leadership reporting structure / team | Regulatory & Legal                                | Z - Media Quote 1 - FD                                 |
| Leadership Value Forceful Optimism    | Regulatory / requirements, policies               | Z - Media Quote 2 - WO                                 |
| Leadership Values                     | Restructuring, renewing, rebuilding               | Z - Media Quote 3 - MZ                                 |
| Legal, litigation, settlements        | Sales Conference                                  | Z - News Release Quote 1 - FD                          |
| Long-term outcome, perf, results      | Sales, sales force, conference                    | Z - News Release Quote 2 - WO                          |
| Market achievements                   | Services, software, apps                          | Z - News Release Quote 3 - MZ                          |
| Market share / position               | Shareholder thank you                             | Z - News Release Quote 4 - PB                          |
| Markets                               | Shareholder, value, benefits, confidence, support | Z - Shareholder Letter 1 - FD                          |
| Mechanisms of Strategy                | Simplification, streamlining, efficient           | Z - Shareholder Letter 2 - WO                          |
| Media engagement                      | Stakeholders, stakeholder value                   | Z - Shareholder Letter 3 - MZ                          |
| Media reference                       | Stock, share price, stock exchange                |  |
| Media support for firm                | Strategic Issues                                  |  |
| Network Transformation                |   |  |
| NR - Material reference               |   |  |
| Operations, excellence                |   |  |
| Organizational (re)structure          |   |  |



## APPENDIX D. Pilot Study Workshop Letter

### **Strategic Discourse Days/ Les journées du discours stratégique (HEC – Oct 31, 2011)**

Gwyneth Edwards, PhD Candidate (JMSB)  
Data Workshop Submission

The following submission is an extract of my thesis on Strategy Texts and Path Dependence. In my thesis I am investigating the role of strategy texts in organizations and how they influence the organization's evolution. The thesis investigates three main questions (which I am still developing):

1. What is the content and form of CEO/employee strategy texts and how does it change over time? In this question, I will investigate the content and form of 70+ CEO strategy texts (emails) that were issued to employees over a 4 year period, including employee (retrospective) sensemaking of the strategy texts.
2. How do the media influence a firm's strategy texts? In this question, I will study the influence of media texts on the evolution of the firm's internal strategy texts, using the CEO Emails and articles published in the media.
3. How do strategy texts contribute towards path dependence? Here I will study the infrastructure of strategy texts that were produced over a 4 year period, by the organization, to include the CEO Emails, annual reports, press releases, interviews and keynote addresses. I am interesting in understanding the interconnection of texts over time and space.

The thesis is a narrative study on the use of strategy texts in organization, and the role of these texts in path dependency. It is a longitudinal study on the use of texts, and therefore I consider the data to be process data. I will use a grounded theory approach, whereby I will perform comparative analysis on a large number of small units of data (text) to create descriptive categories. I will then categorize them in ways to elucidate the phenomenon. The thesis is a single case study, using embedded units of analysis. The primary unit of analysis is the strategy text. The research site is Nortel, with a particular focus on the period in which Mike Zafirovski was CEO (November 2005 to August 2009). I intend to use critical discourse analysis as the methodology and Atlas TI software.

For this workshop, I am grateful for input on the first research question, specifically the analysis of the CEO strategy texts. I have included 3 examples of the emails, for discussion purposes.

Thank you for your input. I'm looking forward to the discussion.

Sincerely,  
Gwyneth  
[G\\_edward@jmsb.concordia.ca](mailto:G_edward@jmsb.concordia.ca)

## APPENDIX E. Nortel Event History 2002-2010

**Method:** This event history is based on information found within reports filed by Nortel Networks Corporation on the System for Electronic Document Analysis and Retrieval (SEDAR). All Canadian public companies use SEDAR to file legal documents stipulated by the Canadian Securities Administrators. Nortel Networks filed documents for both Nortel Networks Corporation and its principal operating subsidiary, Nortel Networks Limited, in two separate sections on SEDAR. The following history uses the Nortel Networks Corporation documents and not the Nortel Networks Limited documents; however, variance (minimal) between these two documents is limited only to the financial reports, from 2005 onwards. The documents were sorted based on date and then type. Each document was read and summarized (in the event database, an excel document). The following event history, by quarter, is based on a review of the document summaries.

Note: Nortel's fiscal year is the same as the calendar year. All amounts in US dollars unless indicated otherwise. Stock price history accounts for the 10:1 reverse stock split affected on December 1, 2006

### Nortel Corporate History

- 1985 - Northern Electric and Manufacturing Company, Limited, a subsidiary of Bell Canada
- January 5, 1914 – The Northern Electric Company, Limited
- March 1, 1976 – Northern Telecom Limited
- April 29, 1999 – Nortel Networks Corporation
- January 4, 1982 – corporate amalgamation of wholly-owned subsidiaries
- March 7, 2000 – Incorporation of New Nortel Inc.
- May 1, 2000 – New Nortel Inc. divested from Bell Canada Enterprises (BCE), Inc. and becomes Nortel Networks Corporation. Nortel Networks Limited becomes principal operating subsidiary.

### 2001 Summary

- By year end, organized into three businesses: Metro and Enterprise Networks, Wireless Networks and Optical Long-Haul Networks.
- Gross profit fell from \$12.8B in 2000 to \$3.1B in 2001, and gross margin from 25.1% to 18%.
- In response to slow growth within the industry and overcapacity of networks, focused on streamlining operations
- Workforce:
  - January 2001: 92,900 employees.
  - December 2001: 51,600 employees
  - Located around the world in 276 building sites. (18,700 USA; 13,700 Canada; 13,700 Europe; 5,500 other).
  - Goal to reduce workforce to 48,000 in 2002

- Liquidity:
  - On June 14, 2001, entered into a 364-day \$2B credit agreement. In December, reduced the size to \$1.575B and extended the term to December 13, 2002.
  - On February 8, 2001, completed an offering of \$1.5B (6.125%) notes due February 15, 2006.
  - On August 15, 2001, completed a private offering of \$1.8B (4.25%) convertible senior notes, due September 1, 2008
  - Amendments to credit agreements now contain covenants requiring minimum net worth and EBITDA thresholds
  - Total cash obligations at year end: \$2.7B long term debt; \$2.5B outsourcing contracts; \$1.2B operating leases
- Businesses: discontinued access solutions operations; outsourced non-strategic manufacturing and sold non core business for \$500M in cash inflows.
- Intangible assets: wrote down \$2B

### 2002 – Q1

- Note: Frank Dunn became President and CEO in November 1, 2001
- Reports 2001 results, significantly lower than 2000
- Holds investor conference in New York City; provides outlook for 2002.
- Projects return to profitability by Q4 2002, but concerned customer spending even slower than expected, effecting Q1 outlook.
- Declares dividends on Series 5 & Series 7 preferred Class A shares, consistently, until May 2008.
- Amends registration statement on 4.25% convertible senior notes
- Calls AGM for April 25<sup>th</sup> in Halifax, Nova Scotia
- Terry Hungle (CFO) resigns after trading outside of authorized trading window; Frank Dunn takes on interim role of CFO (in addition to being President and CEO).
- Class action lawsuit launched against Nortel for material misrepresentation in investment plan
- Office of the Chief Executive (including Chairman, Red Wilson, Frank Dunn and John Roth) dissolved; Frank Dunn considered ready to lead company.
- William Owens joins Board of Directors

### 2002 – Q2

- Moody lowers ratings on securities to below investment grade, leading various Nortel liens, pledges and guarantees to come into effect; Nortel blames industry conditions but states that downgrade possibility was factored into liquidity plans.
- Q1 results down 50% since Q1 2001, points to customers' resolve to contain spending
- Must re-file financial statements for 3-year period ending Dec 2001 based on Moody downgrade. Must provide supplemental financial disclosure for subsidiaries that guaranteed credit agreements
- Announces intention to file a shelf registration statement for \$2.5B of securities; files short form prospectus

- Reconfirms Q2 revenue growth at flat or down 5%, will realign optical business, target a break even cost structure and consider further opportunities to raise capital
- Performs public offering of equity units and common shares, raises \$1.3B for general corporate use

### **2002 – Q3**

- Nortel removed from S&P100 because (as per Nortel) not a US company. Position on the S&P/TSX 60 and S&P Global 1200 not affected
- Doug Beatty appointed CFO
- Reports Q2 results down 50% from Q2 2001
- Revises Q3 outlook lower than guidance; will restructure to 35,000 employees by year end (from previous target of 48,000)
- Revises Q3 outlook again and announces that it will address overall liquidity needs.
- Announces proposal to consolidate outstanding shares since share price below NYSE minimum listing requirements
- Will offer series 7 shareholders option to convert to series 8 shares, on a one to one basis

### **2002 – Q4**

- Restructures into four business units: Wireless Networks, Wireline Networks, Enterprise Networks, and Optical Networks. Frank Plastina leaves Nortel
- Files 8-K explaining, in detail, Frank Dunn's internal email to all employees on Q3 results and break-even model. (WHY?)
- Reports Q3 results: revenue down 15%, strong cash performance, cost structure significantly improved, continuing to target profitability; revises Q2 results due to change in business structure – separates reporting of Wireline and Enterprise business units
- Malcolm Collins becomes President Enterprise Networks
- Terminates \$1.175B undrawn credit facility set to expire in April 2003. \$750M April 2005 facility remains undrawn and available.

### **2003 – Q1**

- Reports 2002 results: revenues down to \$10.56B from \$17.51B in 2001; 36,000 employees (instead of planned 35,000)
- Enters into a \$750M EDC (Export Development Canada) Master Facility agreement to Jun 30, 2004. \$300M committed for performance bonds; \$150M uncommitted for receivables sales/securitizations; \$300M uncommitted for performance bonds and receivable sales/securitizations.
- Annual general meeting called for April 24, 2003.

### **2003 – Q2**

- Issues amended and restated securities registration agreement for common shares

- Reports Q1 results. Positive net earnings. Achieves profitability one quarter earlier than expected
- Shareholders approve (at AGM) reverse stock split for between 5:1 and 10:1.

### **2003 – Q3**

- EDC Master Facility Agreement maturity date extended to Dec 31, 2005.
- Reports Q2 results: revenues down by 3%, net loss of \$14M

### **2003 – Q4**

- Preliminary results for Q3 indicates net earnings of \$179M.
- Announces plan to restate financials for 2000, 2001, 2002 and 1H 2003. Expect reduction in net losses and increase in shareholders' equity and net assets; not expected to impact cash balance or future operations.
- Request 5 day extension for filing of Q3 10-Q
- Files Q3 10-Q on November 19, which includes restated financials for previous years
- Reissues reports for 1Q, 2Q and 3Q, 2003 and annual report for 2002

### **2004 – Q1**

- Announces supply chain strategy: will keep core supply chain activities (New Product Introduction; deployment, integration and support on complex, multi-technology network solutions) and outsource remaining manufacturing activities, potentially to Flextronics.
- Reports Q4 2003 results: revenues up 12% from Q4 2002; and 25% from Q3 2003; \$499M net earnings
- Announces AGM and special meeting of shareholders for April 29, 2004, in Toronto, Ontario.
- Delays filing of 2003 results due to audit review of previously issued restatements. Additional restatements expected. Review based on establishment, timing of, support for and release to income of certain accruals and provisions in prior periods.
- Not in compliance with obligations related to public debt indentures
- Doug Beatty (CFO) and Michael Gollogly (controller) placed on paid leave of absence pending completion of independent review. William Kerr and MaryAnne Pahapill appointed CFO and Controller (respectively) on interim basis.
- AGM delayed until 2003 financial statements are available
- EDC issues waiver until May 29, 2004

### **2004 – Q2**

- SEC issues formal order of investigation in connection with previous financial restatements and current need to restate; OSC Enforcement Staff launch investigation for same reason
- April 28, 2004
  - William Owens appointed President and CEO.

- William Kerr (CFO) and MaryAnne Pahapill (controller) permanently assigned
- Frank Dunn terminated with cause, along with Doug Beatty (CFO) and Michael Gollogly (controller)
- Four other senior finance business line executives placed on paid leave.
- Announce need to restate 2001, 2002, 2003 financials; net losses expected to decrease in early years, while net earnings expected to become net losses in 2003.
- Q1 2004 preliminary results indicate cash down by \$400M party due to bonus payments (return to profitability bonus from 2003) and restructuring costs
- Dr. Manfred Bischoff appointed to Board of Directors
- Intends to file a 25 month shelf registration statement
- Receives Federal Grand Jury Subpoena for documents prepared from Jan 1, 2000 to date - in relation to ongoing criminal investigation by US Attorney Office for Northern District of Texas, Dallas Division.
- OSC issues temporary order to stop all trading by directors, officers and certain current and former employees; follows with permanent order 15 days later. Company must provide bi-weekly status updates.
- Receives resignation from Frank Dunn as director of NNL and NNC.
- Hon. John Manley, Former Deputy Prime Minister of Canada, appointed to Board of Directors.
- EDC issues waiver until Aug 30, 2004
- Requests to schedule AGM past Jun 30th deadline; OSC allows for a delay up until Dec 31, 2004.
- RCMP conducting a review of accounting situation and need for criminal investigation
- 27 class action complaints filed in Southern District of NY and one Employee Retirement Income Security Act (ERISA) class action in Middle District of Tennessee - against (mostly) Dunn, Beatty and Gollogly - for making materially false and misleading statements in violation of US security laws. ERISA against Dunn and Board because members suffered losses in retirement accounts
- TSX advises on late filings but does not take action
- Expects to provide update on impact of restatements by Jul 2004, and limited 1H 2004 results by August. Expects to file 2003 and 1H 2004 in 3rd quarter of 2004 (will be late with 2004 Q2).
- Tennessee class action suit amended to expand period and named defendants.
- Agreement reached with Flextronics on manufacturing outsourcing.

### **2004 – Q3**

- Expected impact of restatements: elimination of 2003 full year net earnings from continuing operations; no material impact on revenues or cash balance.
- US District Court of Southern NY consolidates and files the 27 class action complaints

- Class of shareholders request Nortel take action against listed individuals within 14 days or class of shareholders will.
- RCMP (Integrated Market Enforcement Team) advises Nortel that it will commence a criminal investigation into accounting situation.
- First half 2004 results \$5.1B, net earnings of .00 to .02\$.
- Announces strategic plan to grow market share and leverage strength in high performance, high reliability networks. Will reduce workforce by 10% (3500) and consolidate 2M square feet of real-estate.
- 7 finance employees terminated with cause (4 of which were on leave on leave), in addition to Dunn, Gollogly and Beatty. All 10 will be asked to repay bonuses and further action may be taken.
- Class proceedings start in Ontario Superior Court for CDN\$250M in damages related to the return to profitability bonus program.
- EDC extends waiver to Sep 30, 2004, then to Oct 31, 2004, then to November 19, 2004.
- Details of Owens agreement published: based salary of 1M, target bonus of 170% of base. Special pension benefit that will result in ~33,540 per month, payable over 5 years after retirement.
- Now expects to file 2003 and 1H 2004 by October (instead of end of Q3)
- Hires Accenture to help transform finance org's structure, processes, and systems.
- 3Q revenues expected lower than Q2 but up on full year basis.

#### **2004 – Q4**

- Completes transfer of Ottawa/Monkstown Flextronics assets; delays Montreal to mid-2005; blames financial activity is taking away resources
- Notifies late filing for 2004Q3 - backlog due to all the other restatements
- Delays filing of 2003 and 1H 2004 restatements from Oct 2004 to mid Nov 2004. Modifies expected revenue adjustments for 2001, 2002 and 2003.
- Seeks order to delay AGM to Mar 31, 2005, and then to May 31, 2005. Ontario Superior Courts of Justice approves requests
- Delays reporting of 2003 and 1H 2004 results by another 30 to 60 days. Will release preliminary Q3 2004 results in December 2004. Modifies (again) expected revenue adjustments for 2001, 2002 and 2003. Expect 2004 growth to be lower (single digits) than expected due to increase in 2003 revenues (from restatements). Restatement work has identified revenue adjustments for 1999 and 2000, based on revenue recognition principals.
- Office of the Chief Accountant of the SEC doesn't rule either way about how Nortel recognized software revenue, so Nortel not changing accounting method.
- Stock exchanges verbally confirm that no delisting currently in process.
- Expects to file 2003 and 1H 2004 statements by Jan 10, 2005. Expects to provide updates to unaudited 2004 results and limited results for 2001, 2002, 2003 and 3Q 2004 - the week of Dec 13, 2004. Further adjusts revenue for all years and related impacts (details provided)

- Announces limited estimated unaudited results for Q3 2004 and updates ones for Q1 Q2 2004, 2003, 2002, and 2001. Will hold conference call to discuss after statements filed on Jan 10, 2005. Net loss in Q3 2004. Adjust 2004 outlook due to restatement results. Details provided.
- EDC extends waiver to Dec 10, 2004, and then to Jan 15, 2005.

### **2005 – Q1**

- 2003 and Q1, Q2, Q3 2004 financial restatements; 2005 reporting delayed as a result
- EDC extends waiver to Feb 15, 2005, then to Mar 15, 2005, and then to April 30, 2005.
- Board directs management to implement all changes recommended by independent review
- Hires Ethics and Compliance officer, Susan Sheppard
- Five Board members choose not to stand for re-election
- Executives offer to give back their bonuses received in 2003
- CFO change: William Kerr (becomes advisor to CEO) to Peter Currie
- Controller change: MaryAnne Pahapill (resigns) to Karen Sledge
- William Owens appointed CEO (no longer President), Gary Daichendt President and COO
- Class action suit filed against Nortel for false reporting (Apr 2003-Apr 2004)
- AGM set for June, to review 2003 and 2004 results

### **2005 – Q2**

- Buys PEC US Government Solutions for \$448M
- Amends Flextronics contract, delays end date of transfer of manufacturing facilities
- Controller change: Karen Sledge to Paul Karr
- Reports 2004 FY (and Q4) results (late)
- At 2003/2004 AGM, shareholders approve amended Nortel Stock Incentive Plan and Nortel Stock Purchase Plan
- Publishes substantial previously confidential document as part of exhibits to the 2004 10-K (due to OSC rule change) – includes stock option plans, success plans, executive offer letters, director pay increase, etc...
- Q1 2005 quarterly report issued, about a month later than usual.
- EDC extends waiver to Apr 30, 2005, then to May 31, 2005
- Gary Daichendt resigns as President and Chief Operations Officer along with Gary Kunis (both came from Cisco) – after less than 3 months. Conflict of opinions on corporate strategy, with CEO.
- Harry Pearce replaces Lynton Red Wilson as Chairman of the Board; directors get a pay increase
- Board approves corporate performance objectives as part of Success plan: revenue, management operating earnings before taxes, cash flow, financial accountability, leadership in ethics and integrity, and revenue from new business. Also, for



executives, (i) Progress on SAP implementation; (ii) Sarbanes Oxley Compliance; and (iii) addressing remediation items identified in the Summary of Findings and of Recommended Remedial Measures

### **2005 – Q3**

- No SEDAR filings in July
- Code of Ethics published
- 2005 Q2 results issued on time
- Nicholas De Roma, Chief Legal Officer, leaves
- Monkstown withdrawn from Flextronics contract, establishing a Regional Supply Chain Centre

### **2005 – Q4**

- Stephen Pusey, President EMEA, offered a £525,000 2 year retention package
- Mike Zafirovski (MZ) replaces William Owens as President and CEO; both packages outlined in detail
- Motorola sues MZ over breach of contract; Nortel pays settlement of \$11.5 Million
- Nortel Toronto Headquarters sold for CDN\$100M; headquarters relocated to smaller Toronto facility
- EDC extends support facility maturity date for an additional year, to Dec 31, 2007
- Q3 2005 results issued on time

### **2006 – Q1**

- AGM schedule for May 2<sup>nd</sup>
- Credit facility of \$1.3B established
- Calgary transfer to Flextronics postponed a quarter, to Q2
- Pascal Debon, former President of Wireless and current Sr Advisor, leaving; Brian McFadden, Chief Research Officer leaving
- Filing of 2005 annual report delayed; will restate 2003, 2004, 2005 (Q1-Q3) results due to incorrect revenue recognition procedure (not improper conduct). Postpones AGM.
- Announces Business Transformation Plan (as material matter) – looking for expansion of \$1.5B in 2008 operating margin and at least 20% market share
- Board approves 2006 corporate performance objectives for Success plan as revenue, earnings and cash flow.
- OSC issues order prohibiting trading for certain current/former Nortel personnel

### **2006 – Q2**

- AGM rescheduled to June 29<sup>th</sup>, and also considered a “special” meeting
- Account process changed from percentage-of-completion to individual contract deliverables – additional financial restatements may be required.
- 2005 annual results issued (late)
- Board approved a Success bonus of 1/3 the target level

- Q1 2006 results issued – late; re-files 2003, 2004 and 2005 financial reports
- Settlement of the Class action suit; \$575M and 628.7M common shares (14.5% of equity)
- Issues \$2B of senior notes
- Changes in the Board of directors
- MZ voluntarily reduces his special lifetime annual pension benefit by 29%, to \$355K (per yr.)

### **2006 – Q3**

- Microsoft and Nortel form 4 year strategic alliance (non-equity?) for advanced unified communication solutions and systems integration
- 2006 Q2 results issued on time

### **2006 – Q4**

- 2006 Q3 results issued on time.
- Consolidates shares 10:1; now 433M shares outstanding
- Dr. Kristina Johnson appointed to Board. Susan Sheppard resigns as Chief Ethics Officer, no reason provided.
- Sells UMTS (radio) business unit to Alcatel for \$320M; 1700 employees to transfer
- EDC extends master facility agreement for another year, to end of Dec 31, 2008. Total of \$750M.

### **2007 – Q1**

- 2006 filings delayed. Will have to restate results for 2005, 2005, and Q1-Q3 2006, along with adjustments to 2004. (This is the third series of restatements)
- Re-issues Code of Business Conduct
- Sets AGM for May 2<sup>nd</sup>
- Peter Currie leaves as CFO; no reason provided
- New Business Transformation Plan to include reduction of 2900 positions, shifting of 100 more
- 2006 results reported towards end of quarter. Deloitte also withdraws audit reports for previous years, due to changes.
- Board approves 2007 corporate performance objectives for Success: revenue, operating margin and free cash flow; customer satisfaction and quality
- Announces \$1B senior notes offering; expects \$980M proceeds to be put into money market funds

### **2007 – Q2**

- David Drinkwater appointed CFO (was the Chief Legal Officer)
- OSC sets hearing with Nortel on allegations about fraudulent accounting practices in 2000, Q3/Q4 2002, Q1/Q2 2003.
- Q1 2007 results issued on time
- Re-issues Code of Business Conduct with substantive changes

**2007 – Q3**

- Dion Joannou, President of North America, leaves to pursue personal interests
- Q2 2007 results issued on time, highest operating margin since 2004 achieved
- Joel Hackney appointed President, Enterprise Solutions
- Paviter Binning appointed CFO, replacing David Drinkwater

**2007 – Q4**

- EDC extends master facility agreement to Dec 31, 2011
- Nortel settles with OSC – to pay \$35M civil penalty for violations

**2008 – Q1**

- William Nelson appointed EVP of Global Sales
- AGM scheduled for May 7<sup>th</sup> (in Ottawa vs Toronto)
- Amends the Stock Purchase Plans and Stock Incentive Plans
- 2007 results issued on time
- Announces reduction in workforce by 2100, shifting 1000 to lower cost locations. Reducing real-estate by 750,000 square feet.

**2008 – Q2**

- Q1 2008 results issued on time
- Strategic WiMax agreement with Alvarion

**2008 – Q3**

- Q2 2008 results issued on time
- Revises 2008 full year outlook based on pressure by customers to cut back investments. Will explore divesting Metro Ethernet Networks business (Core business). Announcement made Sep 17, 2008.

**2008 – Q4**

- Reports Q3 results and 2008 revised outlook. Announces the “2009 Restructuring Plan” to reduce 1300 positions, shift 200 to lower cost locations.
- David Drinkwater, Chief Legal Officer, to retire Feb 2009.
- New operating model announced; dividends on preferred shares suspended.
- NYSE gives Nortel 6 months to bring stock price back above \$1
- Nortel downgraded to CAA2, in default on EDC support facility. Receives 30 day waiver, which becomes permanent in 2009.

**2009 – Q1**

- Jan 14<sup>th</sup>:
  - NNC and NNI (Canada and US) file Chapter 11 creditor protection to preserve liquidity and fund operations.

- EDC provides \$30M support facility and continues to extend throughout Chapter 11.
- Over \$4B of direct financial obligations triggered
- NYSE delists Nortel; TSX considering.
- 2008 results issued on time
- EDC extends support facility on an ongoing basis;
- OSC extends stay of proceedings to May 1, 2009.
- Bank of NY Mellon resigns as trustee of sr notes.
- Announces further workforce reduction of 3200 positions, incremental to 1800 announced previously

### **2009 – Q2**

- Q1 2009 results issued on time
- Dr. Kristina Johnson resigns from Board to be Under Secretary of Energy to President Obama.
- Stalking horse agreements and auctions begin
- OSC extends stay of July 30, 2009.
- TSX delists Nortel shares.

### **2009 – Q3**

- Caribbean and Latin America subsidiary seeks Chapter 11
- Ericsson buys CDMA business and LTE assets for \$1.13B; 2500 employees to transfer
- Aug 10: MZ and Dennis Carey resign. Business units restructured as SBUs, Board drops from 9 to 3 members. Paviter Binning appointed Chief Restructuring Officer. George Reidel stays as Chief Strategy Officers. John Doolittle in charge of SBU sales.
- Q2 2009 results issued on time
- Board approves corporate performance objectives for Quarterly Annual Incentive Plan payout: revenue, cash and cash equivalents and reserve fund, savings plan (headcount reduction, outage recovery). SBUs: revenue, operating expense, headcount reductions, management operating margin, outage recovery
- Avaya buys Enterprise Solutions, Government Solutions and Diamondware, for \$915M
- Paul Karr resigns as Controller. Clarke Glaspell appointed.
- OSC extends stay of proceedings to October 30, 2009.

### **2009 – Q4**

- Hitachi buys Next Generation Packet Core Networks, for \$10M
- Delay in filing Q3 2009 results due to changes in reporting format (but filed this quarter). Will no longer present combined financial statements for EMEA subsidiaries.

- Incentive plan eliminates corporate performance and moves direct to quarterly business unit performance objectives – except of one executive: Paviter Binning – who is rated on a composite average.
- Ericsson/Kapsch buy GSM for \$103M; 650 employees to transfer
- Ciena buys Optical networks and Carrier Ethernet for \$30M and \$239M convertible notes; 2000 employees to transfer
- John Ray becomes Principal Officer of US debtors
- OSC extends stay of proceedings to January 29, 2010
- Final Canadian Funding and Settlement Agreement between NNI (US) and NNL (Canada), with respect to internal corporate transfer pricing and pre-filing claims (\$2B by NNI to NNL).
- IRS settles a \$3B claim against NNI for \$37.5M

#### **2010 – Q1**

- OSC extends stay to April 23, 2010
- Nortel reaches certain agreements with former and disabled employees for health benefits coverage. Also pays \$3000CDN to former employees as advanced termination proceedings.
- Since January 14, 2009: Net proceeds from assets sales = \$2B; 13,000 jobs transitioned. Remaining in corporation: 2300 positions in Network Business Solutions and Corporate functions
- GENBAND buys CVAS for \$182M; most employees moving.
- Nortel withdraws notice of intention to be qualified as a short form prospectus issuer
- 2009 results issued on time
- Files Form 15 which suspends reporting requirements under the SEC
- Paviter Binning to step down Mar 21, 2010. John Doolittle to become CFO Officer (as his replacement) but Chief Restructuring Officer position will not be filled.

#### **2010 – Q2**

- OSC extends stay of proceedings to July 22, 2010.
- George Riedel (Chief Strategy Office) – appointed President Business Units
- Ericsson buys Nortel's ownership (50% plus 1 share) in the Nortel LG joint venture for \$242M
- Performance metrics for first half of year approved: cash, cost management and asset mgmt/corp operations.
- Q1 2010 results issued on time.

#### **2010 – Q3**

- OSC extends stay of proceedings to October 29, 2010.
- Q2 2010 results issued on time
- Ericsson buys MSS business for \$65M; all employees to move

#### **2010 – Q4**

- Carling Ottawa campus sold to Public Works and Government Services Canada of \$208M CDN.
- OSC extends stay of proceedings to February 28, 2011
- Q3 2010 results issued on time.
- November mediation session on the disposition of asset sale proceeds is inconclusive.
- Ericsson buys Nortel ownership (62%) of GDNT (China) for \$50M; all employees moving

## APPENDIX F. Nortel Self-Reported History

(Downloaded from [www.nortel.com](http://www.nortel.com) on May 15, 2011)

From Alexander Graham Bell's original telephone patents to the anywhere, anytime connections of today, Nortel has been at the forefront of innovation in the ever evolving history of communications. Since its 1895 founding as Northern Electric and Manufacturing, supplying telecommunications equipment for Canada's fledgling telephone system, Nortel has grown to become a global leader in delivering communications capabilities that enhance the human experience, power global commerce, and secure and protect the world's most critical information.

### Early Years

- Manufactures the portable commutator, a one-wire telegraphic switchboard for military field service in World War 1.
- Produces first dial equipment in Canada - a dial PBX - for a brewery in Montreal.
- Manufactures first vacuum tubes in Canada which are also eventually used on repeater apparatus for long-distance lines.
- Trans-Canada telephone toll system goes live in 1932 based on Northern switches. The system covers Toronto, Montreal, Quebec City, Hamilton, and Windsor.
- Produces the #19 wireless set for two-way telephone communications in tanks and other military vehicles. It becomes the standard for Canada, Britain, and Russia in WW2.
- Develops electromechanical switch in 1950s, which also allows push-button phone dials and direct inter-city dialing. Using photo-transistors, this automated system is the company's first advancement towards computerized switching and is the company's staple switch for the next 20 years.
- Implements the Trans-Canada Skyway in 1958, the world's longest microwave system covering 6114.2 kilometers (3,800 miles).

### The Telephony Era

- A pioneer in communications-satellite business in the 1960s, Northern develops satellite and antenna equipment, serving as prime subcontractor with Hughes Aircraft for the electronics used in Canada's ANIK communications satellite.
- Launches the Contempra or "Princess" telephone with the dial in the handset - a design that influences telecommunications products around the world.
- Introduces world's first X.25 data switch in 1976, representing the first standard-based commercial application of packet switching, the technology that is the foundation of today's Internet.
- First to announce a complete line of fully digital telecommunications products. In 1979 the first Digital World product -- DMS-100 - goes into service. It is a fully digital central office switch serving as many as 100,000 lines.

- Introduces the first cellular telephone system in North America to provide subscribers with such features as call forwarding, call waiting and three-way calling.
- First in the world to use 64 quadrature amplitude modulation (QAM) in microwave radio system, allowing more information to be put into the same frequency band.
- Introduces "Fiber World" initiative for systems based on fiber-optic technology that is much faster and more cost-effective than copper wires.
- Develops world's first billing system to use speech-recognition technology to automate collect calls, calls billed to a third party and calling-card calls.

### **The Internet Revolution**

- Celebrates its first 100 years with introduction of "Nortel" brand, reflecting the company's evolution from telephony to multiservice Internet and IP-based global communication solutions.
- Introduces the world's first 1-Meg modem for "always on" Internet connections; orders exceed US\$1 billion in only eight months.
- Redefines speed of networking with 6.4 trillion bits per second (terabit) optical technology. The technology increases Internet networking speeds and capacity by 640 times with an amplification system that supports 28 million simultaneous Internet connections over a single fiber.
- Installs world's first commercial 3G (UMTS) wireless network in Spain.
- Completes series of landmark next-generation wireless calls, including the industry's first wireless packet data sessions using CDMA2000 1xRTT technology.
- First networking company to complete the University of New Hampshire InterOperability Laboratory (UNH-IOL) phase II test regimen for IPv6 - the next-generation Internet Protocol. IPv6 will enable the Internet to continue to grow.
- First networking vendor to provide an end-to-end VoIP solution certified by the U.S. Defense Department Joint Interoperability Test Command (JITC).
- The convergence of the communications and IT industries takes a significant step forward as [Microsoft Corp. and Nortel announce a strategic alliance](#) based on a shared vision for unified communications. By combining Nortel's world-class network quality and reliability with Microsoft® software's ease of use, the alliance will accelerate the availability of unified communications.
- BT selects Nortel to play an important role in its 21st Century Network (21CN) program. Nortel will be one of two suppliers of a carrier-scale Ethernet solution for 21CN that exploits Ethernet in a fundamentally new way.

Today's networked world was unimaginable when this company was born, yet much of it has been created by the imagination of our people. As you browse the major milestones of our corporate history, you'll see this ongoing spirit of innovation, coupled with the agility to respond to an ever-changing world.



## **APPENDIX G. CEO Email Textual Analysis**

### **1.1 Introduction**

Research in CEO narratives has included sources such as analyst calls, Letters to Shareholders, news releases, and media articles. Due to issues with access and its relative newness, research on the content and form of CEO Emails does not exist. The purpose of this appendix is to gain further understanding on the CEO Emails used in the larger research project. The analysis borrows from genre theory and compares the CEO Email to a data set constructed by Cornut, Giroux, and Langley (2012). In particular, the CEO Email is considered, for this purpose, as a source of strategy narrative and therefore is directly compared to strategic plans, which were central to Cornut et al.'s (2012) analysis. The objective is to understand if the CEO Email presents distinct narrative characteristics and, if so, to position these characteristic within the greater body of CEO narratives used for the main research project.

This appendix is laid out as follows. First, a brief theoretical background is provided to position the purpose of the research. Follows is an explanation of the research methods used to study the tone and macrostructure of the CEO emails. The analytical results and discussion are then presented, followed by a conclusion.

Notably, although this appendix is structured similar to an academic paper, its main focus is on the research methods employed to understand both the tone and macrostructure of the CEO Email. This appendix does not have, as purpose, a distinct and separate academic contribution, per se, although the potential exists for further research in this area, with the given dataset.

## 1.2 Theoretical Background

Short and Palmer (2008) argue that content analysis of managerial narratives is an *unobtrusive* method that can be used to understand the beliefs and cognitions of top managers. Given the difficulty in gaining access to executives, and especially CEOs, analyzing the content of written or recorded narratives can provide insight into CEO mental models. These results can then be associated to not only the behaviour of executives but also overall firm performance. For example, Short and Palmer (2008) provide a review of research that used content analysis on narratives (e.g. press release, emails, speeches, written statements mission statements, Letters to Shareholders, and annual reports) to study variables such as organizational identity, leadership, image management, communicative action, corporate culture, and firm performance.

Content analysis can also be a useful method to distinguish between sources of narratives such as financial reports, Letters to Shareholders, analyst calls, and corporate news releases. Crawford Camiciottoli (2010) most recently studied not only the macrostructure of earnings calls but also the intertextuality of the calls. By studying the content of earnings call, Crawford Camiciottoli (2010) was able to identify how a financial reporting narrative was created through recurring situations. Through this analysis of intertextuality, she determined that the financial disclosure process included the earnings call announcement, the release of earnings, the earnings call itself, and the quarterly (and/or annual) report.

Cornut et al. (2012) investigate the strategic plan as a specific type of narrative that exists within the larger set of strategy plans. The purpose of their research was descriptive in nature. Using textual analysis, they compared the tone of strategic plans to

similar types of narratives (using a process defined by Hart, 2001) and looked at the macrostructure of the plans, through the analysis of rhetorical moves. The latter approach is similar to Crawford Camiciottoli's (2010) analysis, which investigated the macrostructure of the earnings calls.

Although Cornut et al. (2012) originally intended to study the strategic plans of both private and public organizations, only the latter was included in the final dataset because "it proved extremely difficult to have access to the former; even after repeated contacts with senior managers from several organizations, we could not obtain a sufficient number of plans to make any statistically valid comparisons" (p. 26). Problems in gaining access to organizational narratives are common among strategy researchers, especially narratives produced by senior managers (Short & Palmer, 2008); but without insight into internal executive discourse, a gap remains. Although research on various types of texts has included CEO-authored texts, there is no evidence of research on the emails issued by CEOs to their employees. As part of the thesis, therefore, the following analysis was undertaken to gain further insight into the textual characteristics of the Nortel CEO Emails.

## **1.3 Methodology**

### ***1.3.1 Data Sample***

The analysis included the 168 CEO Emails originally identified in the Research Methods chapters and summarized in Table G1. The detailed list of emails is also available in Appendix A.

**Table G1: Summary of CEO Emails**

| Author          | Period                      | Emails Analyzed | Total Words |
|-----------------|-----------------------------|-----------------|-------------|
| Frank Dunn      | May 2002 – March 2004       | 22              | 14701       |
| Bill Owens      | April 2004 – October 2005   | 26              | 12962       |
| Mike Zafirovski | November 2005 – August 2009 | 109             | 69110       |
| Paviter Binning | August 2009 – February 2010 | 11              | 3480        |

As part of the overall research project, the emails were sorted by date, author, and type. Each email was given a descriptive file name and then loaded (with the other texts) into the ATLAS.ti database. Each email was then read, in order, from Dunn's initial email in April 2002 to Binning's last email in 2010. From this reading, a short narrative was prepared on each group of emails, by CEO, as follows.

**Frank Dunn.** Dunn's emails were relatively long (668 words on average). Compared to the other authors, his tone was more formal. His emails were informative in nature. He referred frequently to the past and the future. He spoke often of corporate finances, return to profitability objectives, and market conditions. Dunn was less personal in his emails, referring seldom to himself.

**William Owens.** Owens' emails were shorter than Dunn's (499 words on average) but he communicated more consistently and more often than Dunn. He was more personal in his emails, using pronouns such as I, we, you, us, etc... He used negative terminology less than the others, thanked employees, and spoke mainly of the present and the future. His focus was on the financial restatements and the restructuring of the finance organization. Owens referred to the external environment less frequently than the others, although he referenced customers periodically. His word usage suggested a tone of encouragement.

**Mike Zafirovski.** Zafirovski's emails were almost as long, on average, as Dunn's (628 words). He communicated the most frequently, compared to the others. As with Owens, he was inclusive in his writing and personal. He expressed emotion often and used words that suggested a sense of urgency and need for change. He was focused both internally on the operations and externally on customers, the industry, and the market. He emphasized corporate efficiency using words such as revenues, margins, operations, quality, processes, and Six Sigma.

**Paviter Binning.** Binning's emails were the shortest of the four authors (316 words on average). His emails were issued in conjunction with news releases that were material in nature. In his emails, Binning was informative, detailing the action that the company had taken or was going to take. He thanked employees for their efforts. He made little mention of *the team*.

### **1.3.2 Types of Emails**

In addition to the computerized coding, a hard copy of each email (in their original form) was read and coded based on content, to determine the types of emails produced by the CEOs. Through the analysis of the grounded codes, supplemented by the individual reading of each email, the emails were classified into three categories: strategy, organizational announcements, and non-market event (see Table G2). Dunn began the tradition of issuing CEO Emails to communicate strategy when he became CEO in 2002. Owens followed the tradition, as did Zafirovski and Binning.

Organizational announcements were issued by the CEOs, to all employees, and included reference to corporate strategy or earlier strategy emails. Some strategy emails

also included organizational announcements. The non-market emails spoke of external events such as natural disasters and the 911 anniversaries; they were not related to corporate strategy, performance, or organizational announcements.

**Table G2: CEO Emails by Type**

| CEO             | Strategy   | Organizational Announcement | Non-Market |
|-----------------|------------|-----------------------------|------------|
| Frank Dunn      | 19         | 2                           | 1          |
| William Owens   | 17         | 2                           | 7          |
| Mike Zafirovski | 85         | 21                          | 3          |
| Paviter Binning | 10         | 1                           | 0          |
| <b>Total</b>    | <b>131</b> | <b>26</b>                   | <b>11</b>  |

### ***1.3.3 Analytical Methods – Tone***

To characterize the tone of the emails, a textual analysis was performed on the narratives and compared to strategic plans and other narratives included in Cornut et al.’s (2012) research. The data from their research was obtained through their published article (which they included as an appendix to their paper) and used within this analysis, for comparative purposes. In their research, Cornut et al. (2012) used Hart’s (2001) computerized approach to textual analysis, which involves individual word count systems and dictionaries created from linguistic theory. The dictionaries and methodology are available through Hart and Carroll’s (2012) DICTION software.

DICTION is content analysis software that includes 31 dictionaries developed from business texts (Hart & Carroll, 2012). With no repeated words, these dictionaries facilitate the analysis by tapping into the characteristics of narratives (see Table G3).

**Table G3: DICTION Dictionaries (Hart & Carroll, 2012)**

| <b>Dictionary Codes (each include a series of words)</b> |               |                |                 |                    |
|--|---------------|----------------|-----------------|--------------------|
| Accomplishment   | Communication | Hardship       | Passivity       | Spatial Awareness  |
| Aggression   | Concreteness  | Human Interest | Past Concern    | Temporal Awareness |
| Ambivalence  | Cooperation   | Inspiration    | Praise          | Tenacity           |
| Blame  | Denial        | Leveling       | Present Concern |                    |
| Centrality   | Diversity     | Liberation     | Rapport         |                    |
| Cognitive Terms  | Exclusion     | Motion         | Satisfaction    |                    |
| Collectives  | Familiarity   | Numerical      | Self Reference  |                    |

Cornut et al. (2012) used the DICTION dictionaries to study strategic plans, but not the DICTION software application itself. Instead, they recreated the dictionaries in WordStat and performed a content analysis on a large data set of strategic plans, annual reports, business articles, research articles, project plans, executive speeches, State of the Union addresses, horoscopes, and religious sermons; a total of 663 texts.

To perform the textual analysis on the CEO Emails, the same approach was undertaken but with ATLAS.ti software (as opposed to WordStat). The 31 dictionaries from DICTION were provided by one of the authors from the Cornut et al. (2012) paper (in word format) and were subsequently loaded into ATLAS.ti using the auto-coding feature, one dictionary at a time, to create a new code (for a total of 31 codes). Each code was then run against the emails (summarized in Table G4). The results of the coding were then transferred into Excel, producing a master data set that included the word count for each dictionary, by email. To determine the frequency of usage for each dictionary, the word counts were divided by the total word count of each text. These results were then

loaded into statistical analysis software, EQS (a multivariate software), to produce mean frequency usage for each dictionary. These means were then used to understand which characteristics (from the dictionaries) were significant within the emails, not only in totality, but also by author (CEO) and by email type (strategy/organization announcement/non-market). The results were compared to the results from Cornut et al.'s (2012) research.

**Table G4: CEO Email Textual Characteristics, by CEO**

| Textual Characteristic<br>(DICTION Dictionary) | Frequency of Word Occurrence |      |       |            |         |
|--|------------------------------|------|-------|------------|---------|
|  | All<br>Emails                | Dunn | Owens | Zafirovski | Binning |
| Accomplishment                                 | 6030                         | 1049 | 720   | 4027       | 234     |
| Aggression                                     | 806                          | 140  | 102   | 553        | 11      |
| Ambivalence                                    | 1508                         | 202  | 166   | 1101       | 39      |
| Blame  | 164                          | 39   | 12    | 109        | 4       |
| Centrality                                     | 1024                         | 181  | 133   | 681        | 29      |
| Cognitive Terms                                | 2220                         | 325  | 291   | 1542       | 62      |
| Collectiveness                                 | 2270                         | 422  | 344   | 1445       | 59      |
| Communication                                  | 1703                         | 310  | 209   | 1121       | 63      |
| Concreteness                                   | 2682                         | 408  | 422   | 1742       | 110     |
| Cooperation                                    | 1862                         | 362  | 322   | 1080       | 98      |
| Denial   | 444                          | 86   | 28    | 319        | 11      |
| Diversity                                      | 305                          | 52   | 25    | 221        | 7       |
| Exclusion                                      | 291                          | 38   | 29    | 214        | 10      |
| Familiarity                                    | 25355                        | 4004 | 3378  | 16994      | 979     |
| Hardship                                       | 276                          | 33   | 75    | 164        | 4       |
| Human Interest                                 | 7753                         | 1213 | 1112  | 5233       | 195     |
| Inspiration                                    | 1573                         | 296  | 179   | 1075       | 23      |
| Leveling                                       | 1694                         | 294  | 203   | 1130       | 67      |
| Liberation                                     | 220                          | 59   | 21    | 124        | 16      |



| Textual Characteristic<br>(DICTION Dictionary) | Frequency of Word Occurrence |              |              |              |             |
|--|------------------------------|--------------|--------------|--------------|-------------|
|  | All<br>Emails                | Dunn         | Owens        | Zafirovski   | Binning     |
| Motion   | 590                          | 85           | 92           | 408          | 5           |
| Numerical                                      | 3426                         | 495          | 383          | 2339         | 209         |
| Passivity                                      | 1302                         | 252          | 155          | 821          | 74          |
| Past Concern                                   | 768                          | 118          | 95           | 529          | 26          |
| Praise   | 1357                         | 230          | 171          | 928          | 28          |
| Present Concern                                | 2952                         | 480          | 415          | 1980         | 77          |
| Rapport  | 363                          | 67           | 61           | 222          | 13          |
| Satisfaction                                   | 823                          | 105          | 105          | 577          | 36          |
| Self Reference (I)                             | 1569                         | 196          | 235          | 1114         | 24          |
| Spatial Awareness                              | 1555                         | 182          | 284          | 1036         | 53          |
| Temporal Awareness                             | 3450                         | 546          | 427          | 2338         | 139         |
| Tenacity                                       | 6178                         | 825          | 874          | 4329         | 150         |
| <b>TOTALS:</b>                                 | <b>82513</b>                 | <b>13094</b> | <b>11068</b> | <b>55496</b> | <b>2855</b> |

### 1.3.4 Analytical Methods – Macrostructure

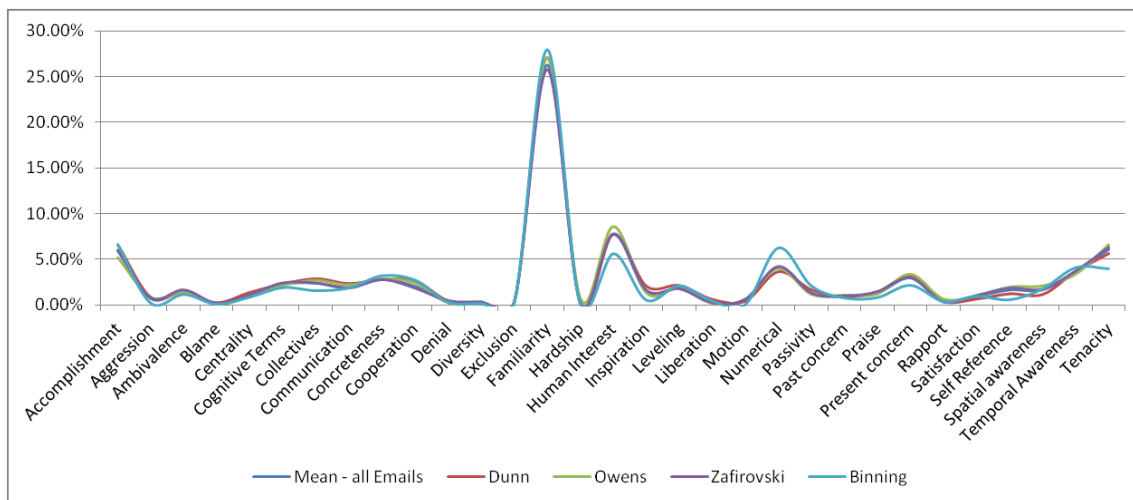
To determine the macrostructure of the emails, and as part of the larger research project, a content analysis in ATLAS.ti was performed on each email using grounded coding methods. These results formed the basis of the analysis to understand the *moves* within the emails, which (if consistent) define the macrostructure. As part of the coding, and based on a recommendation from a researcher during the pilot study, each email was also coded by title, salutation, opening paragraph, closing paragraph and complementary close (signature block). These codes provided an effective means to analyse the narratives.

#### **1.4 Results – Verifying for Individual Level Differences**

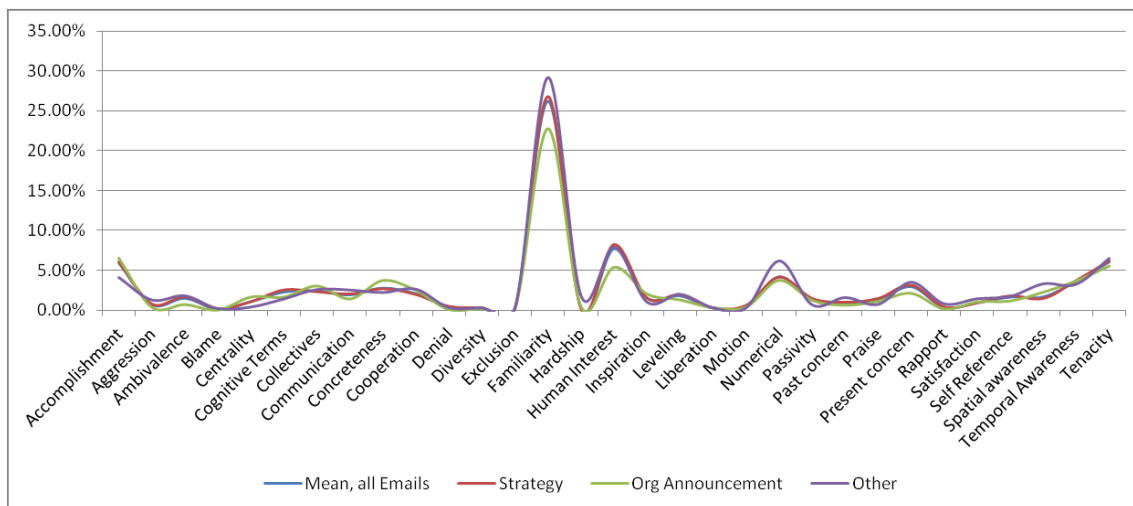
As indicated in the previous section, the textual analysis (using the DICTION dataset) was used for two purposes: to determine the tone of the emails and if there was significant variance between the groups of emails. More specifically, the analysis verified if the differences between groups was greater than differences between the individual emails, which would prevent further analysis taking place on the body of the emails in total, suggesting that the narrative form varied significantly from CEO to CEO (or from type to type).

For this purpose, the 168 emails were divided into two groups: by author (CEOs) and by email type (strategy, organization announcement, non-market). Descriptive statistics were first run on the data set as a whole, and then on each group. Using the frequency of word usage by email (word count of characteristic divided by total words in the email), descriptive analysis was performed using EQS, a structural equation modelling software. Descriptive results for each of the 31 characteristics, by CEO, are presented in Figure G1, while the results by email type are presented in Figure G2. As the figures suggest, there were minimal differences for each characteristic, between CEOs and between email types.

**Figure G1: Mean Usage Frequency by CEO**



**Figure G2: Mean Usage Frequency by Email Type**



To confirm this descriptive finding, intraclass correlations (ICC) were performed with EQS on the word usage data, for each characteristic, using two clusters: CEO and email type. ICC represents the ratio of the between-group variance to the total variance at

the individual level. An ICC greater than 10% is considered significant. In this case, an ICC<sup>21</sup> was performed to determine if there was significant variance between the CEO Emails, for all types, and between the email types, for all CEOs.

The ICC results indicated that variance between CEOs, for all email types, was significant for nine of the 31 characteristics. Of the nine, six of the characteristics had mean usage frequencies greater than 1.3% while the other three were below 0.4%. Although these results suggest that the variance is mostly at the individual email level, further analysis was undertaken to see if less between group variance could be obtained.

ICC tests were performed on all permutations and combinations of groups for the CEOs (pairs and triplets), along with email type (pairs). Of all ICC tests, the combination that provided the most variance at the individual level, and least variance at the group (CEO/type) level, included the Strategy and Organizational Announcement emails authored Dunn, Owens, and Zafirovski. Intuitively this makes sense as the non-market emails were not related to strategy or organization. Binning's emails were specific to the liquidation process; all of his emails were in reference to the sale of a particular business unit. Variance between his emails and the other emails was significantly high.

Based on the results, the non-market emails (11) and Binning's emails (11) were removed from the dataset, reducing the number of texts to 146. The mean values of the revised set were calculated and used for the remainder of the analysis.

---

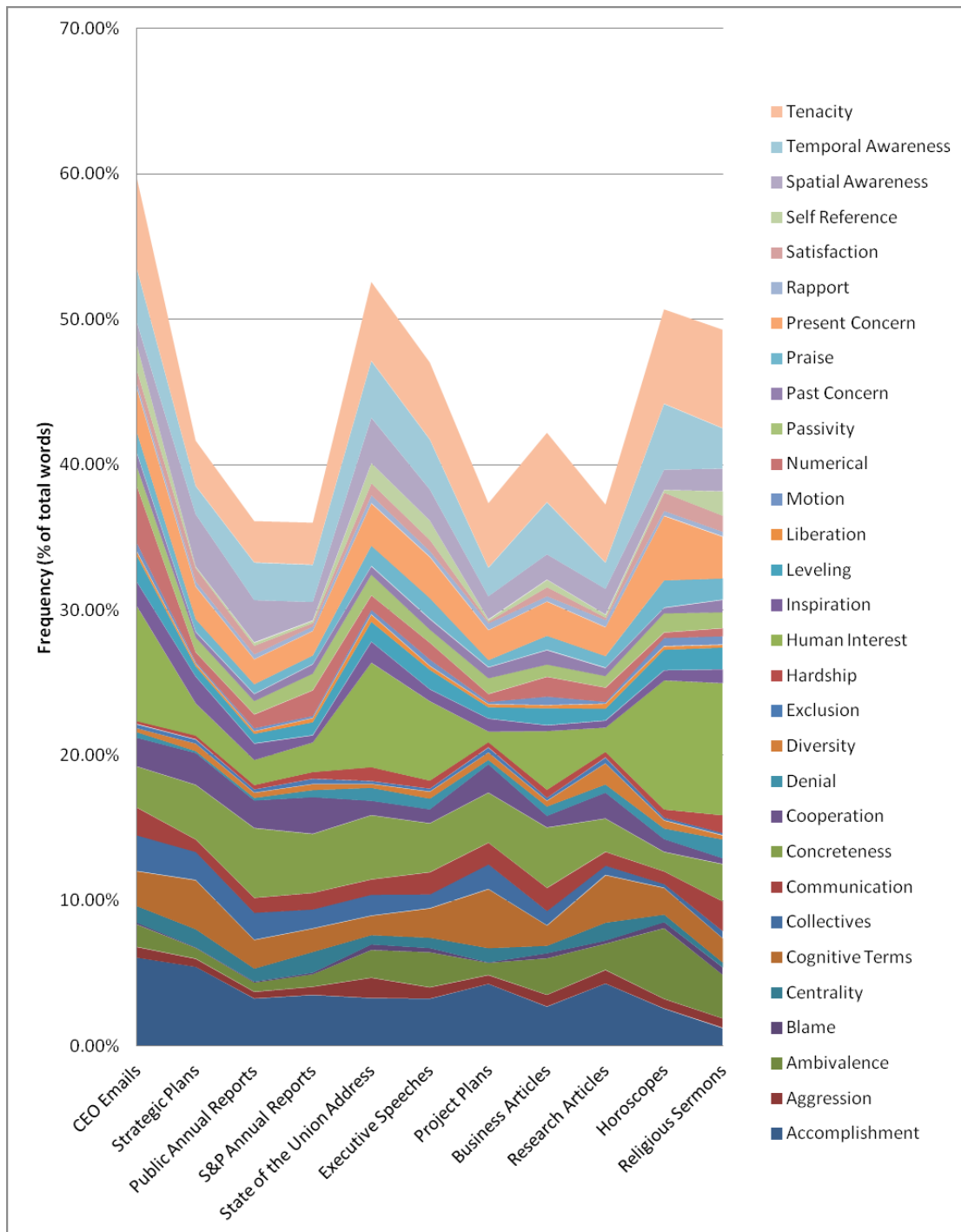
<sup>21</sup> The ICC results are elaborate and not included here, however they are available upon request.

As part of the ICC test using EQS, an analysis of covariances was performed on the characteristics at the individual and group levels. For the individual and group levels, covariances were insignificant (less than 0.001), confirming that the DICTION dictionaries were discriminate (i.e. no repetition of words).

### **1.5 Results – Tone**

Using the word count statistics (i.e. mean usage frequency, in percent) from the CEO Emails (discussed above) along with the data made available through Cornut et al.'s (2012) research, the CEO Emails were compared to the larger body of narratives. These results are presented graphically in Figure G3 and numerically in Table G5. The results suggest that CEO Emails have a unique usage pattern compared to the other types of narratives. Follows is a more detailed discussion on sets of the characteristics, with a particular emphasis on attributes that are relevant to strategic management. Notably, the characteristic *familiarity* is included in the discussion, even though it cannot be compared to Cornut et al.'s (2012) results (as they did not analyse this textual characteristic).

**Figure G3: Cumulative CEO Emails Word Usage Comparison**



Note: Familiarity is not included in this figure as Cornut et al. (2012) did not include it in their research, and therefore no comparison exists.

**Table G5: Cumulative CEO Emails Word Usage Comparison**

|                    | Thesis Data |                     | Data from Cornut et al. (2012) |                    |                |                    |               |         |                   |            |                   |
|--------------------|-------------|---------------------|--------------------------------|--------------------|----------------|--------------------|---------------|---------|-------------------|------------|-------------------|
|                    | CEO Emails  | Strategic Plans     | Public Annual Reports          | S&P Annual Reports | State of Union | Executive Speeches | Project Plans | Fortune | Research Articles | Horoscopes | Religious Sermons |
| Accomplishment     | 6.23%       | 5.44%               | 3.26%                          | 3.50%              | 3.29%          | 3.25%              | 4.26%         | 2.70%   | 4.29%             | 2.57%      | 1.24%             |
| Aggression         | 0.83%       | 0.55%               | 0.45%                          | 0.56%              | 1.39%          | 0.77%              | 0.60%         | 0.79%   | 0.93%             | 0.64%      | 0.64%             |
| Ambivalence        | 1.56%       | 0.73%               | 0.63%                          | 0.85%              | 1.89%          | 2.41%              | 0.83%         | 2.51%   | 1.79%             | 4.86%      | 3.00%             |
| Blame              | 0.17%       | 0.05%               | 0.07%                          | 0.12%              | 0.40%          | 0.30%              | 0.05%         | 0.36%   | 0.23%             | 0.43%      | 0.52%             |
| Centrality         | 1.06%       | 1.26%               | 0.92%                          | 1.44%              | 0.66%          | 0.73%              | 1.00%         | 0.53%   | 1.25%             | 0.54%      | 0.34%             |
| Cognitive Terms    | 2.30%       | 3.37%               | 1.97%                          | 1.61%              | 1.33%          | 2.02%              | 4.06%         | 1.39%   | 3.26%             | 1.83%      | 1.67%             |
| Collectives        | 2.35%       | 1.96%               | 1.88%                          | 1.32%              | 1.45%          | 0.97%              | 1.71%         | 1.00%   | 0.66%             | 0.28%      | 0.50%             |
| Communication      | 1.76%       | 0.86%               | 1.03%                          | 1.14%              | 1.06%          | 1.52%              | 1.49%         | 1.59%   | 0.95%             | 0.87%      | 2.05%             |
| Concreteness       | 2.77%       | 3.74%               | 4.78%                          | 4.03%              | 4.39%          | 3.34%              | 3.42%         | 4.13%   | 2.27%             | 1.32%      | 2.55%             |
| Cooperation        | 1.93%       | 2.20%               | 1.90%                          | 2.53%              | 1.00%          | 0.97%              | 1.96%         | 0.81%   | 1.79%             | 0.88%      | 0.41%             |
| Denial             | 0.46%       | 0.16%               | 0.20%                          | 0.51%              | 0.92%          | 0.76%              | 0.33%         | 0.67%   | 0.59%             | 0.75%      | 1.31%             |
| Diversity          | 0.32%       | 0.52%               | 0.36%                          | 0.42%              | 0.27%          | 0.48%              | 0.51%         | 0.39%   | 1.46%             | 0.55%      | 0.28%             |
| Exclusion          | 0.30%       | 0.28%               | 0.21%                          | 0.35%              | 0.19%          | 0.20%              | 0.33%         | 0.20%   | 0.38%             | 0.18%      | 0.16%             |
| Familiarity        | 26.21%      | Did not investigate |                                |                    |                |                    |               |         |                   |            |                   |
| Hardship           | 0.29%       | 0.26%               | 0.31%                          | 0.47%              | 0.96%          | 0.56%              | 0.37%         | 0.56%   | 0.39%             | 0.57%      | 1.22%             |
| Human Interest     | 8.02%       | 2.22%               | 1.73%                          | 2.05%              | 7.21%          | 5.47%              | 0.73%         | 4.05%   | 1.68%             | 8.89%      | 9.10%             |
| Inspiration        | 1.63%       | 1.84%               | 1.13%                          | 0.48%              | 1.43%          | 0.81%              | 0.89%         | 0.39%   | 0.48%             | 0.69%      | 0.94%             |
| Leveling           | 1.75%       | 0.71%               | 0.66%                          | 0.89%              | 1.37%          | 1.34%              | 0.78%         | 1.17%   | 0.81%             | 1.41%      | 1.50%             |
| Liberation         | 0.23%       | 0.17%               | 0.18%                          | 0.28%              | 0.49%          | 0.27%              | 0.21%         | 0.21%   | 0.34%             | 0.23%      | 0.19%             |
| Motion             | 0.61%       | 0.12%               | 0.21%                          | 0.16%              | 0.32%          | 0.44%              | 0.16%         | 0.59%   | 0.13%             | 0.58%      | 0.59%             |
| Numerical          | 3.54%       | 0.68%               | 0.95%                          | 1.76%              | 1.00%          | 1.16%              | 0.54%         | 1.36%   | 0.98%             | 0.38%      | 0.55%             |
| Passivity          | 1.35%       | 1.03%               | 0.93%                          | 1.16%              | 1.43%          | 0.91%              | 1.09%         | 0.85%   | 0.80%             | 1.33%      | 1.11%             |
| Past Concern       | 0.79%       | 0.37%               | 0.48%                          | 0.63%              | 0.58%          | 0.72%              | 0.75%         | 0.99%   | 0.55%             | 0.37%      | 0.85%             |
| Praise             | 1.40%       | 0.87%               | 0.66%                          | 0.59%              | 1.41%          | 1.43%              | 0.49%         | 0.97%   | 0.80%             | 1.88%      | 1.46%             |
| Present Concern    | 3.05%       | 2.25%               | 1.72%                          | 1.69%              | 2.92%          | 2.83%              | 2.07%         | 2.36%   | 1.99%             | 4.45%      | 2.88%             |
| Rapport            | 0.38%       | 0.35%               | 0.33%                          | 0.31%              | 0.54%          | 0.39%              | 0.47%         | 0.36%   | 0.49%             | 0.33%      | 0.33%             |
| Satisfaction       | 0.85%       | 0.93%               | 0.61%                          | 0.24%              | 0.85%          | 0.78%              | 0.14%         | 0.64%   | 0.17%             | 1.27%      | 1.12%             |
| Self Reference     | 1.62%       | 0.10%               | 0.21%                          | 0.16%              | 1.38%          | 1.33%              | 0.12%         | 0.51%   | 0.20%             | 0.19%      | 1.69%             |
| Spatial Awareness  | 1.61%       | 3.61%               | 2.91%                          | 1.27%              | 3.13%          | 2.16%              | 1.60%         | 1.74%   | 1.77%             | 1.39%      | 1.55%             |
| Temporal Awareness | 3.57%       | 1.94%               | 2.59%                          | 2.56%              | 3.90%          | 3.43%              | 1.96%         | 3.59%   | 1.80%             | 4.53%      | 2.77%             |
| Tenacity           | 6.39%       | 3.10%               | 2.84%                          | 2.88%              | 5.43%          | 5.28%              | 4.42%         | 4.77%   | 3.99%             | 6.49%      | 6.78%             |

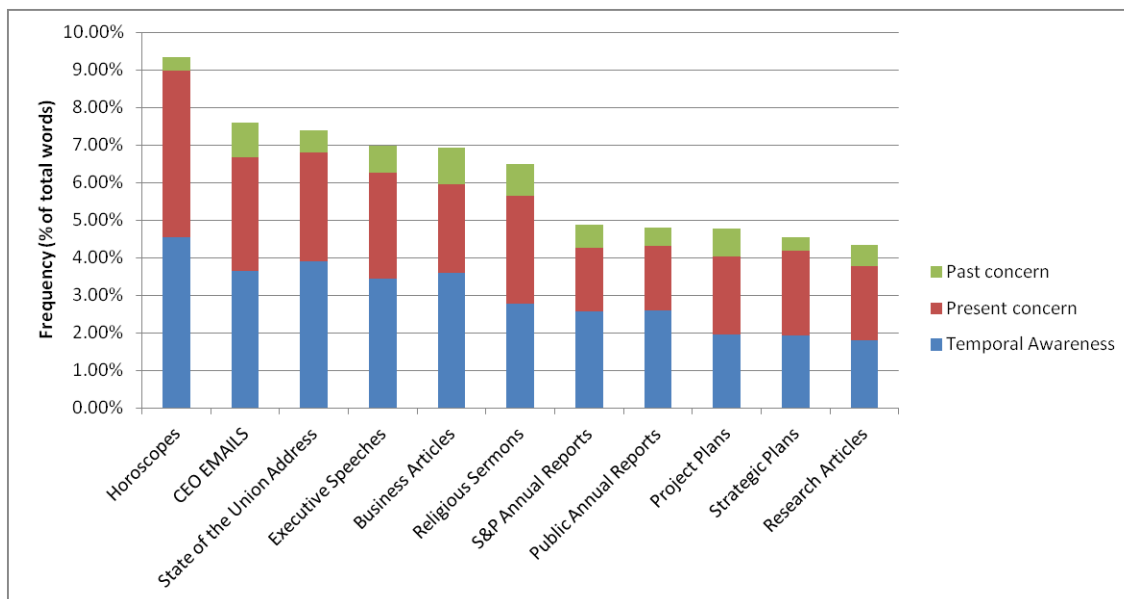
### *1.5.1 Temporal and Spatial Awareness*

Strategy-as-narrative (Barry & Elmes, 1997) suggests that strategy is a form of fiction, standing “somewhere between theatrical drama, the historical novel, future fantasy, and autobiography” (p. 432). To tell the strategy story, authors need to draw on past events, potentially using rhetorical history (Suddaby et al. 2010), and link these events with the present. Additionally, authors need to consider the future, as strategy is forward thinking. Collectively, strategy narratives contribute towards a narrative infrastructure, and can provide insight on how the trajectory of the firm is established over time and space (Barry & Elmes, 1997; Fenton & Langley, 2011; Kuhn, 2008), suggesting that narratives will have both temporal and spatial references.

Grounded coding using ATLAS.ti suggested that all CEOs were consistently concerned about time. They referenced past events such as firm performance, earlier narratives (CEO Emails, and other), and historical events. They also referenced the future in terms of upcoming events, milestones, and performance objectives.

Based on strategic management theory and the findings from the grounded coding, further analysis was undertaken on temporal awareness defined by Hart and Carroll (2012) using the following textual characteristics: temporal awareness, past concern, and present concern. As indicated Figure G4, the CEO Emails were relatively more concerned with time than many of the others. The emails appear closer to speeches than to reports and documentation, suggesting that the CEOs were trying to tell a story, as opposed to report information. Although the CEOs were discussing strategic issues in the emails, the emails had greater temporal awareness than strategic plans.



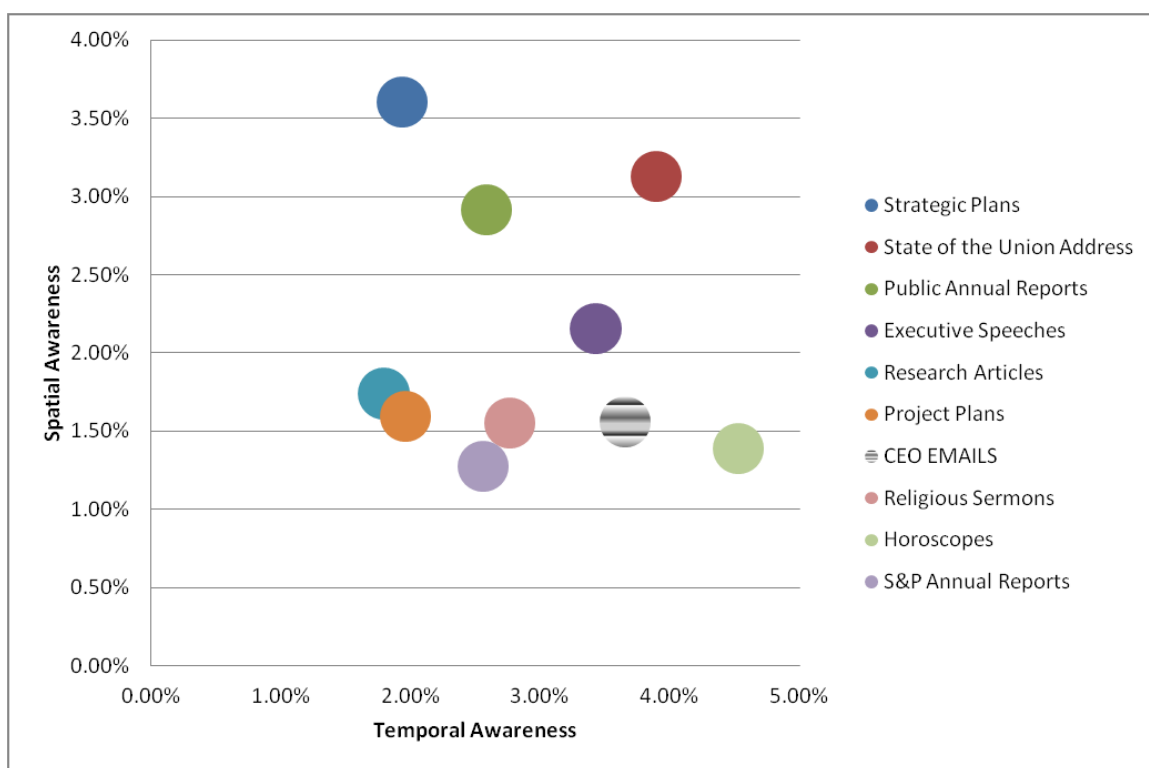
**Figure G4: Temporal Awareness and Concern**

Grounded coding results also suggested that the CEO Emails were equally focused on both the past and the future; although the emphasis changed over time, the overall usage in both cases is significant. Cornut et al. (2012) investigated future concern by creating their own dictionary for the characteristic and found that all narratives emphasised both the past and present significantly more frequently than the future.

In addition to temporal awareness, spatial awareness, defined as “terms referring to geographical entities, physical distances, and modes of measurement” (Hart & Carroll, 2012: 8) was also investigated. As Nortel was a self-described global company, operating in over 150 countries and many different continents, it would be expected that the CEO Email narratives would include significant spatial references, similar to State of the Union Addresses, strategic plans, or Annual reports. However, as Figure G5 suggests, the CEO Emails, although high on temporal awareness, were relatively low on spatial awareness. It is possible that authors purposely avoided spatial terms as means to

personalize the email to each individual employee. The emails were sent to all employees around the world. The focus on temporal awareness, suggesting a “concern for concrete and practical matters” (Hart & Carroll, 2012: 8) may be a way for CEOs to incite individual action.

**Figure G5: Time and Space**  
(Frequency, as a % of total words)



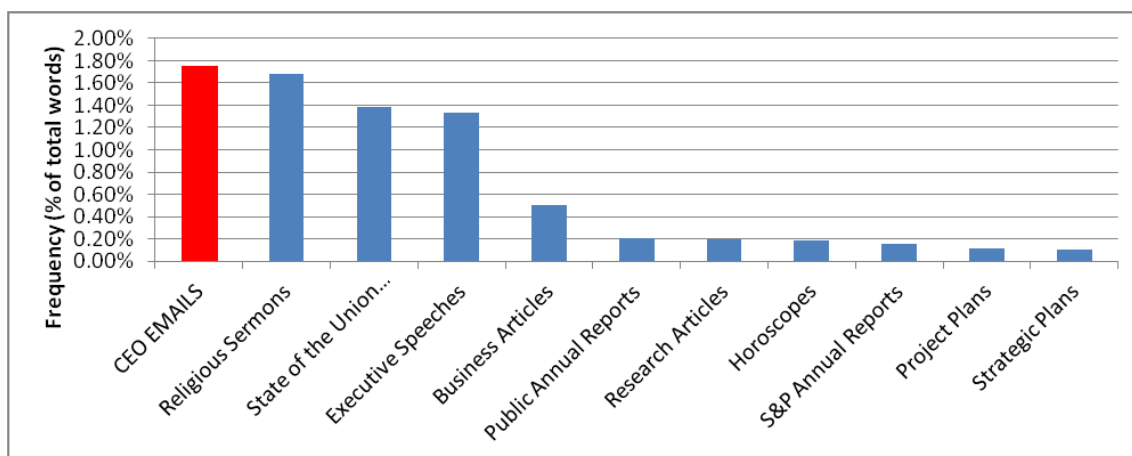
### 1.5.2 Monological Tone

Barry and Elmes (1997) suggested that, at the turn of the century, strategy narratives would have to deal with organizations that had become less monological in nature, allowing for “blurred organizational boundaries, dispersed intelligibilities, diverse realities, disrupted chains of authority, and erosion of organizational autonomy” (p. 442). Accompanying that argument, they believed that authors would move from a

monological tone to a dialogical tone, whereby the varied and potentially conflicting opinions of the readers would be represented.

The CEO, however, continues to be considered the lead strategist in the firm (Hutzschenreuter et al., 2012). To test Barry and Elmes (1997) proposition, the frequency of self-references in each of the narrative types was compared. As Figure G6 suggests, the CEO Emails had the greatest frequency of self-references, even compared to the State of the Union Address, where it would be expected that the President would refer to his role in the presidential process. The high usage of self-reference suggests that, contrary to Barry and Elmes' (1997) argument, in the case of CEO strategy narratives, the CEO still takes the position as grand narrator of the firm's strategy. The high self-reference also reaffirms the notion that CEOs interpret the email as a personal communication between the CEO and the reader.

**Figure G6: Monological Authorship (Self-reference)**



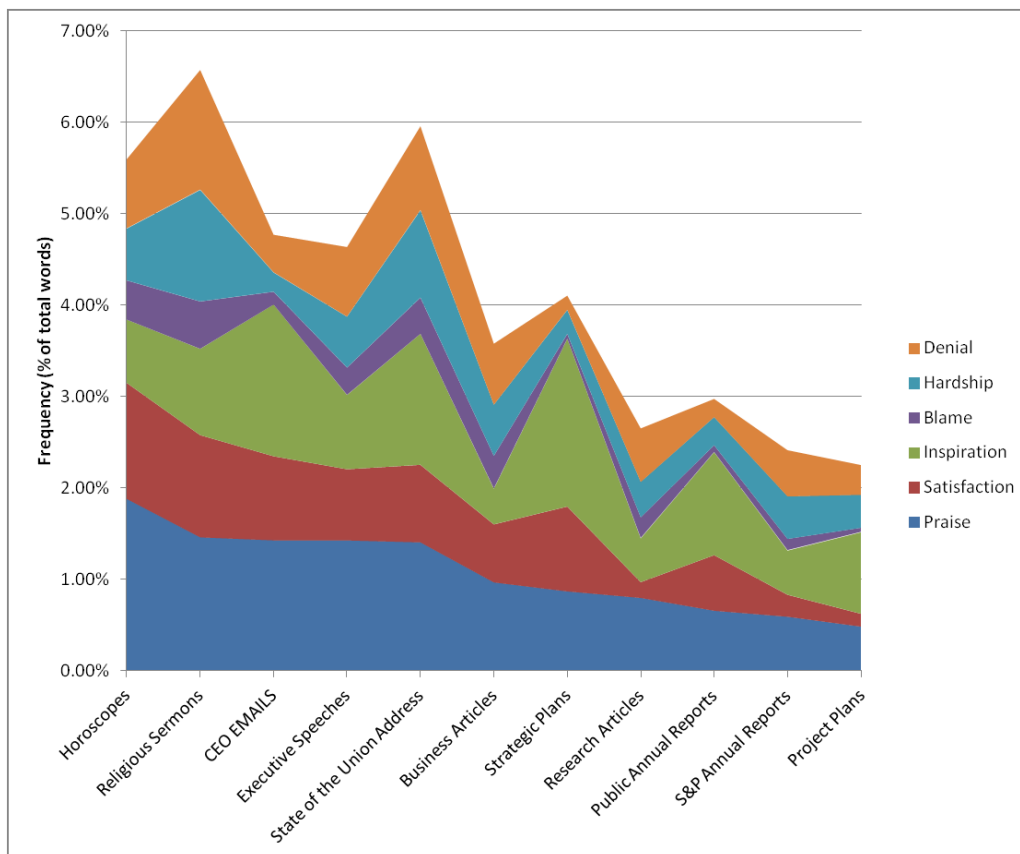
### 1.5.3 Optimism

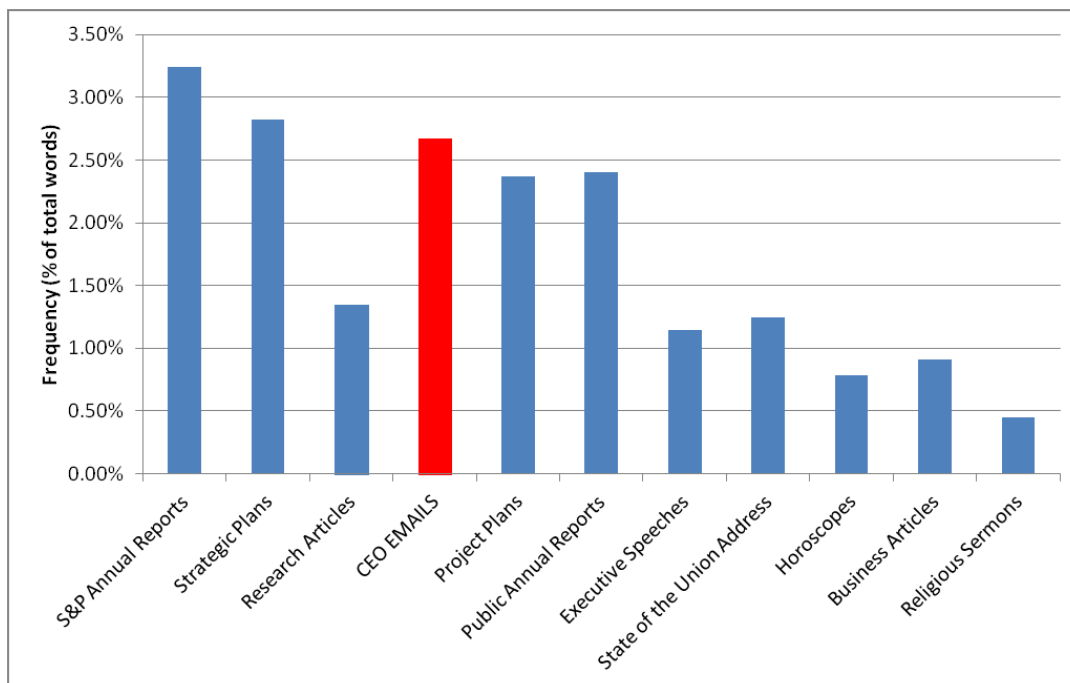
Cornut et al. (2012) explain how certain narratives, such as Letters to Shareholders and annual reports, are characteristically more optimistic in nature, which

they found applies to strategic plans. As the CEO Email is primarily focused on strategic issues, it would be expected that the narratives would be more optimistic than negative. Using the characteristics for optimism (praise, satisfaction, inspiration) and negativity (blame, hardship, denial), as defined by Hart and Carroll (2012), the CEO Emails were compared to the other 11 types.

As indicated in Figure G7, and as expected, the CEO Emails contained similar levels of optimism as strategic plans and State of the Union addresses. In addition, the CEO Emails contained minimal use of negative terms, only second to strategic plans. This is somewhat surprising given that, throughout the case, Nortel was experiencing significant challenges both financially and strategically, and yet, CEOs employed minimal use of blame, hardship, or denial in their narratives. Figure G8 indicates that CEO Email narratives were the most optimistic of the 11 types and were of similar nature to strategic plans, suggesting that CEO strategy narratives have similar constitution to the plans in regards to optimism for the future.

**Figure G7: Optimism and Negativity**



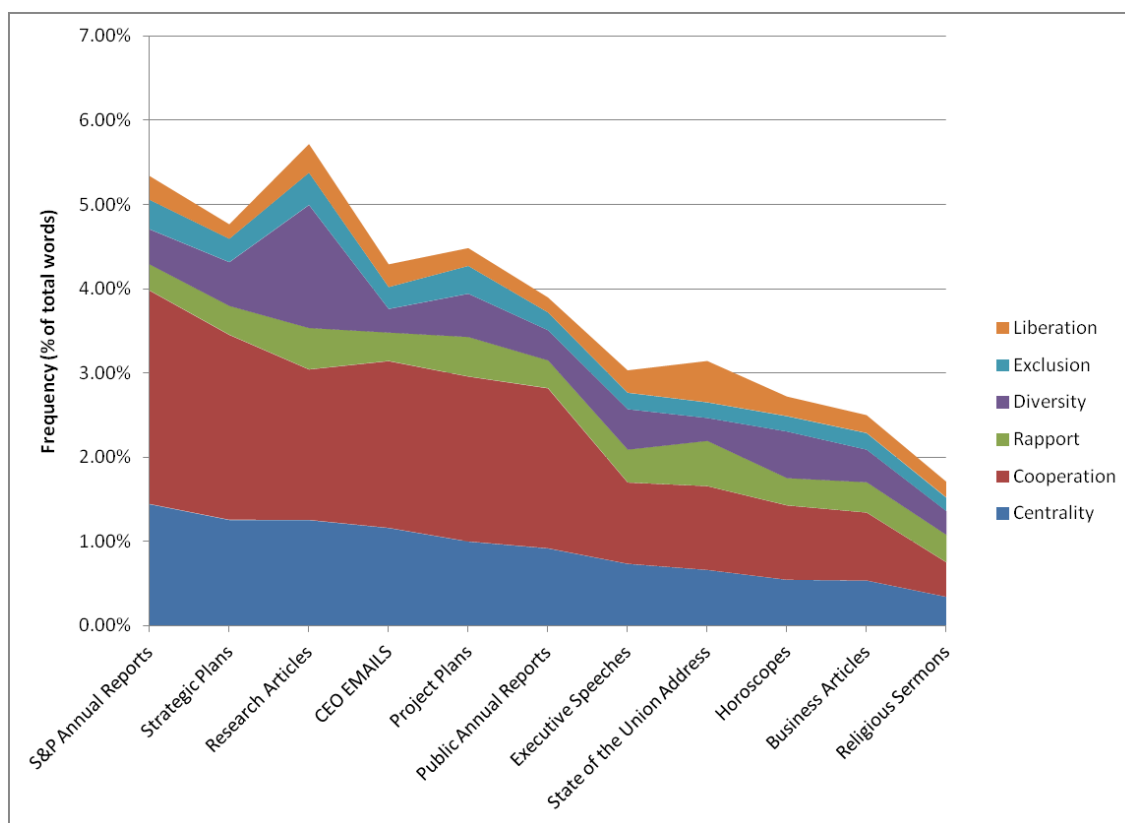
**Figure G8: Net Optimism**

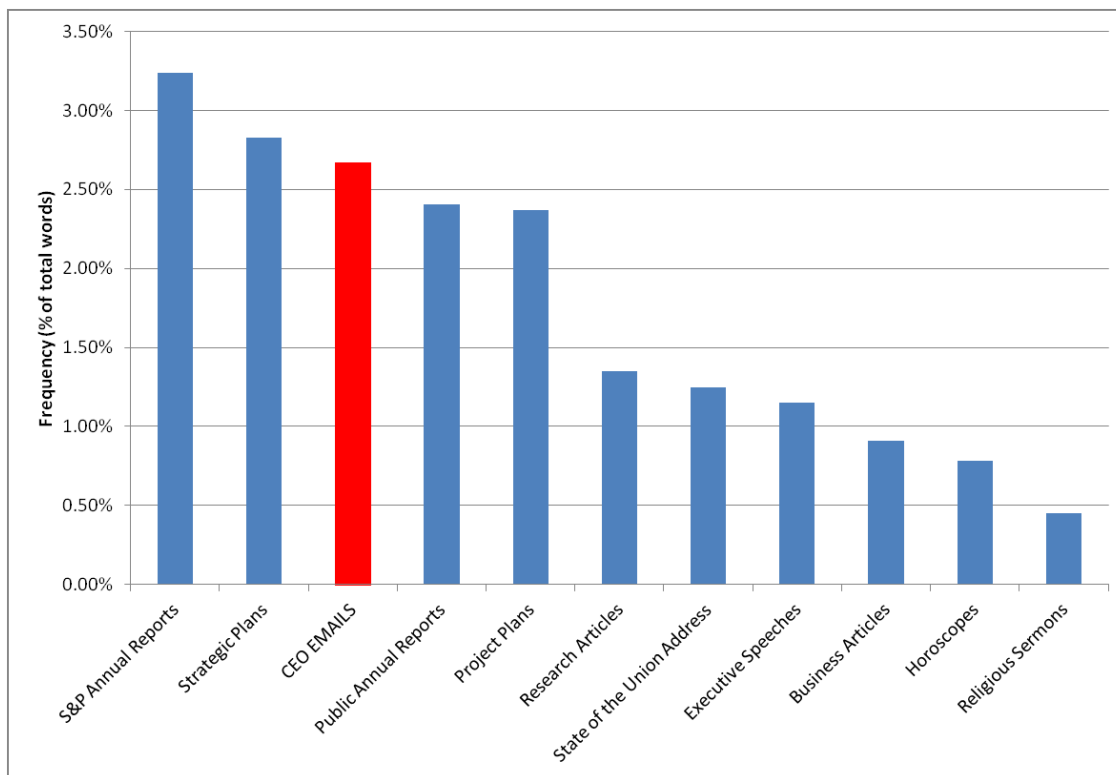
#### 1.5.4 Commonality

In strategy-as-narrative, Barry and Elmes (1997) proposed that strategy narratives would move away from rhetoric that positions the company as being at war with other companies, towards more communitarian ideals, where groups and collectives are valued as a way of doing business. Hart and Carroll (2012) define commonality as “language highlighting the agreed-upon values of a group and rejecting idiosyncratic modes of engagement” (p. 9) through the difference between the following characteristics: centrality, cooperation and rapport (i.e. commonality); and, diversity, exclusion, and liberation (i.e. idiosyncratic). Given that strategy is based on the idea of cooperation (Barnard, 1938) and core values (Selznick, 1957), it would be expected that all strategy narratives would contain a tone of commonality.

As expected, the CEO Emails and the strategic plans both gravitated towards commonality within their narrative, with minimal mention of idiosyncratic characteristics (see Figure G9). In fact, most texts, with the exception of the research articles, centred on themes of commonality. The difference between types was the extent of the usage of commonality characteristics, being greatest with the S&P annual reports and fewest with religious sermons (see Figure G10).

**Figure G9: Commonality and Idiosyncratic Engagement**



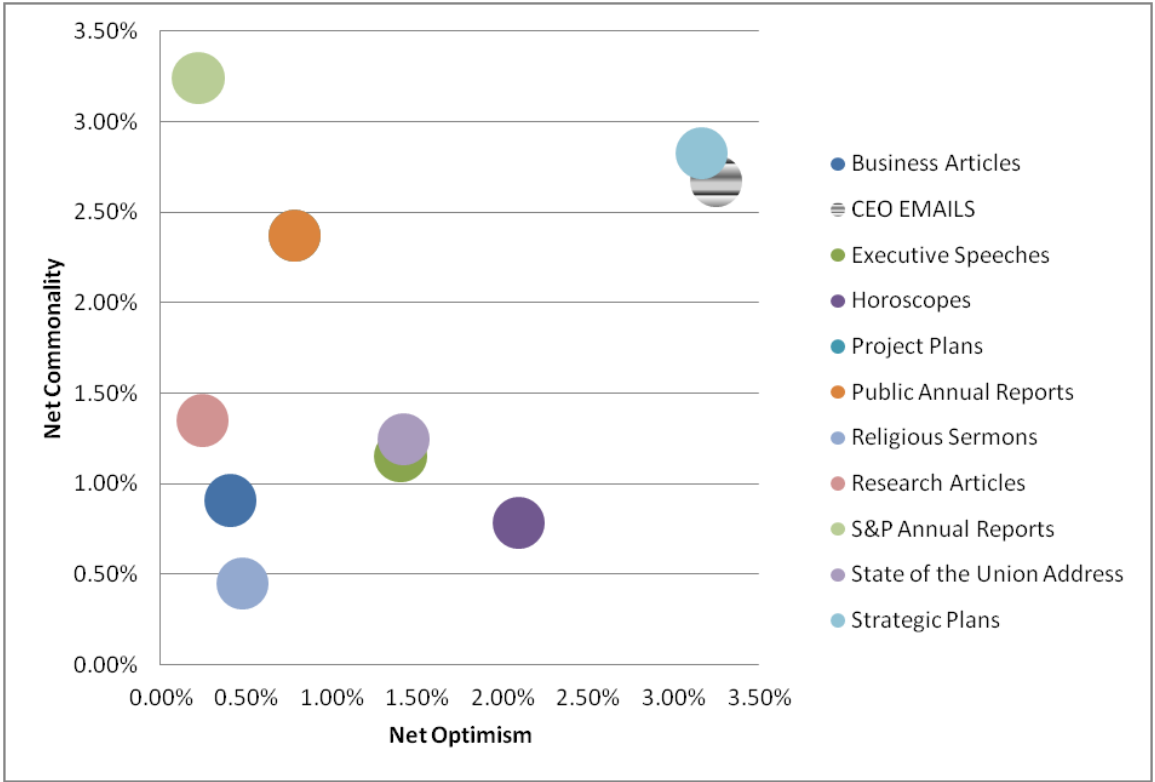
**Figure G10: Net Commonality**

Cornut et al. (2012) further investigated the relationship between net optimism and net commonality, arguing that strategic plans were significantly different from the others, as they were the only source of narrative that scored high on both attributes. As a future-oriented document, it is not surprising that the strategic plan emphasizes both a collective approach to strategy and an optimistic outlook. Figure G11 indicates that, as with strategic plans, the CEO Email also encourages a communitarian approach, with an optimistic outlook. Again, this is an interesting finding, given the specific case of Nortel and the associated challenges. The CEOs used the email as a means to motivate employees, more so than executive speeches and State of the Union addresses, which are similar in their attempt to reach out to the individual reader (or listener).



**Figure G11: Commonality and Optimism**

(Frequency, as a % of total words)



**1.5.5 Activity**

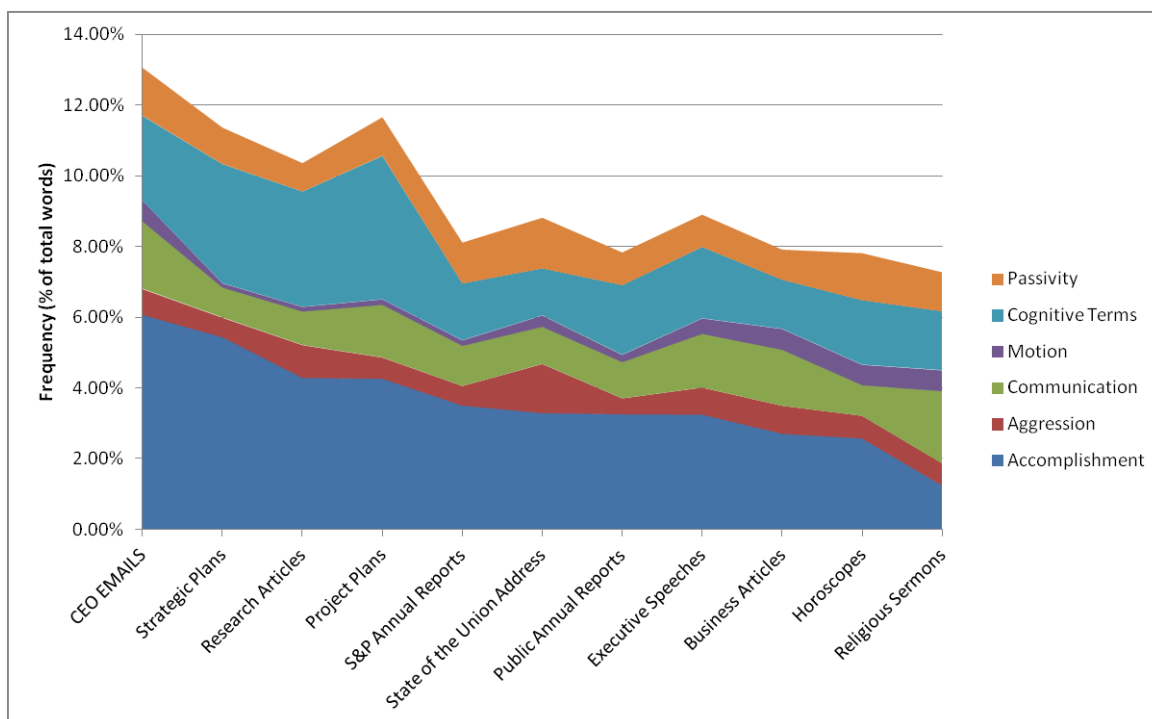
Activity is defined by Hart and Carroll (2102) as “movement, change, the implementation of ideas and the avoidance of inertia” (p. 1). Since strategy is activity-based, investigating the degree of activity characteristics in CEO Emails may provide insight into the purpose of the emails.

Activity includes seven textual characteristics: aggression, accomplishment, communication and motion; and (representing inertia), cognitive terms, passivity and embellishment (Hart & Carroll, 2012). Embellishment is calculated by DICTION using a ratio of adjectives to verbs of praise, blame, present concern, and past concern. Because

ATLAS.ti was used for the textual analysis (and not DICTION), embellishment had to be dropped from the equation.

Figure G12 indicates that CEO Emails rate high on activity, specifically on the accomplishment characteristic. The emails were laden with references to accomplishments and future objectives, using words related to task-completion, capitalism, organization, expansion, and programs. Although use of cognitive terms was also high for the CEO Emails, the net activity score for CEO Emails was the highest of all. This result suggests that the CEO Emails were specifically focused on accomplishments and objectives.

**Figure G12: Activity**

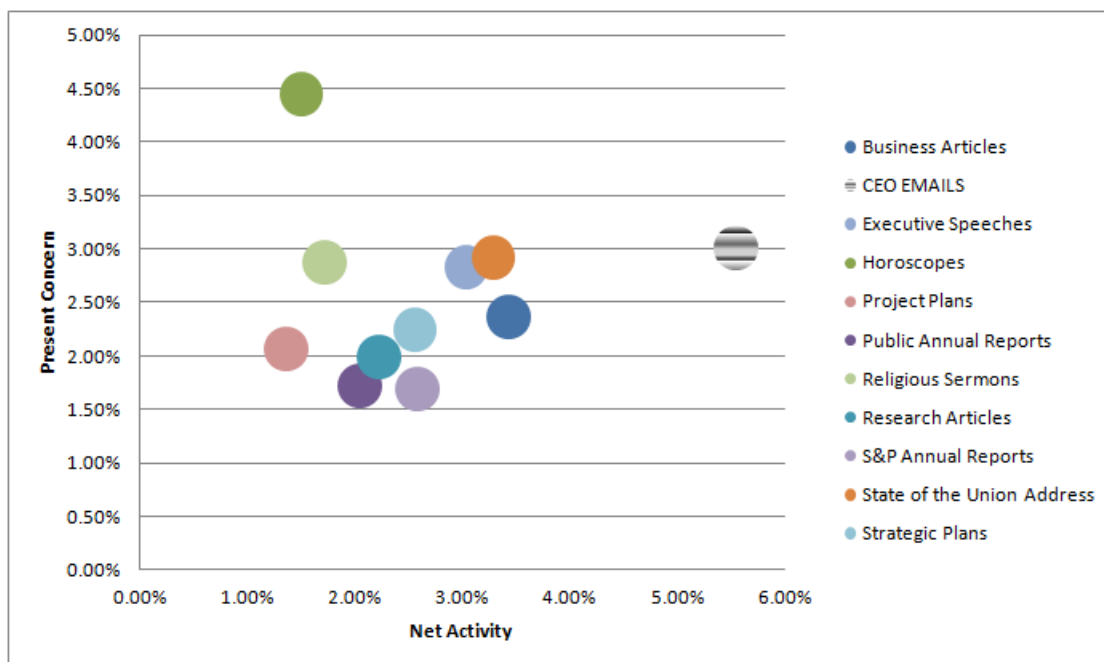


To further investigate the CEO's emphasis on activity, through their email narrative, net activity (activity less inertia) was mapped against present concern. As

Figure G13 demonstrates, CEO Emails are in a unique position whereby they emphasize activity and the present jointly, further suggesting the action-oriented nature of the narrative, more so than strategic plans, which are closer (in this case) to executive speeches and business articles in their present action orientation.

**Figure G13: Net Activity and Present Concern**

(Frequency, as a % of total words)



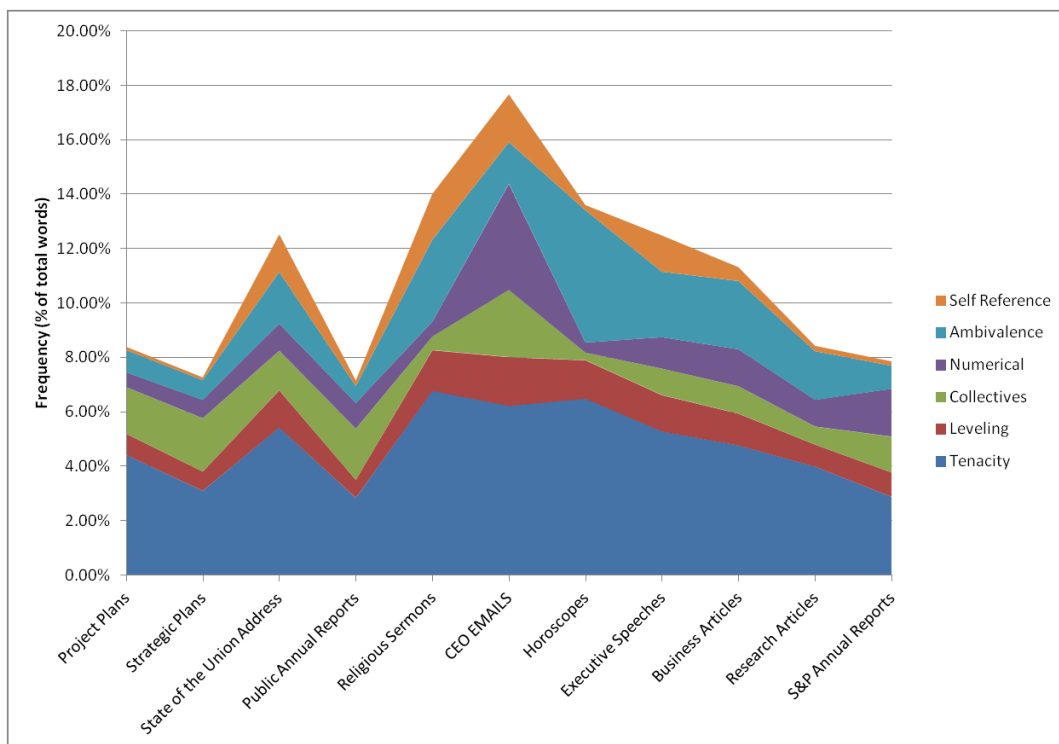
### 1.5.6 Certainty

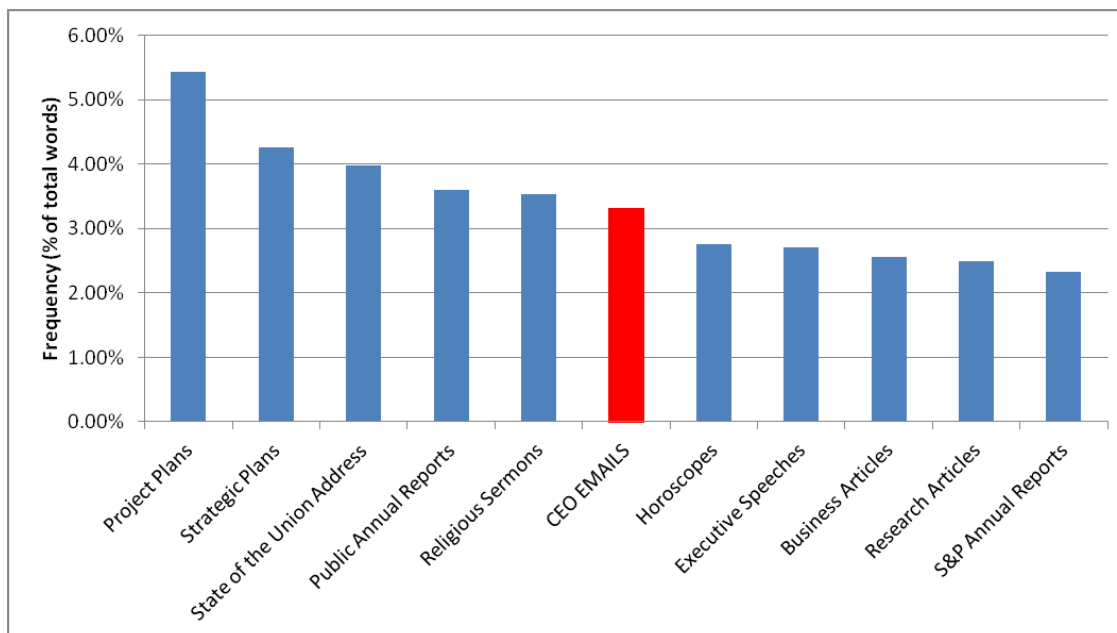
Dealing with uncertainty is an ongoing managerial problem; executives try to manage uncertainty by trying to buffer the organization's technical environment from the external (Thompson, 1967). Hart and Carroll (2012) define certainty as "resoluteness, inflexibility, and completeness and a tendency to speak ex cathedra" (p. 5) by measuring the certainty characteristics – tenacity, leveling, collectives and insistence – and the ambivalence characteristics – numerical terms, ambivalence, self-reference and variety.

Although variety and insistence are calculated by the DICTION software and therefore dropped, the other characteristics were considered sufficient to investigate the degree of certainty within the CEO Emails.

The results of the analysis are shown in Figure G14. CEO Emails not only score high on the certainty characteristics but also on the ambivalence terms, specifically the use of numerical terms and self-reference. As a result, net certainty (Figure G15) for the CEO Emails is just over 3%, whereas strategic plans are over 4% and project plans over 5%. It is important to note that the measure of certainty is not a direct measure of a CEO's reference to an uncertain environment. Rather, the characteristics (in addition to numerical terms) include ambivalence (not willing to commit to what has been written), and high self-reference (suggesting limited vision) (Hart & Carroll, 2012).

**Figure G14: Certainty and Ambivalence**



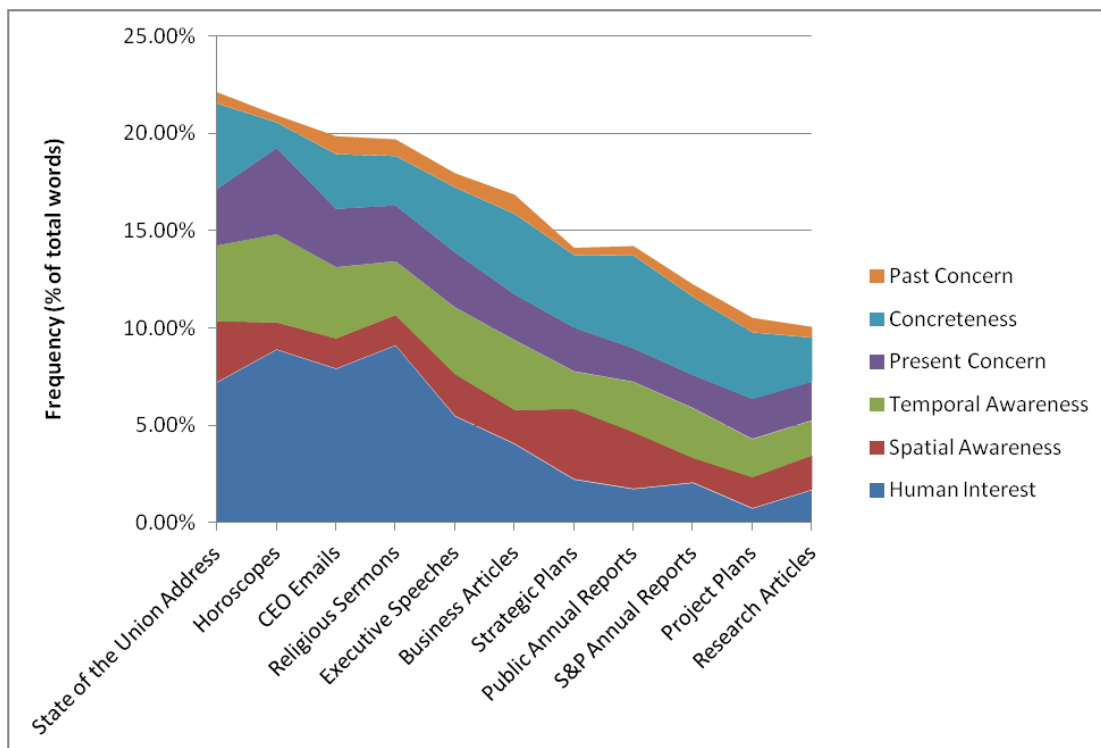
**Figure G15: Net Certainty**

### 1.5.7 Realism

Realism is defined as “tangible, immediate, recognizable matters that affect people’s everyday lives” (Hart & Carroll, 2012: 8). Realism is of interest specifically because of the nature of the CEO Email. The CEOs at Nortel chose to communicate strategy and organization concerns to employees directly, through a broad email distribution system. Employees received these emails in their personal email inboxes. When the email was sent, it took a half day (at most) for the technical system to distribute the emails to all employees (they were sent in batches). Employees could read the emails at their leisure – alone, with colleagues, during work hours, outside of work hours. The email served as a one-way communication by the CEO and was arguably timely, as it referenced both past and future events, and was grounded in present activity. Making the emails *real* to employees could be important.

Realism can be measured with eight of the textual characteristic through the following formula: the addition of familiarity, spatial awareness, temporal awareness, present concern, human interest, and concreteness, less past concern and complexity (Hart & Carroll, 2012). Complexity is a DICTION-measured variable that calculates the average number of characters per word within the file. It was not used in this calculation. Additionally, familiarity results were not included in Cornut et al.'s (2012) study, and therefore were dropped here as well. Notably, the familiarity measure for the CEO Emails was the most pervasive of all characteristics, suggesting that the emails were highly informal. Figure G16 shows that the CEO Emails narratives were high on realism.

**Figure G16: Realism**



### ***1.5.8 Summary***

As the analysis indicates, the CEO Email is similar to strategic plans, state of the union addresses, religious sermons, horoscopes, and executive speeches. However, as shown in Table G6 and Figure G17, differences suggest that the CEO Email is a unique narrative. Similar to speeches and horoscopes, the emails have a temporal awareness and concern for the past, present and future. However, unlike strategic plans, CEO emails have limited spatial awareness. The emails score high on realism, as do other narratives that aim to speak directly to the individual reader / listener (speeches, horoscopes) but CEO Emails (more than any other) are activity-based, with an emphasis on present action.

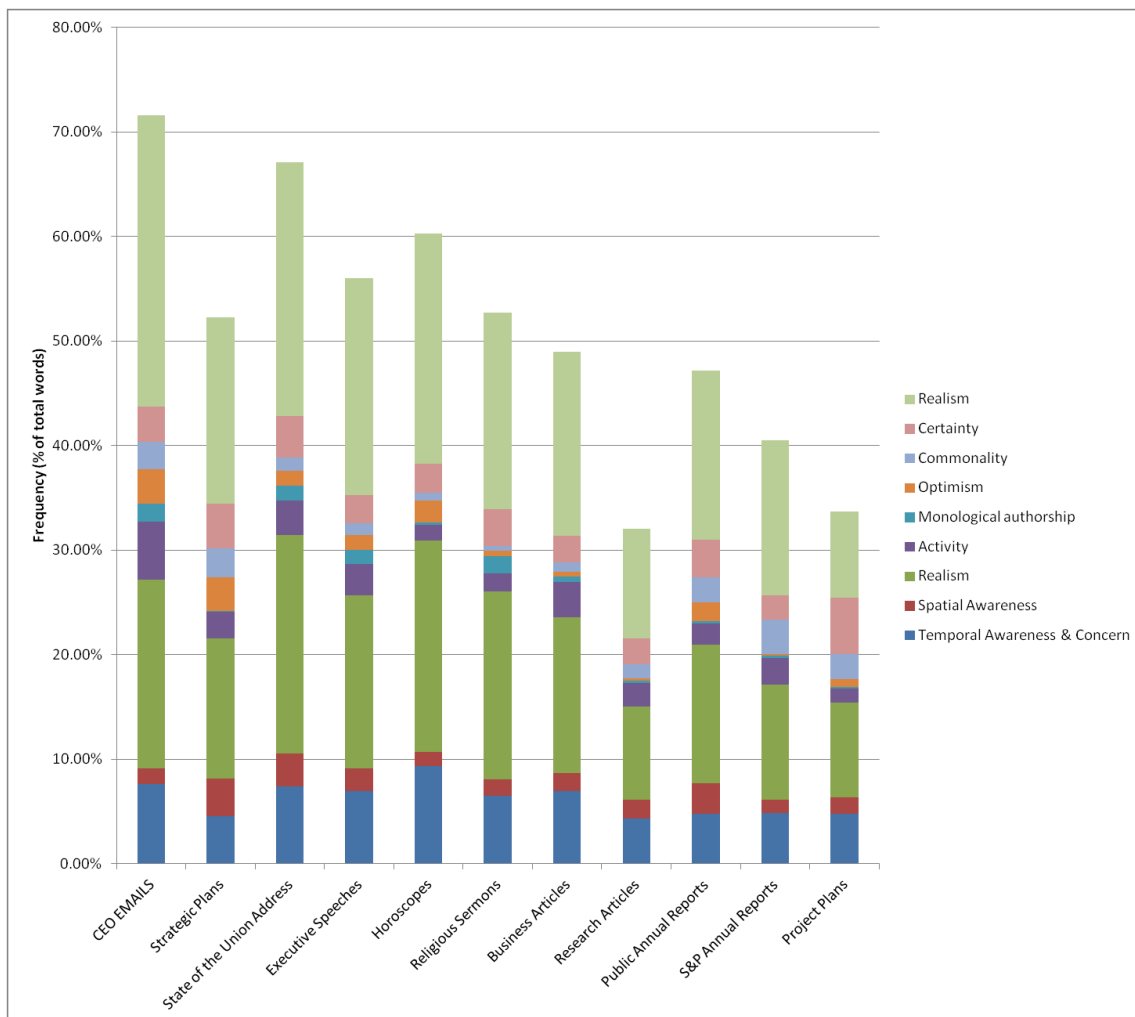
Authorship is monological. The CEO Emails score high on optimism and commonality, much like strategic plans. Above all others, CEO Emails are high in realism. Notably, for CEO Emails, certainty falls more towards the median, and is significantly lower than its counterpart, strategic plans.

**Table G6: CEO Emails as a Unique Type of Strategy Narrative**

|                            | Temporal Awareness & Concern | Spatial Awareness | Realism | Activity | Monological authorship | Optimism | Commonality | Certainty | Realism |
|----------------------------|------------------------------|-------------------|---------|----------|------------------------|----------|-------------|-----------|---------|
| <b>CEO EMAILS</b>          | 7.59%                        | 1.56%             | 18.02%  | 5.55%    | 1.75%                  | 3.25%    | 2.67%       | 3.32%     | 27.92%  |
| Strategic Plans            | 4.55%                        | 3.61%             | 13.39%  | 2.57%    | 0.10%                  | 3.17%    | 2.83%       | 4.26%     | 17.79%  |
| State of the Union Address | 7.39%                        | 3.13%             | 20.96%  | 3.30%    | 1.38%                  | 1.42%    | 1.25%       | 3.98%     | 24.33%  |
| Executive Speeches         | 6.99%                        | 2.16%             | 16.50%  | 3.04%    | 1.33%                  | 1.40%    | 1.15%       | 2.70%     | 20.73%  |
| Horoscopes                 | 9.35%                        | 1.39%             | 20.20%  | 1.51%    | 0.19%                  | 2.10%    | 0.78%       | 2.76%     | 22.02%  |
| Religious Sermons          | 6.50%                        | 1.55%             | 18.00%  | 1.73%    | 1.69%                  | 0.48%    | 0.45%       | 3.53%     | 18.81%  |
| Business Articles          | 6.93%                        | 1.74%             | 14.88%  | 3.43%    | 0.51%                  | 0.41%    | 0.91%       | 2.57%     | 17.57%  |
| Research Articles          | 4.34%                        | 1.77%             | 8.95%   | 2.24%    | 0.20%                  | 0.25%    | 1.35%       | 2.49%     | 10.49%  |
| Public Annual Reports      | 4.79%                        | 2.91%             | 13.25%  | 2.05%    | 0.21%                  | 1.81%    | 2.40%       | 3.60%     | 16.13%  |
| S&P Annual Reports         | 4.89%                        | 1.27%             | 10.97%  | 2.59%    | 0.16%                  | 0.22%    | 3.24%       | 2.32%     | 14.85%  |
| Project Plans              | 4.77%                        | 1.60%             | 9.03%   | 1.37%    | 0.12%                  | 0.78%    | 2.37%       | 5.43%     | 8.24%   |



**Figure G17: CEO Email as a Unique Type of Strategy Narrative**



## 1.6 Results – Macrostructure

### 1.6.1 Descriptive Results

This section provides a description of the CEO Emails, using the data set of 146 emails (i.e. all strategy and organizational announcement emails from the Dunn, Owens, and Zafirovski).

*Authorship.* Although it has not been confirmed if the CEOs themselves wrote every email, all CEOs were required to provide final approval; the emails were

distributed from the CEOs' email account and they electronically signed each email. "Even when authorship of the text is uncertain (e.g., a shareholder letter), there is widespread agreement that executives are heavily involved in their preparation (Barr et al., 1992)" (Short & Palmer, 2008: 729).

*Distribution.* The emails were issued with an information technology system created by Nortel, called 'webalert.' Webalert allowed for the mass distribution of an email and was linked electronically to the firm's organizational structure manager (OSM) application. From within the webalert system, the user was able to select the audience of the email, based on criteria included in OSM. Since OSM contained demographic information of all employees, along with their position profile, their salary level, and their reporting structure, it was possible to send to a wide variety of user-defined groups. For example, the user could choose to send an email to specific segments of the employee population such as: employees in a particular country, city, or region; employees reporting to a particular manager, executive, function; employees above a certain managerial level, below, or a combination thereof; only women; etc...

The CEO Emails were sent to all employees through the webalert tool. Once the content of the email was finalized by the CEO, it was sent to the corporate communications manager responsible for webalert distribution. The manager was able, through webalert, to associate the email to the CEO's email account, so that the official sender of the email was the CEO. This also meant that any reply to the email would be sent directly to the CEO's email account (and not the corporate communications manager). Depending on the size of the employee population, the email distribution could

take up to a few hours to complete, as they were distributed in batches (to avoid overloading the internal telecommunications network).

*Language.* Emails were written and distributed in English to all regions, with the exception of Quebec. Emails to Quebec employees were translated into French and sent in a separate batch, as a bilingual email (i.e. both English and French versions combined). If translation was not possible for the initial distribution, the French translation followed when available, while the original English email was sent at the same time as the rest of the company. The English emails were used for the analysis.

*Intended audience.* The webalert tool automatically inserted a first line into each email to identify the audience. Up until March 2005, the first line of every email began with “Audience:” followed by an expression that indicated the email was being sent to all employees. Dunn’s emails (with one exception) indicated that the email was being sent to either “All Employees” or “All Nortel Networks Employees.” Owens’ emails were addressed to “The People of Nortel.” None of Zafirovski’s emails had this formal designation, however, in all cases, the “TO” line of the email indicated that the message was sent to all employees. It can be confirmed, therefore, that the emails used in this research were issued through webalert and to all employees in the organization.

*Header format.* The header format included the TO line, the FROM line (Office of the CEO, or similar), DATE and TITLE.

*Body format.* When Dunn first began issuing the emails, the webalert tool did not support HTML formatting, therefore his emails and many of Owens’ emails were written in basic text. Subtitles were identified through capitalization of whole words and asterisks served for bulleted lists. By the time Zafirovski became CEO, the webalert tool supported

HTML formatting. His emails included different font types (typically Arial 10), bolded/underlined characters, bulleted lists, tables, etc... He also named his strategy emails “Zmails,” which included both a picture and a mustard yellow background as part of the format. Since ATLAS.ti was used for the analysis, the emails were all converted into rich text format and loaded into the software stripped of their original formatting. This was considered inconsequential, given that the analysis was on the texts themselves.

### **1.6.2 The Macrostructure**

The macrostructure of the emails is based on the analysis as described in the methods section and as presented in Table G7. Follows is a discussion on each move.

**Table G7: CEO Emails Macrostructure (Moves)**

| <b>Move</b>                                     | <b>Communicative Purpose</b>  |
|---|---|
| 1. Email Title - Passivity                      | Signal the nature of the email to the employee.   |
| 2. Opening Paragraph(s) – Heroes and Villains   | Establish the email’s context and set the tone. Position the employee within the narrative. Create a sense of importance and urgency to make the email relevant.          |
| 3. Body – The Story                             | Inform the employee of current events/decisions. Identify specific ways in which the employee will be affected or is expected to behave.                                  |
| 4. Background Paragraph(s) – Rhetorical History | Through rhetorical history, identify both internal and external events to confirm organizational identity and to legitimize decisions/actions.                            |
| 5. Closing Paragraph – The Ask                  | Reinforce urgency and importance. Summarize organizational values and define expectations of employees.   |
| 6. Complementary Close – Levelling              | Level the CEO-employee relationship through personal connections (expressions of emotion). Summarize the need of “doing it for the good of Nortel” (not just for the CEO) |

### ***1.6.3 Move ‘Email Title’ – Passivity***

With few exceptions, each email had a unique title, where major words were capitalized and minor words (e.g. articles, prepositions, and coordinating conjunctions) were in lower case. Of the 146 emails, all but 16 had descriptive titles. The remaining 16 were issued by Zafirovski during the bankruptcy protection process.

Email titles typically summarized the content of the email. Strategy emails that focused on results usually included a reference to the financial quarter in the title. For example, Dunn used titles such as: A Financial Update, Return to Profitability Bonus, 2003 Results and 2004 Priorities, Update on Restatement of Financial Results. Owens’ titles were equality descriptive, however less focused on financial results and more focused on the restatement process and employee engagement. Zafirovski’s emails had a mix of both. Most email titles used nouns and the passive voice.

### ***1.6.4 Move ‘Salutation’ – Inconsistent***

As indicated previously, the webalert tool automatically inserted a form of salutation, with the first line being “Audience: xxxx.” These appeared in most of Dunn’s and Owens’ emails, but not Zafirovski’s. In addition to the standard inserted line, Dunn and Owens also added personal salutations such as “Fellow Employees” and “The People of Nortel.” For the most part, however, any consistent use of a salutation was absent from the CEO Emails. The lack of personal salutation is similar in structure to an internal company memorandum, which has a standard header format similar to the CEO Emails (To, From, Date, Title) and no salutation.

### 1.6.5 Move ‘Opening Paragraph(s)’ – Heroes and Villains

Both types of emails – strategy and organizational announcements – began with the introduction of a hero, villain, or both, to establish narrative context. Organizational announcements began with details on the leadership change, followed by the recognition of both the outgoing leader and the incoming leader. In most cases, both leaders (incoming and outgoing) were presented as heroes in the narrative. Occasionally, an outgoing leader’s accomplishments would be downplayed and, in one instance, the leader was positioned as a villain (departure of Daichendt).

In the strategy emails, the heroes and villains were either actors or groups of actors, as shown in Table G8. For example, the economy and the industry were often portrayed as villains, along with the media and analysts, and (at times) even Nortel’s own employees. Executives were often portrayed as the heroes, both individually and as a group, along with employees (when performance improved).

**Table G8: Move ‘Opening Paragraph’ – Heroes and Villains**

| CEO Email                     | Opening Paragraph   | Hero, Villain        |
|-------------------------------|---|----------------------|
| Dunn,<br>December 16,<br>2002 | On my way home from a business trip to India at the end of November, I reflected on the events of the past year. My conclusions? Without question, 2002 was an extraordinary period of challenge and change for telecom. Sweeping changes in industry structure touched every player in every corner of the sector. The stakes were and continue to be enormous for everyone in the industry. | Villain:<br>Industry |

| CEO Email                     | Opening Paragraph   | Hero, Villain  |
|-------------------------------|---|--|
| Owens, June 18, 2004          | I wanted to give you a bit of an update on my thoughts and activities of the last couple of weeks since I last wrote to you. Life has been pretty busy for me as I continue my early agenda of (1)getting to know the people of our company, (2)engaging our major customers, (3)evolving Nortel's presence with the media and the investment community, and (4)starting down the path of putting new initiatives in place to make our company stronger. I'll talk to you more in detail about all of these as time goes on, but I have been very pleased with our progress in the 7 weeks I've been your Chief Executive.  | Hero: Owens  |
| Zafirovski, June 9, 2006      | Earlier this week, we announced the results for the first quarter of 2006. It was a difficult quarter -- flat sales and higher loss than last year -- and our performance must improve substantially to achieve our stated full-year 2006 targets (growth in high single digits; 300-500 basis point improvement in operating margin). <u>Our internal plans that are in place are to meet/surpass these targets</u> , but many external, and arguably some internal, skeptics would say there is a catch. Namely, we will have to deliver on those plans (and the naysayers will point to the lack of a track record over the last few years).   | Villain: Financial results, skeptics, naysayers, including employees |
| Zafirovski, August 1, 2007    | After 12 extremely productive and successful years, Dion Joannou, our North American President, has decided to leave Nortel to pursue other personal interests, effective August 31, 2007.<br>Dion has been a strong contributor and a key member of our leadership team for many years. From his tenure as Chief Strategy Officer and CALA President, through to his present responsibilities in the North American region, he has helped strengthen our company and build our business - particularly in the Enterprise space where he has made a strong contribution in recent years.<br>We are sorry to see him go, and wish him much success wherever his career takes him. In the interim, we hope that he will fulfill his wish of spending more quality time with his family. | Hero: Executive  |
| Zafirovski, November 10, 2008 | These are unprecedented times and the path forward for Nortel is filled with challenges. The world economic situation has deteriorated and it is impacting our business and customers deeply. Today, we are acting swiftly and decisively to strengthen our financial position, navigate this uncertain environment and build a stronger, more focused organization.  | Villain: The world economy<br>Hero: Collective - Nortel              |

The communicative purpose of the opening paragraph(s) was to establish context for the employee in a clear and succinct manner. The CEOs consistently used the opening

of the email to identify the central theme of the narrative, position the employee within the story, and establish a sense of urgency and importance.

### **1.6.6 Move ‘Body’ – The Story**

The body of the emails contained specific information on the relevant events and/or decisions being communicated. If the decision was complex (e.g. a major organizational announcement), the body of the email would consist of numerous paragraphs and bulleted items, outlining each decision and the impact to employees. If a new program was launched, the details of the program would be included in the email, including the owner, the structure, the objectives, the timing of the launch, and the employee’s responsibility within the program (see Table G9 for examples). Often, the body of the email would contain links to other narrative sources such as news releases and financial reports posted on the company’s external website, internal Q&A documentation, videos, PowerPoint presentations, earlier CEO Emails, corporate values, and other websites dedicated to employee communication.

**Table G9: Move ‘Body’ – The Story**

| <b>CEO Email</b>         | <b>Body</b>   | <b>The Story</b>                  |
|--------------------------|---|-----------------------------------|
| Dunn, November 13, 2002  | This bonus has two objectives that are interrelated and that, from my perspective, serve the interests of the company, its employees and shareholders, who have felt the economic consequences and impacts of the telecom collapse that's occurred over the past several years.   | The Return to Profitability Bonus |
| Owens, November 11, 2008 | You will see evidence of our new marketing and advertising campaign in our buildings, on your desktop, on our external and internal websites, and in the materials that are making their way to all of you. Please take time to familiarize yourself with our messages and recognize the very important role all of you play in being brand ambassadors for Nortel. Playing that role is a tangible way all employees can contribute to the success of our company. | Launch of new marketing campaign  |



| CEO Email                    | Body   | The Story  |
|------------------------------|--|--|
| Zafirovski, March 28, 2007   | As I have previously communicated, meeting our financial targets is our number one “Must-Do” for 2007. And one of our key financial objectives is to reduce our level of debt, while maintaining a strong balance sheet.<br>Following up from my email last week, today we closed on issuing \$1.15 billion of convertible senior notes. The proceeds will be used to proactively refinance a large portion of our existing \$1.8 billion convertible notes, which mature in September of 2008. By taking this action, we are increasing our financial flexibility so that we can move with greater agility to execute on our <u>6-point plan</u> and re-create this great company.  | Announcement of convertible senior notes offering        |
| Zafirovski, February 4, 2008 | <b>Driving best practices will accelerate our success.</b> Like our new ads say: "Why make it hard, when you can make it simple?" It will be critical for us to drive best practices across the company. We have many "one-off" successes -- both in terms of significant customer wins and in select world-class practices -- but we are not adopting and spreading them quickly enough. One thing all great companies have in common is an ability to learn from each other and leverage and multiply the impact of good ways of doing things. We have started sharing customer successes in the "Anatomy of a Deal" initiative and can point to several efforts to streamline our processes. But, we need to move much faster and we need to make success a habit at Nortel. This will ultimately strengthen our ability to build a true culture of excellence and execution. | One of 11 paragraphs on the corporate marketing campaign |

The communicative purpose of the email body was to inform employees of the decision and/or event and to ultimately influence behaviour (norms, values, beliefs, or actions). Although in some instances no immediate action was required of employees, the body of the email focused (at the very least) on influencing beliefs. Throughout the case, CEOs were faced with the task of communicating bad news, such as poor financial performance, market challenges, workforce reductions, or programs to change culture; the change efforts were substantial. The body of the emails reflect the efforts of the CEO in trying to influence employee behaviour.

### 1.6.7 Move ‘Background Paragraphs’ – Rhetorical History

Once the purpose of the email was established, the CEOs drew on the past to recreate history, through the sequencing and sensemaking of events. This method of using history as a resource is known as rhetorical history, where strategists reconstruct the past to “motivate, persuade and frame action, both within and outside an organization” (Suddaby et al., 2010: 147). As outlined in the examples of Table G10, Dunn drew on Nortel’s historical capabilities to substantiate the firm’s ability to succeed (e.g., we led through innovation in the past, we can and will do it again). Owens used rhetorical history to indicate success in developing and following a strategic plan. In relation to the restatements, Zafirovski positioned them as a blip in the corporation’s history; an exception to its proud heritage. He also positioned Nortel not only as an industry leader but also as being responsible for major industry transformations.

**Table G10: Move ‘Background Paragraphs’ – Rhetorical History**

| CEO Email              | Background Paragraphs   | Rhetorical History   |
|------------------------|---|--|
| Dunn, January 30, 2003 | As I look back, a few things really stand out, foremost being the fierce resolve, energy, and commitment of our people. A superior ability to adapt to and lead disruptive, fast-moving change has been a Nortel Networks strength for a long time, and it was on full display this past year. Many no-turning-back decisions were made in 2002 to keep the company together and move it in new directions, and we needed a lot of hands-on work -- an execution culture -- and passionate leadership throughout the company to get things done in real time. | Nortel’s strength, no-turning back decision, execution culture |
| Owens, April 26, 2005  | As I communicated to the market last summer, Nortel will continue its strategy of partnerships and alliances to speed solutions to market and strengthen our competitive advantage. This is the way we are executing aggressively on our strategy of developing, acquiring, and making alliances to achieve rapid time-to-market and first-mover advantage in key markets.  | Established strategy of partnerships and alliances             |

| CEO Email                          | Background Paragraphs   | Rhetorical History   |
|------------------------------------|---|--|
| Zafirovski,<br>February 8,<br>2006 | The attention this settlement will get will no doubt be a temporary distraction as pundits and industry watchers may use it as an opportunity to re-tell the circumstances around the financial restatement and recent challenges facing the Company. It's important to recognize that the settlement is in relation to activities that are a part of our past, and a big part of moving forward is in closing this unfortunate chapter in our otherwise proud and distinguished history. | Restatements were an exceptional circumstance (not endemic of greater issue) |
| Zafirovski,<br>January 15,<br>2007 | We believe that it marks a seismic change in the industry, and it can be added to the long list of Nortel innovations that have transformed networks over the years - including Digital World (the world's first line of fully digital telecom systems), FiberWorld (telecom systems based on fiber optic technology), and successive waves of next-generation wireless technology.   | Nortel as an industry transformer, then and now                              |

With rhetorical history, the CEOs were able to shape organizational identity, legitimize decisions and actions, and decouple the identity from undesirable characteristics.

### ***1.6.8 Move 'Closing Paragraph' – The Ask***

All of the CEO Emails included a final paragraph that closed the narrative in a similar way: through the summation of the story, the email would close with a request to employees on what they should believe and how they should act (see Table G11). The communicative purpose was to reinforce urgency and importance of the issue, emphasize relevant organizational values, and define expectations of employees.

**Table G11: Move 'Closing Paragraph' – The Ask**

| <b>CEO Email</b>           | <b>Closing Paragraph</b>  | <b>The “Ask”</b>          |
|----------------------------|---|---------------------------|
| Dunn, January 29, 2004     | This is a rigorous set of priorities, but each is critical and, if we are successful in meeting them, extremely powerful. The bottom line is Nortel Networks is on the move again. We are well positioned to go on the offensive and continue to create new realities for ourselves, our customers and our industry in 2004 and beyond, just as we did in 2003. I look to each of you to be a leader in working to move these priorities forward.   | Do your job               |
| Owens, December 7, 2004    | Please get behind this and other strategic relationships that will help define the new Nortel going forward. Today's news, combined with our announcement that we will provide Sprint with enhanced wireless infrastructure equipment and professional services to support the Nortel portion of their nationwide 3G wireless network, are further proof points that very good business continues at Nortel.  | Support the plan          |
| Zafirovski, March 10, 2006 | What makes this company great is the way all of you have created new innovative market solutions while rising to meet the challenges of the past. Today marks another challenge; however, rest assured, today's restatement announcement is not going to slow down our commitment to rebuilding a high-performing company that we can all be proud of.  | Ignore the problems       |
| Zafirovski, August 1, 2008 | If we stay true to these values, we will transform with purpose, we will grow and we will succeed. As we discussed at the June analyst meeting, I am very excited about moving our transformation to the growth stage. Great companies grow or perish. The most successful organizations are those that have a strong sense of who they are, what they value and how they bring it to the world. Nortel is no different. Even during the toughest of times, by pulling together, we can be part of something truly special. Let's make it happen. | Live the corporate values |

### **1.6.9 Move 'Complementary Close' – Levelling**

Each of the CEOs included a complementary close of a few lines (small paragraph) that would include a personal message and a thank you to employees (see Table G12). It appears that the communicative purpose of the close was to establish a personal connection with the employee and to downplay the authoritarian role of the CEO. The close often included a personal reference of emotion. The complementary close acted as a levelling mechanism by signalling to employees that the CEO was

accessible, understanding, and caring about all employees. This move represents a migration from a monological to a polyphonic narrative approach (Barry & Elmes, 1997), although most of the remaining email narrative had a monological tone.

**Table G12: Move ‘Complementary Close’ – Levelling**

| CEO Email                     | Complementary Close  | Levelling  |
|-------------------------------|--|--|
| Dunn, January 30, 2003        | Once again, thank you -- and keep your e-mails coming.   | You can communicate directly with me, no chain of command  |
| Owens, June 10, 2005          | Thanks for all that you do to strengthen Nortel day-in and day-out.  | You matter, you matter to Nortel and to me                 |
| Zafirovski, August 15, 2006   | If you haven't already, be sure to take some vacation this summer. I certainly enjoyed the time off last week with my wife and our three sons. Each one of us needs to be fully charged to drive a successful second half. | We are all human, even me, and I allow you to be human too |
| Zafirovski, December 18, 2008 | I truly wish all of you a healthy, happy and enjoyable holiday season. Thank you again for all you are doing for Nortel.   | I mean what I say, I really do care about you              |

### 1.7 Summary of Findings (for the purpose of the thesis)

The CEO Email represents a unique form of organizational discourse, whereby the CEO attempts to establish an individual connection with each employee. With rhetorical history, the CEO defines, develops and confirms organizational norms, values, and beliefs to shape employee behaviour and reconstructs past events to legitimize executive decisions and actions. With the ability to reach all employees quickly and easily, the CEO Email is an important tool in the process of strategizing, providing CEOs the opportunity to communicate directly with employees, bypassing all levels of management and establishing a direct rapport.

The informal and personal nature of the emails also allows CEOs to develop their own individual identity within the organization, in context with the organization's identity. However, with the communicative purpose being to shape employee thinking and behaviour, the CEO Email retains a monological authorship that reaffirms the CEO's role as the master architect of the firm's strategy, even with CEO attempts at levelling in the complementary close.

As with strategic plans, CEO Emails are both optimistic and inclusionary, but unlike strategic plans, CEO Emails are highly temporal (present and future), realism-based, with an emphasis on present-day activity. Although similar to executive and presidential speeches, the CEO Email is a concrete document; the intertextual nature of the CEO Email, both in texts that it draws upon, and texts that draw upon it, embed the email into the narrative infrastructure in a purposeful way.