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**Entrepreneurial responses to conditions  
of high strategic uncertainty**

Harold Star

A Thesis

in

The Department

of

Management

Presented in Partial Fulfilment of the Requirements  
for the Degree of Doctor of Philosophy at  
Concordia University  
Montreal, Quebec, Canada

February, 1990

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All I can say is thank you ...

to Shirley, for her love and infinite patience;

to Ron, whom I call friend;

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to Christina, who opened the doors;

and to the mills, who trusted a stranger.



## **ABSTRACT**

### **Entrepreneurial responses to conditions of high strategic uncertainty**

Harold Star, Ph.D.  
Concordia University, 1990

This study examined the strategic responses of 19 Canadian sweater manufacturers to the uncertainties which characterize their industry. Theoretical predictions developed in the dissertation argued that the firms would engage in relationship management practices as a primary strategic activity. To test this, the study examined the partnership choices made by each of the subjects, and analyzed their established relationships with key suppliers and customers, using an inductively developed relationship classification scheme.

The sample displayed tremendous diversity in their choice of partner type. Similarly, the distribution of relationship types varied widely, although there was a significant association between the type of established relationship and partner form. The data suggested that partner choice represented a structural response to uncertainty, while relationship type constituted a process response. Firms adopted sets of responses to the industry uncertainties, in a seemingly emergent, "groping" fashion.

To test whether the response sets were idiosyncratic, the sample was stratified into statistically significant clusters of firms. Each cluster was

shown to represent a unique uncertainty domain. It was found that firms within each cluster displayed comparable partnership choices; these choices were distinctly different from those made by firms in the other clusters. The distribution of relationships within each cluster suggested that each group had a "linking pin" member; this firm had formed a long term relationship with either a supplier or a customer. The data suggested the presence of the linking pin, and the benefits which group members derived by its presence, was the primary factor maintaining the membership and behavioural stability of the strategic clusters.

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## **CHAPTER 1**

### **Strategic management and uncertainty**

#### **1.0 Introduction**

Strategic management and uncertainty are inextricably linked. Indeed, the relationship can be considered to be a product of definitions:

Corporate strategy is, by definition, an exercise in forward thinking, a disciplined planning process aimed at attaining specific company goals at some point in the future ... Under fairly static conditions, this process works well, but when faced with a future certain to be wracked with change, uncertainty, and even turbulence, static-based planning is an enemy in the costume of a friend. (Gilbreath, 1987: p. 44)

The intertwining of the two concepts does not imply, however, that the literature has treated the strategy-uncertainty relationship with extensive depth. In this chapter, the reasons why uncertainty represents strategic management's "Achilles heel" (Allaire and Firsirotu, 1989) will be explored. The chapter will review the approaches strategic management has taken toward "uncertainty", and will analyze the assumptions underlying the treatment. It will conclude by suggesting that relaxing these assumptions exposes strategic management's treatment of uncertainty as inadequate.

## **1.1 Uncertainty and the schools of management thought**

A convenient framework through which the examination of the strategy-uncertainty relationship can be undertaken is offered by Mintzberg. He categorizes the strategic management literature into "schools of thought", i.e. widely distinct conceptualizations of strategy and its contextual elements. Selected representatives from each major school will be reviewed herein, to illustrate that approach's thematic treatment of uncertainty.

### **1.1.1 The design school**

The design school, which divides strategy making into distinct formulation and implementation stages, is the oldest of the approaches to strategy making (Abell and Hammond, 1979; Ackoff, 1981; Andrews, 1981; Ansoff, 1965; Bracker, Keats, and Pearson, 1988; Grant, Jammine, and Thomas, 1988; Hall, 1978; Hofer and Schendel, 1978; Hofer, 1976; McNichols, 1983; Schendel and Hofer, 1979). Mintzberg proposes that this school is distinguished by its view of strategy as firm specific, i.e. uniquely designed for each organization:

In each company, the way in which distinctive competence, organizational resources, and organizational values are combined is or should be unique. Differences among companies are as numerous as differences among individuals. (Andrews, 1981: p. 70)

Uncertainty is a risk-return assessment made in the strategy formulation stage:

The formulation of strategy ... is a logical activity (of identifying opportunities and threats in the company's environment and attaching some estimate or risk to the discernible alternates ... The riskiness of any future plan should be compatible with the economic resources of the organization and the temperament of the managers concerned (Andrews, 1981: pp. 25, 39)

Uncertainty is thus subjective, and its inclusion in strategy formulation considerations is "optional" (Andrews, 1981). In essence, uncertainty is not an important factor in the design school's view of strategy.

### **1.1.2 The positioning school**

The positioning school (Amit, Domowitz, and Fershtman, 1988; Chrisman, Hofer, and Boulton, 1988; Hambrick, 1983 (a), (b); Harrigan, 1985, 1980; Hatten, Schendel, and Cooper, 1978; Jones and Butler, 1988; Mascarenhas, 1989; Mitchell, 1989; Murray, 1988; Porter, 1980, 1985) views strategy making as a process of positioning the firm within and against its environment:

The goal of competitive strategy for a business unit in an industry is to find a position in the industry where the

company can best defend itself against (the) competitive forces or can influence them in its favour. (Porter, 1980: p. 4)

Porter sees uncertainty as an important and often ignored element in formal strategic planning<sup>1</sup>:

Most observers would agree that uncertainty has increased dramatically in the last decade ... Uncertainty is not often addressed very well in competitive strategy formulation, however. Strategies are frequently based either on the assumption that the past will repeat itself, or on managers' own implicit forecasts about the most probable future of the industry. (1985: pp. 445-446)

Porter advocates the use of industry scenarios in the strategy formulation stage as a means of dealing with uncertainty<sup>2</sup>:

A scenario is an internally consistent view of what the future might turn out to be. By constructing scenarios, a

---

<sup>1</sup>Porter does not offer a formal definition of uncertainty. He links the concept to questions about the future shape of the industry (1980: 256, 327). This suggests that his *implicit* operationalization of uncertainty is "environmental trends which are significant in their possible impact upon industry structure" (1985: p. 452).

<sup>2</sup>To develop the scenarios, the elements of industry structure must be categorized by their vulnerability to uncertain change, and those trends ("causal factors") which independently influence the most vulnerable elements are to be used in scenario development.

firm can systematically explore the possible consequences of uncertainty or its choice of strategies. (1985: p. 446)

Five decision options are available when making the "uncertain" strategic choice:

- 1) Bet on the most probable scenario;
- 2) Bet on the "best" scenario;
- 3) Hedge, i.e. adopt a minimax strategy that produces satisfactory results under all scenarios;
- 4) Preserve flexibility until it becomes apparent which scenario will transpire;
- 5) Influence: Select a scenario, and try to influence events to make it occur.

The options are neither mutually exclusive, nor is one superior to another:

When facing considerable uncertainty, firms tend to select strategies that preserve flexibility, despite the costs in terms of required resources or diminished competitive position. (1985: p. 446)

The best way to deal with uncertainty is to make a conscious choice to follow one or more approaches, rather than a choice based on inertia or implicit scenario ... The most challenging part of dealing with uncertainty is to find creative ways to minimize the cost of preserving flexibility or

hedging, and to maximize the advantages of betting correctly. (1985: p. 477)

The positioning school thus expressly includes uncertainty in the strategy formulation stage. Uncertainty's role is that of a moderator variable, in that it influences the choice of the developed alternatives. Uncertainty is not seen as a factor in the development of the alternatives themselves.

### **1.1.3 The configurational school**

The configurational approach (Chandler, 1962; Galbraith, 1983; Galbraith and Schendel, 1983; Keats and Hitt, 1988; Kim and Lim, 1988; Lawrence and Lorsch, 1967; Miles and Snow, 1978; Miller, 1988; Miller and Friesen, 1984; Miller, Droge, and Toulouse, 1988; Venkatraman, 1989) sees organizations as complex entities whose strategy, structure, and environments exhibit a natural tendency to coalesce into "configurations" of interdependent elements:

We ... advocate an approach that favours synthesis, developing or isolating composites that take the form of what we have called "gestalts", "archetypes", and "configurations". These can be defined as commonly occurring clusters of attributes or relationships—in the case of our own research, common states and processes of the organization as well as characteristics of its situation—that are internally cohesive, such that the presence of some



attributes suggest the reliable occurrence of others (Miller and Friesen, 1984: pp. 11-12)

Uncertainty is rooted in the issues which organizational decision makers see themselves confronting:

Prospectors are frequently the creators of change in their respective industries ... Prospector managers typically perceive more environmental change and uncertainty than managers of ... other organization types (Miles, Snow, Meyer, and Coleman, 1978, p. 553)

The uncertainties come from both internal and external sources, making managerial responses multi-layered in scope:

Successful organizations achieve strategic fit with the market environment, and support their strategies with appropriately designed structures and management processes ... Managers of truly outstanding organizations ... will not undo a crucial link among strategy, structure, or process in order to "solve" predictable problems. (Miles and Snow, 1984, pp. 1, 16)

The configurational approach makes uncertainty an important element in the strategy formation process. This school of thought sees uncertainty as one of many relevant factors which shape decisional and

behavioural alternatives. Uncertainty is a constant part of the relationally defined configurations (Miller and Friesen, 1984).

#### **1.1.4 The political school**

This school (Allison, 1971; Aldrich & Pfeffer, 1976; Beard and Dess, 1988; Eisenhardt and Bourgeois, 1988; Hill and Snell, 1988; Hirsch, 1975; Pfeffer and Salancik, 1978; Provan and Skinner, 1989; Romanelli, 1989; Yasai-Ardekani, 1989) defines strategy as the management of interrelationships within the operating environment:

... Organizations survive to the extent that they are effective. Their effectiveness derives from the management of demands, particularly the demands of interest groups upon which the organizations depend for resources and support (Pfeffer and Salancik, 1978: p. 2)

The starting premise of this approach is that organizations need resources. This makes "dependence" a basic operating condition for strategy making organizations:

The key to organizational survival is the ability to acquire and maintain resources ... Organizations depend on other organizations for many resources they themselves require... (Pfeffer and Salancik, 1978: p. 2)

Uncertainties are rooted in the resource acquisition requirements:

Problems arise not merely because organizations are dependent on their environment, but because this environment is not dependable. Environments can change, new organizations enter and exit, and the supply of resources becomes more or less scarce. When environments change, organizations face the prospect of either not surviving or of changing their activities in response to these environmental factors. (Pfeffer and Salancik, 1978: p. 3)

Strategy is aimed at absorbing the dependency rooted uncertainties:

One of the problems faced by organizations interdependent with other organizations is that the exchanges required for maintaining operations are uncertain ... potentially unstable ... and mediated by social actors. Coping with organizational environments requires stabilizing them, and the uncertainty resulting from unpredictable social actions is reduced by coordinating these actors.

We argue that vertical integration represents a method of extending organizational control over exchanges vital to its operation; that horizontal expansion represents a method ... to reduce uncertainty generated by competition; and that diversification represents a method of decreasing the organization's dependence on other, dominant organizations. (Pfeffer and Salancik, 1978: p. 114)

The political school thus expressly regards a narrowly defined form of uncertainty as a central element in strategy formation. Uncertainty is seen to be underlying firm behaviours; confronting it is regarded as a primary strategic objective.

#### **1.1.5 The learning school**

The learning school (Boeker, 1989; Burgelman, 1983; El Sawy and Pauchant, 1988; Grinyer and Spender, 1979; Hedberg, 1981; Hedberg and Jonsson, 1977; Lindblom, 1959; Mintzberg, 1978; Mintzberg and Waters, 1985; Mintzberg and Waters, 1982; Quinn, 1980) sees strategy formation as an incremental process. Strategic actions are made in small steps, with both causes and effects learned over time:

The most effective strategies of major enterprises tend to emerge step by step from an iterative process in which the organization probes the future, experiments, and learns from a series of partial (incremental) commitments rather than through global formulations of total strategy (Quinn, 1980: p. 58)

Uncertainty is at the heart of strategy formation:

Strategy deals with the unknowable, not the uncertain. It involves forces of such great number, strength, and combinatory powers that one cannot predict events in a

probabilistic sense. Hence logic dictates that one proceed flexibly and experimentally from broad concepts toward specific commitments, making the latter concrete as late as possible in order to narrow the bands of uncertainty and to benefit from the best available information. This is the process of "logical incrementalism" ... (Quinn-Mintzberg, 1988, p. 104)

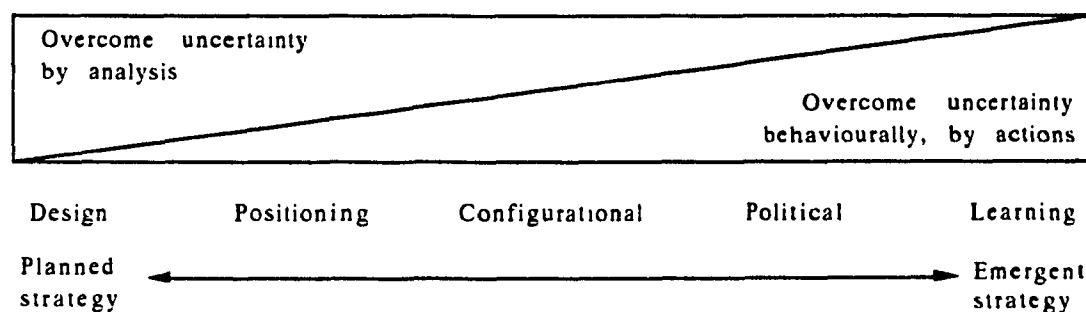
In fact, uncertainty and strategy making are so intertwined that uncertainty is managed by strategy making:

Effective executives accept much ambiguity. They seek sufficient definition and balance to keep major thrusts from getting out of control or in conflict, but they consciously avoid overspecifics that might impair the flexibility needed to exploit further information or new opportunities (Quinn, 1980: pp. 52, 56)

The learning school describes an extremely close strategy-uncertainty relationship. In essence, uncertainty is viewed as one of the primary factors influencing the shape and character of a firm's strategy.

### 1.1.6 Synthesis

In effect, two different approaches to coping with uncertainty can be identified in the strategic management literature. Advocates of a rational, planned approach to strategy making suggest that any uncertainties present in the formulation phase can be overcome analytically. Makridakis and Wheelright (1981), for example, suggest that the firm acquire more information through sophisticated forecasting techniques. Naylor (1983) and Porter (1985) advocate scenarios as a means of improving the use of already available information.



**Figure 1-1;** Coping with uncertainty;  
the schools of strategic management

Advocates of strategy as emergent patterns, on the other hand, suggest that flexibility and adaptiveness should be built into organizational activities as a means of coping with uncertainty. Some strategies are more "emergent" than others (Mintzberg and Waters, 1985), depending upon the level of uncertainty confronted by the strategist (Burton, 1984; Aaker and Mascarenhas, 1984; Gilbreath, 1987). The issue is one of crafting the strategy to the conditions being faced at that time (Mintzberg, 1987).

The different schools of strategy formation do not advocate "either/or" approaches to dealing with uncertainty. As discussed above, the positioning school recognizes the practical merits of behavioural flexibility. Similarly, the learning school accepts that strategies must be based, in part, on information and analysis. As suggested in Figure 1-1, the approaches seem to fall on a response continuum. Coping involves the blending of two different mechanisms:

Informational coping: The strategist is urged to acquire more information, and employ superior analytical techniques with the information he already possesses;

Behavioural coping: The strategist is urged to move incrementally, wait for uncertainties to resolve themselves, build flexibility into actions, and absorb uncertainties where necessary.

These coping approaches reflect what appears to be a single-lens perspective through which uncertainty has been viewed:

Most treatments have begun with the implicit assumption that uncertainty is dysfunctional to maintaining equilibrium and to satisfactory performance, and have focused on identifying and prescribing ways managers can either reduce or absorb these negative consequences of uncertainty. (Jauch and Kraft, 1986: p. 777)

To understand the roots of this limited perspective, we turn to a more detailed examination of the uncertainty construct.

## 1.2 Uncertainty

Uncertainty is one of the central concepts in organization theory:

- a) As a construct which partly describes the environment-organization interface (Dill, 1958; Lawrence and Lorsch, 1967; Duncan, 1972), uncertainty is particularly relevant to strategic management.
- b) In developing their behavioural theory of the firm, Cyert and March (1963) assert that uncertainty is a permanent feature of organizations (p. 118);
- c) Thompson (1967) argues that overcoming uncertainty is top management's most important task:

Uncertainty appears as the fundamental problem for complex organizations, and coping with uncertainty, as the essence of the administrative process (Thompson, 1967: p. 159)

When examined closely, however, uncertainty emerges as an elusive construct to understand:



One source of confusion in the environmental uncertainty literature is that the term "environmental uncertainty" has been used both as a descriptor of the state of organizational environments and as a descriptor of the state of a person who perceives himself to be lacking critical information about the environment (Milliken, 1987: p. 134.)

One of the factors which make uncertainty elusive is that consistent definitions of uncertainty are hard to find. Milliken (1987) identifies three which are frequently employed:

- 1) An inability to assign probability as to the likelihood of future events (Duncan, 1972; Pennings, 1981; Pfeffer and Salancik, 1978)
- 2) A lack of information about cause—effect relationships (Duncan, 1972; Lawrence and Lorsch, 1967);
- 3) An inability to predict accurately what the outcomes of a decision might be (Downey and Slocum, 1975; Duncan, 1972; Hickson, Lee, Schneck, and Pennings, 1971)

Another barrier to the understanding of uncertainty is that empirical inquiries into its nature and effects have been plagued by measurement problems. The two scales most frequently employed to measure decision makers' perceived uncertainty (Lawrence and Lorsch, 1967; Duncan,

1972) have few significant correlations among their respective subscales (Downey, Hellriegel, and Slocum, 1975; Tosi, Aldag and Storey, 1973). Efforts to measure uncertainty "objectively" (Downey, Hellriegel, and Slocum, 1975; Downey, Hellriegel, and Slocum, 1977; Tosi, Aldag and Storey, 1973; Tung, 1979) have generally focussed upon environmental volatility. Critics of this approach (Lawrence and Lorsch, 1973; Pfeffer and Salancik, 1978) note that the frequency of change is not an effective measure of uncertainty, as the construct is more closely associated with *unpredictable* change.

Also contributing to the difficulties of understanding uncertainty is the difficulty of interpreting the results of related empirical inquiries (Milliken, 1987). Jauch and Kraft (1986) offer an explanation. They identify three phases in the evolution of the literature on environmental uncertainty, suggesting that the implied definition of uncertainty has varied with the evolution:

Classical views: (March and Simon, 1958; Burns and Stalker, 1961; Chandler, 1962; Cyert and March, 1963; Emery and Trist, 1965). External environment is a source of uncertainty. The objective environment influences decisions, structures, and performance;

Transition views: (Thompson, 1967; Terreberry, 1968; Perrow, 1970; Child, 1972; Galbraith, 1973). Source of uncertainty is both external and internal. Uncertainty is not seen as an imperative; decision makers have choices and influences;

Process views (Lawrence and Lorsch, 1967; Duncan, 1972; Downey and Slocum, 1975; Van de ven et al, 1976; Downey et al, 1977; Tung, 1979). Objective environmental properties are largely ignored. The decision maker's perceptions, influenced by internal factors, mediate the link between uncertainty and system characteristics.

Uncertainty thus appears to be a particularly slippery construct. Implicit and explicit definitions, operationalizations, and interpretations all vary significantly from viewer to viewer. We seem to be better able to deduce clues of uncertainty's presence than to systematically observe and understand it. Little wonder, then, that strategic management exhibits variance in its treatment of uncertainty, and almost defensively adopts a narrow perspective in the assumed dysfunctionality of its influence.

### 1.3 Discussion

From this review, two types of uncertainty appear to be relevant to strategic management:

External uncertainty: This type of uncertainty is rooted in the nature of the organization's environment. High external uncertainty is characterized by dynamism (Dess and Beard, 1984), and sharply discontinuous change in areas like technology and competitor activities (Eisenhardt and Bourgeois, 1988).

Internal uncertainty: Uncertainty is also linked to processes within the organization. One type of internal uncertainty relates to the decision makers. Strategists' perceptions of the environment can lead them to "see" the world in different ways (Duncan, 1972; Child, 1972; Downey and Slocum, 1975; Starbuck, 1976; Hedberg and Jonsson, 1976; Smircich and Stubbard, 1985; Bourgeois, 1985). Milliken (1987) extends this argument, suggesting that perceptual uncertainties relate to three issues: (a) State uncertainty, which relates to difficulties interpreting the way(s) environmental components might be changing; (b) Effect uncertainty, which relates to the inability to predict what the impact of environmental events will be upon the organization; and (c) Response uncertainty, which relates to the inability to understand what response options are available and what the value of each might be.

A second type of internal uncertainty relates to the processes which enact the strategic actions. Political processes within the organization influence strategic behaviours (March and Simon, 1958; Cyert and March, 1963; Pfeffer, 1981). Dysfunctional politics (Bacharach and Lawler, 1980) can create a large gap between the intended and realized strategy (Mintzberg, 1978; Quinn, 1980).

Strategic management's difficulties with the uncertainty construct appear to be a function of researchers' taking different vantage points on strategically significant uncertainty. The design and positioning schools, for example, seem to view uncertainty as an "external" phenomenon. To these planning schools, uncertainty can be overcome informationally. In contrast, the behavioural schools seem to view uncertainty as largely an internal issue. The configurational and learning schools therefore suggest that the more slow moving behavioural coping mechanisms are the means of overcoming uncertainty.

In effect, strategic management has constructed process descriptions linked to incomplete conceptions of "strategic uncertainty" (Allaire & Firsirotu, 1989). As a consequence, the advocated coping mechanisms are linked to critically narrow "internal" and "external" assumptions (see Table 1-1 below).

**TABLE 1-1**

**COPING WITH UNCERTAINTY:  
PRESCRIPTIONS AND ASSUMPTIONS**

	<b>Assumptions about the actor</b>	<b>Assumptions about the environment</b>
<b>Informational coping</b>	Rational; Apolitical	Objective; Functionally ordered
<b>Behavioural coping</b>	Capable of enduring the uncertainties	Changing slowly; Receptive to firm

Informational coping mechanisms assume that the decision maker is rational, and capable of fully processing all supplemental information (March and Simon, 1958). "Best" decisions can be made, and consensus can be achieved, because the decision environment is apolitical.

These approaches also assume that the environment is objectively "knowable" to decision makers acting alone or in groups. Even an "uncertain", changing environment is assumed to be orderly arranged and predictable in evolution. Changes are assumed to have an underlying causal structure, and coping with them requires investigation and understanding.

Behavioural coping mechanisms assume that the organization and the decision maker can withstand the

waiting periods before action is taken. The organization is assumed to possess abundant resources, and the individual decision makers are presumed capable of defending temporary decisional inaction.

Behavioural coping advocates also assume that the environment is changing slowly enough for the firm to "catch up", once it decides to act. By corollary, it is implied that the environment is highly receptive to firm actions, and that reactions of others will be orderly and predictable.

When these assumptions are challenged, strategic management's ability to "handle" uncertainty is strained. Two changes seem particularly problematic:

When the actor's size is reduced, the actor is made less rational, due to decreased information acquisition and processing capabilities. Similarly, the ability to withstand even minor environmental discontinuities is severely limited; and

When the environment is turbulent (Emery and Trist, 1965), the ability to predict its future shape reduces considerably. Similarly, the virtues of incremental actions disappear, as the future cannot be expected to "clarify".

These changes seemingly define, at least partially, the strategy making setting of many organizations. Small to medium sized organizations constitute the vast majority of businesses. Turbulence seems to be a characteristic of young and/or fragmented industries. We therefore have limited insights into how uncertainty is managed, and strategy is formed, in commonly occurring "high uncertainty" settings.

#### **1.4 Conclusion**

In this chapter, the relationship between strategic management and uncertainty was reviewed. It was shown that strategic management's level of acceptance of uncertainty is not homogeneous. Some authors virtually ignore the construct, while others make it a central element of strategic processes. The chapter proposed a continuum on which this theoretical treatment varies.

Analysis identified two broad methods (informational and behavioural) by which strategic processes "cope" with uncertainty. The chapter showed that both coping mechanisms are based upon a set of assumptions which ultimately restrict the capacity of strategic management to describe strategy formation in a number of contexts. One of these descriptive limitations is identified by the following question:

How do relatively small organizations operating in turbulent settings manage their uncertainties and develop strategies?



In the next chapter, a theoretical answer to this question is developed. The chapter will develop a general model of strategy formation under conditions of high uncertainty..

## **CHAPTER 2**

### **Certainty Creation**

#### **2.0 Introduction**

In the previous chapter, it was shown that strategic management's description of strategy making under uncertainty is based upon a narrow set of assumptions. In this chapter, a more generalized model of uncertain strategy formation will be developed. The model is termed *certainty creation*.

The chapter will first outline the strategic management roots of certainty creation. After examining the model's details, the chapter will contrast certainty creation with a wide range of literatures. The research implications of the theoretical approach will then be developed.

#### **2.1 Strategic responses to uncertainty**

A number of authors have developed classification schemes for organizational reactions to uncertainty. Pennings (1981), for example, proposes that organizations display three broad strategic responses to uncertainty:

- 1) Forecasting: This coping behaviour tries to predict the behaviours of other interdependent organizations. Overlapping personnel, and the direct exchange of people, are commonly adopted intelligence gathering techniques;

2) Forestalling: This coping behaviour tries to prevent or control the emergence of unpredictable behaviours on the part of other organizations. Techniques to accomplish this include joint ventures and differentiation (to break out of the oligopoly constraints and create an independent domain);

3) Absorbing: This is an attempt to mitigate the negative consequences of other organizations. In contrast to the proactive nature of forestalling and forecasting, absorbing is a reactive approach. Mergers, licenses and imitation are the most commonly employed strategies.

These responses reflect the assumption that uncertainty is a negative influence upon the strategy formation process. In their review of strategic uncertainty, Jauch and Kraft (1986) reversed this presumption. They first argued that a firm can influence the level of environmental uncertainty:

Managers and the performance of their organizations influence the environment ... Managers may actually seek to create environmental uncertainty, rather than adapt to it. Through its influence on the environment, an organization can create greater uncertainty for competitors, thereby enhancing its own competitive position. (Jauch and Kraft, 1986: p. 777)

From this, they were able to propose that "uncertainty reduction" and "uncertainty creation" constitute two different sets of strategic responses available to organizations:

*Internal uncertainty reduction* strategies aim to acquire knowledge about the operation of the organization;

*External uncertainty reduction* strategies aim at acquiring knowledge about the environment;

*Internal uncertainty stimulation* strategies try to create organic structures more capable of absorbing external uncertainty; and

*External uncertainty stimulation* strategies create a superior information advantage. This can be done either by raising the level of others' uncertainty or, given an already superior internal structure for processing uncertainty, by creating an equal amount of uncertainty for everybody.

Allaire and Firsirotu (1989) also suggest that a firm possesses a range of reactive and proactive responses to uncertainty:

(1) Technocratic responses to uncertainty find strategists striving to predict future events through the use of such methods as statistical, technological and sociopolitical

forecasting techniques, computer simulations, scenarios, environmental scanning procedures, and market research;

(2) Power responses see organizations trying to shape and dominate their operating contexts, shift risks and uncertainties to less powerful groups, and discipline the level of competitive activity; and

(3) Structural responses are intended to increase an organization's flexibility and adaptability, thus reducing its vulnerability to uncontrollable events. These techniques include broadening the product and market scope of the firm, and directly absorbing environmental uncertainties.

Crawford, Gram and Star (1987) integrated and extended these related perspectives into a theory of strategy making under conditions of uncertainty. They propose that organizations adopt an integrated set of behavioural responses to uncertainty:

(Organizations) ... simplify the range and variety of information considered, and shape (i.e. constrain, direct, activate) the responses of the stakeholders involved in the process (thereby reducing the possibility of interjection of additional uncertainty. In essence, rather than attempting to reduce cognitive uncertainty, the firm can try to create ***behavioural certainty***. (Crawford, Gram and Star, 1987: p. 28))

In effect, Crawford et al suggest that organizations strive to shape actors' responses as a means of creating behavioural certainty:

(Creating behavioural certainty aims at) (1) Encouraging the cooperation of those whose acceptance of the initiative is central to its success; (2) Convincing the key environmental and internal stakeholders that the direction suggested is appropriate; and (3) Preempting other responses. (Crawford, Gram and Star, 1987: p. 28))

As shown in Table 2-1 below<sup>3</sup>, the creation of behavioural certainty (what the authors term *certainty creation*) represents a sharp contrast to the more conventionally prescribed methods of "decreasing uncertainty".

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<sup>3</sup>Adapted from Crawford, Gram, and Star, 1987.

**TABLE 2-1**  
**CERTAINTY CREATION**

<b>Focus of certainty creation</b>	<b>Decreasing Uncertainty</b>	<b>Increasing Certainty</b>
Individual	Manager as supervisor	Manager as coach
Work unit	Group; Technocratic leadership	Team; Inspirational leadership
Organization	System	Culture
Interorganizational	Organization as an isolated competitor	Organization as a social actor

At the individual level, certainty creation makes the manager a coach who helps facilitate an individual's work achievements (Peters and Waterman, 1982). The result is a motivated individual who can be trusted with increasing levels of duties and responsibilities (Porter and Lawler, 1968).

At the unit level, certainty creation recognizes and legitimizes the informal, social component of work groups. Socialization processes strive to raise group cohesiveness (Van Maanen and Scheil, 1979; Feldman, 1976), while inspirational leadership focuses collective energies upon task accomplishment (Allaire and Firsirotu, 1986). The result is a work unit which can be entrusted to enact vaguely defined strategic responsibilities (Nonaka, 1988).

At the organizational level, certainty creation focuses upon cultural engineering as the means of shaping an organization (Kilmann, Saxton, and Serpa, 1986; Allaire and Firsirotu, 1985). By striving for a commonly shared belief and value structure, certainty creation tries to build a missionary organization (Mintzberg, 1983), dedicated in its strategic purpose and functionalist in its internal conflicts (Clegg, 1981).

The certainty creation model proposes a new type of strategy formation process. Crawford et al base their argument upon three related propositions:

a) **Strategic learning (Hedberg, 1981) is the fundamental method by which both internal and external strategic uncertainties are addressed.** Under conditions of high internal and external uncertainty, organizations enact previously learned behaviour patterns (Star and Crawford, 1987<sup>4</sup>; Cohen, March, and Olsen, 1972).

b) **Uncertainty is a permanent condition of strategy formation.** Uncertainty can never be eliminated from strategy making, because powerful residual uncertainties will always be present<sup>5</sup>;

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<sup>4</sup>The authors termed this the certainty envelope.

<sup>5</sup>Two types of uncertainty are identified. Type I uncertainty is the residual uncertainty associated with action (Is the action which we are pursuing a mistake?). Type II uncertainty is the uncertainty of inaction (If we wait, will a competitor get the jump on us?)



c) **To expand the range of their "known" behaviour patterns, and to try and address the residual uncertainties, organizations manage the tone and character of their primary interorganizational relationships.** They use relationships as sources of information, and as a means of shaping their operating contexts (Allaire and Firsirotu, 1989).

Certainty creation shares its basic perspective with the schools of strategic management reviewed in Chapter 1 above. An organization's strategic processes are assumed to yield an autonomous strategy directed at achieving intended and/or emergent objectives. Similarly, strategic actions and responses are influenced by key environmental and organizational contexts. Unlike these schools, however, certainty creation argues that such strategic goals as profit maximization, market share, and uncertainty management are best obtainable with the cooperation of organizations sharing one's task environment. In effect, organization's are proposed to recognize the existence, and strategic potential, of relationships within their strategic spheres of activity.

Suppliers, customers, and competitors are groups of organizations whose cooperation (tacit or open) can be beneficial. Certainty creation suggests that the organizations actively seek to manage the tone and character of key interorganizational relationships:

Suppliers and customers can be brought into the design phase of new market thrusts, and/or can be treated as "partners" in on-going market ventures<sup>6</sup>;

Competitors can be persuaded (by example and/or informal dialogue) of the costs of direct ("hot") competition, and the merits of "cold" competition<sup>7</sup>.

In effect, Crawford et al argue that organizations strive to construct a social environment characterized by trust and commitment between themselves and the organizations with which they interact (Baker, 1984; Cook, 1977; Larsson and Bowen, 1989; Levinthal and Fichman, 1988; Macaulay, 1963; Ouchi, 1981). Uncertainty is reduced primarily by the rich information flowing to the relationship managing organization<sup>8</sup>, but at the cost of time and energy invested into the relationships, and the risk of lost decision making autonomy (Blau, 1964; Emerson, 1962; Selznick, 1949). As such, the greater the level of strategic uncertainty, the more will firms rely upon relationship management methods.

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<sup>6</sup>Nielsen (1988) would term this a type of "exchange" strategy.

<sup>7</sup>Nielsen (1988) would term this a type of "de-escalation" strategy.

<sup>8</sup>High internal uncertainty is reduced by the reinforcement of industry recipes (Grinyer and Spender, 1979), while external uncertainty is overcome by the domain consensus which builds among the partners (Thompson 1967; Bourgeois, 1980; Hedberg and Jonsson, 1976; Smircich and Stubbard, 1985).

## 2.2 Certainty creation in the literature

Crawford, Gram and Star (1987) are not alone in identifying alternate methods of uncertainty management. Nonaka (1988), for example, builds upon his observation of Honda Motors to develop arguments which are highly similar to those developed by Crawford et al (1987). He contrasts the traditional, information processing paradigm to that of an *information creation* approach. The former is viewed as a deductive means of reducing uncertainty, while the latter is viewed as an inductive method of creating uncertainty and generating strategic innovation:

The information-processing paradigm emphasizes the structure of the organization. The information creation paradigm, in contrast, stresses the process of creating meaningful information through personal interaction. The quality of the information becomes more important than the quantity. (Nonaka, 1988: p. 12)

The author contrasts information processing and information creation by examination of the techniques at the individual, group, and organizational level. He concludes that contradictions between the two orientations are integrated in a form of management termed "compressive management":

The essential logic of compressive management is that top management creates a vision or dream, and middle

management creates and implements concrete concepts to solve and transcend the contradictions arising from gaps between what exists at the moment and what management hopes to create. (Nonaka, 1988: p. 9)

As with certainty creation, information creation says that the key is to let lower level actors (middle level managers) enact strategic behaviours:

Middle management occupies a key position: it is equipped with the ability to combine strategic (context-free) information and hands-on micro (context-specific) information. In other words, middle management is in a position to forge the organizational link between inductive and deductive management (Nonaka, 1988: p. 15)

Finally, Nonaka (1988) echoes the certainty creation approach by linking the merits of information creation to the level of uncertainty:

As environmental uncertainty increases, the organization can adapt itself more effectively with a high level of information creation occurring at all levels of the organization, rather than with a low level of information creation.

As can be seen, Nonaka (1988) proposes internal responses to environmental uncertainty. In contrast, certainty creation develops a set of internal and external responses to uncertainty. In the latter case,

the strategic relationship is the primary focus, and on this level, the theoretical basis of certainty creation is well established. The formation of interorganizational relations, for example, has long been seen as an adaptive response to environmental uncertainty (Aldrich, 1979; Cook, 1977; Pfeffer and Salancik, 1978; Schoorman, Bazerman, and Atkin, 1981; Starbuck, 1976; Thompson, 1967). Similarly, there have been a number of empirical studies into the theorized relationship (Burt, 1980; Galaskiewicz and Shatin, 1981; Hirsch, 1975; Leblebici and Salancik, 1982; Ornstein, 1984; Palmer, 1983; Provan, 1984; Stearns, Hoffman, and Heide, 1987).

This largely sociologic literature base provides only partial input into the certainty creation model. Aldrich (1979), for example, argued that environmental complexity triggers similar complexity in an organization's linkage structure. Alternately, he proposes that low levels of environmental complexity "demand" low levels of interorganizational complexity. Crawford et al (1987) reject such determinism, suggesting instead that organizations can choose to maintain deep relationships whenever they experience high strategic (internal or external) uncertainty (Child, 1972).

Another point of contrast between certainty creation and the literature is the measurement of interorganizational relationships. Stearns et al (1987), for example, measured interorganizational complexity on the basis of the presence of self reported resource exchanges, and the time orientation of the interaction (continuous or intermittent). Crawford et al (1987) reject the use of the absolute number of linkages as a

measurement of relationship complexity, and challenge the idea that continuous interaction necessarily produces qualitatively different linkages.

The key difference between the certainty creation model and the interorganizational linkage literature is over the nature of the critical exchanges. In the latter case, resource exchanges are central. In the certainty creation model, information exchange is most important. Crawford et al's proposals for relationship management efforts represent a structural response to information exchange (Allaire and Firsirotu, 1989; Pennings, 1981).

The conceptual root of the certainty creation proposals can be traced to Evan (1966), who first proposed the concept of an organization set:

An organization set consists of those organizations with which a focal organization has direct links ... For an organization, one might think of suppliers, customers, unions, distributors, and trade associations as members of a particular organization set. (Aldrich and Whetton, 1981: p. 386)

Crawford et al (1987) suggest that the management of relationships within an organization set represents the most widely adopted means of structuring information flows, and creating behavioural certainty:

All ... coping strategies are aimed at developing collective structures and facilitating interfirm information transfer, and can promote the interests of an industry in its totality or the interests of any one of its organizations (Pennings, 1981, p. 448)

Pennings (1981) proposes that these structures serve to introduce cooperation and communication into the relationships and facilitate interorganizational coordination. Borys and Jemison (1989) call interorganizational structures which yield these types of benefit "hybrids":

Hybrid structures are organizational arrangements that use resources and/or governance structures from more than one existing organization. (Borys and Jemison, 1989: p. 235)

In discussing business alliances in Japan, Gerlach describes a hybrid-like arrangement:

Among the most significant but poorly understood features of the Japanese economic landscape is the organization of firms into coherent groupings which link them together in significant, complex, long-term ownership and trading relationship ... Being neither formal organizations with clearly defined, hierarchical structures nor impersonal, decentralized markets, business alliances operate instead through extended networks of relationships among

companies. They are organized around identifiable groupings and are bound together in durable relationships based on long-term reciprocity (Gerlach, in Carroll and Vogel, 1987: p. 128)

The "quasi-firm" is another type of hybrid structure which affords interorganizational stability:

When construction projects are not subject to institutional regulations which require competitive bidding, relations between the general contractor and his subcontractors are stable and continuous over fairly long periods of time and only infrequently established through competitive bidding (Eccles, 1981: pp. 339-340)

Gerlach and Eccles each offer descriptions of a *network* of organizations. The described "federations" persist, even though there is seemingly no formal mechanism which maintain them. Thorelli (1986) also argues that networks are hybrid in nature, proposing them as structures "between" markets and hierarchies:

Williamson (1975) may be overly polarized in that he deals somewhat skimpily with the rich institutional arrangements in the many types of markets encountered between the spot transaction and total internalization (Thorelli, 1986: p. 44)



One of the many implications which Thorelli postulates is that network structures may reduce an organization's exposure to risk and uncertainty:

A network engagement may reduce risk relative to spot market participation and total integration. It may be an instrument a company could use to retain some measure of control over its own differential advantage, and thus over its own fate (Thorelli, 1986: p. 46)

Jarillo (1988) extends Thorelli's arguments. He describes strategic networks as characterized by quasi-hierarchical relationships:

Relationships have relatively unstructured tasks, a long term point of view, and relatively unspecified contracts. These relationships have all the characteristics of investments, since there is always a certain asset specificity to the know how of, say, dealing with a given supplier instead of a new one. And yet the contracting parties remain as independent organizations, with few or not points of contact along many of their dimensions. (Jarillo, 1988: p. 34)

Jarillo (1988) also sees networks as means by which transactional uncertainties are governed. He argues that uncertainty reduction is one of the pivotal elements in network sustainability:

Being able to generate trust ... is the fundamental entrepreneurial skill to lower transaction costs and make the existence of the network economically feasible. Trust dissolves the need to specify unforeseeable consequences ... (it) is a central component of both effectiveness and efficiency (Jarillo, 1988: p. 36)

In effect, Jarillo argues that social processes within a network influence the "hub" organization's levels of experienced uncertainty<sup>9</sup>.

### **2.2.1 Summary**

This review of the theoretical and empirical literature bases upon which the certainty creation model is built shows that the arguments developed by Crawford, Gram and Star (1987) represent a synthesis of widely divergent sources. As will be shown in the next section, this perspective links research into certainty creation to a wide range of strategic issues.

### **2.3 Research implications**

Crawford, Gram and Star (1987) propose that members of a firm's value chain (Porter, 1985; Galbraith, 1983) constitute organizations with which relationships will likely be cultivated and managed. Empirically,

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<sup>9</sup>Hub organization refers to what an observer traditionally terms the focal, or central organization.

this is an unexplored domain. Indeed, beyond anecdotal or single case evidence (Peters and Waterman, 1982; Nonaka, 1988), most "network" studies (Aiken and Hage, 1968; Evan, 1972; Elesch, 1973; Levine and White, 1961; McGuire, 1988; Metcalfe, 1976; Whetton and Aldrich, 1979) have ignored profit-seeking enterprises:

Until now, neoclassical economists have had a virtual monopoly over the study of markets. As a result, markets have by and large been seen as unstructured aggregations of individuals, the "buyers" and "sellers" coming together for only short-lived dyadic exchanges—an extension of the Lockean premise that socioeconomic systems arise out of the behaviour of individuals independently pursuing their own ends ...

Sociologists have largely ignored markets themselves, treating them as black holes in the social fabric ... The predominant pattern has been to address the consequences of markets without examining their structure of operation in any concrete or detailed way. (Wellman and Berkowitz, 1988, pp. 221, 222)

The certainty creation model offers a theoretical vehicle by which uncertain organizations act "strategically". It holds that relationship management efforts, both by virtue of the information they generate and the proactive ways in which influence can be exerted, can serve as an

uncertain organization's "business level strategy" (Schendel and Hofer, 1979). It offers a theoretical answer to the issues identified in Chapter 1:

How do relatively small organizations operating in turbulent settings manage their uncertainties and develop strategies?

Do highly uncertain business organizations try to manage the tone and character of their strategic relationships? Are such efforts common, or are they exceptions to the rule? If such efforts are performed, what are the methods and techniques employed? Do these methods actually reduce firms' strategic uncertainty? Beyond their important descriptive value, answers to these questions would also offer clues to other important issues:

1) Is uncertainty an element of competitive advantage?

Certainty creation represents a method by which overall uncertainty levels within an industry are influenced. Actively adopting the role of "linking pin" (Aldrich and Whetten, 1981) allows an organization to widely extend its influence. This creates a situation of potential differential uncertainty between a firm and its competitors, and thus holds the potential for uncertainty rooted advantage. Jauch and Kraft (1986) linked differential uncertainty advantage to information processing capabilities between organizations; Crawford et al extend this by suggesting that

being in the "right group" can create uncertainty based advantage;

2) Is an uncertain environment less amenable to certain "generic" strategies? The certainty creation model predicts that imitation (Porter, 1980; 1985) is likely to be one of the more widely practiced strategic options. This suggests that restricted diversity and limited interorganizational differentiation might be evident in uncertain industries.

## **2.4 Conclusion**

In this chapter, a theoretical model of strategy formation, under conditions of high uncertainty, was developed. Certainty creation argues that information acquisition through the management of key interorganizational relationships is a primary means of coping with uncertainty. The chapter showed that these theoretical solutions are similar to positions taken by authors in a wide range of literatures. A set of strategic management research implications were then identified. In the next chapter, these implications are translated into a set of research hypotheses.

## **CHAPTER 3**

### **Hypotheses**

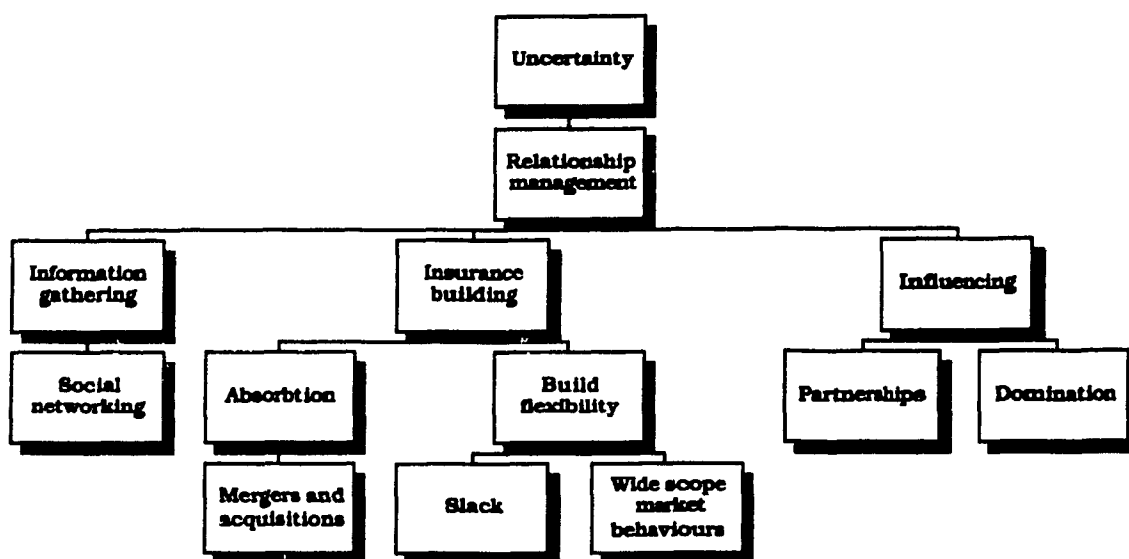
#### **3.0 Introduction**

As developed in Chapter 2, the certainty creation model proposes that organizations manage uncertainty by influencing the behaviours of key internal and external actors. It was argued that strategically, certainty creation involves efforts to manage the tone and character of critical interorganizational relationships. In this chapter, hypotheses drawn from the certainty creation model are developed.

#### **3.1 Hypotheses**

Figure 3-1 (next page) displays a subset of the relationship management approaches available to firms.

**Information gathering** activities are performed largely through "social networking", i.e. the gossip and scripting so often a part of transactional interactions (Borys and Jemison, 1989). Informational networking might also occur during social encounters, or through kinship relationships between key individuals in organizations.



**Figure 3-1: Certainty creation and uncertainty management**

**Insurance building** activities seek to modify the structural elements of the relationships. At one extreme, the relationships (and some of the attendant uncertainties) can be absorbed completely through vertical integration (Williamson, 1975; Thompson, 1967). Alternately, the organization can strive to keep the relationships flexible and non-restrictive. Slack resources (Bourgeois, 1981) ensure that unusual relationship demands can be met quickly and without undue strain; a wide strategic scope avoids dependence upon any single market activity (Allaire and Firsirotu, 1989).

**Influencing** behaviours seek to shape and/or constrain the behaviours of interaction partners. Overt domination may occur in cases of significant inter-firm resource differences

(Allaire and Firsirotu, 1989). More common are relatively covert efforts to build reliable relationships in which mutual strategic interests are tied to the relationship's persistence (Astley, 1984).

The purpose and nature of these activities is summarized in the following research hypothesis:

**HR: Organizations engineer the character of their critical relationships as a method of uncertainty management.**

This hypothesis, in conjunction with Figure 3-1 above, translates into three specific hypotheses:

**H<sub>1</sub>: Firms which gather uncertainty based information will have relationships<sup>10</sup> characterized by a mix of social and economic dialogues.**

This hypothesis suggests that interactions between a relationship managing organization and its transaction partner(s) consist of more than a simple exchange of purchase orders and invoices. Instead, it is predicted that social networking will produce interactions in which a wide range of topics and issues are discussed.

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<sup>10</sup>The terms "linkage" and "relationship" are, from this point forward, used interchangeably.



Information relating to the contract(s) binding the parties will be openly communicated. Further, tangentially related information, as well as social and personal information, will be freely exchanged.

**H<sub>2</sub>: Organizations which try to influence others' behaviours will have older, relatively stable relationships.**

This hypothesis predicts that efforts by a certainty creating organization to transform transactional relationships into informal partnerships will yield relatively stable, long-lived linkages.

**H<sub>3</sub>: Organizations which build flexibility into their strategic operations do so by adding new transaction partners, rather than by severing established linkages.**

This hypothesis suggests that organizations will be reluctant to abandon well established relationships, and will instead change partners by adding new ones, thereby increasing the absolute size of their set of total relationship partners. This hypothesis relates to H<sub>1</sub> (above) in that it predicts that the parties will "bank" known partners (a form of slack), keeping the relationships alive either socially, or by feeding them marginal contracts.

A corollary is suggested by this hypothesis:

**H3a: Organizations which build flexibility into their operations add members incrementally, a process of mixing social and economic performance.** This corollary emerges from the social networking predicted to be important in relationship management. In effect, it predicts that creating certain relationships is a time consuming process.

### **3.2 Conclusion**

The three hypotheses developed in this chapter predict that if firms engage in relationship management techniques:

- a) Their relationships will be mixes of social and economic dialogues;
- b) They will be involved in relatively old, stable relationships; and
- c) Their relationship sets will increase in size and management complexity over time.

Taken together, the hypotheses test a strategic aspect of the certainty creation model. While confirmation of the three hypotheses would not

"prove" the theory (Popper, 1959), strong evidence in support of the certainty creation model as an uncertainty management approach would certainly be provided.

## **CHAPTER 4**

### **Methodology**

#### **4.0 Introduction**

In the previous chapters, the inability of strategic management theory to fully describe strategy making under uncertainty was identified. The certainty creation model was presented as a theoretical "solution", and hypotheses were developed to test some of the model's basic theoretical propositions.

Empirical testing of the certainty creation hypotheses is governed, however, by two broad considerations:

- 1) We have no empirical indications of how relationship management is performed, nor do we have an estimate of the frequency or prevalence of its occurrence; and
- 2) Within a business strategy setting, we do not know which uncertainties are salient to strategy makers. We don't know, beyond theoretical generalizations, how these uncertainties are these managed, nor do we know if such uncertainty management approaches are firm-specific or "generic".

These considerations guided the development of the research design to be presented in this chapter.

#### 4.1 The research design

A number of confound factors were present when deciding how to probe the "considerations" identified above. To identify how relationship management is performed, for example, it was considered that:

- a) The function may be performed unintentionally.
  - b) The parties may not be able to explain how they manage relationships; and
  - c) Relationship management is a two way street.
- Relationship management efforts can be blocked by the absence of reciprocity from the other party.

Similarly, to determine the uncertainty management approaches being employed, it is necessary to first identify the uncertainties being addressed. To do this, we must be able to distinguish idiosyncratic (firm specific) from more widespread uncertainties .

Both sets of confounds made it necessary to employ a comparative research design. By viewing multiple firms confronting the same problem(s), the general uncertainties would be identifiable, and the uncertainty management approaches would be visible. Similarly, by seeing how different firms managed relationships with the same partners, differences in relationship management styles and techniques would be visible in both recounted processes and achieved outcomes<sup>11</sup>.

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<sup>11</sup>If firms A and B each have diadic relations with firm C, and there are discernible differences in the "quality" and "character" of these interfirm linkages, a comparative design will allow us to infer that the practices of A and B contributed to the differences. As a common factor to both relationships, C's practices can be ignored.

The largely exploratory nature of the inquiry suggested that the research design incorporate "rich", qualitative data:

While systematic data create the foundation for our theories, it is the anecdotal data that enable us to do the building. Theory building seems to require rich description, the richness that comes from anecdote. We uncover all kinds of relationships in our "hard" data, but it is only through the use of this "soft" data that we are able to "explain" them, and explanation is, of course, the purpose of research (Mintzberg, 1979a: p. 587)

Wortman & Roberts (1982) say that quantitative and qualitative research methods are complementary. They argue that qualitative research focuses upon how people do things, while quantitative techniques examine the things they do. Given the nature of the questions posed by this inquiry, a combination of qualitative and quantitative techniques was deemed appropriate. Jick (1979) terms the use of multiple methods "triangulation" (Campbell and Fiske, 1959). He suggests that the approach offers unique advantages:

Triangulation, the combination of methodologies in the study of the same phenomenon ... can capture a more complete, holistic, and contextual portrayal of the unit(s) under study. That is, beyond the analysis of overlapping variance, the use of multiple measures may also uncover

some unique variance which otherwise may have been neglected by single methods. It is here that qualitative methods, in particular, can play an especially prominent role (1979: pp. 601, 602)

The comparative nature of the research design, in conjunction with the mix of quantitative and qualitative methods, makes the research design adopted for this study a "hybrid" (Harrigan,1983):

Multiple sites facilitate the use of statistical tests for hypothesis testing and generalized findings ... Using several data sources and measures of phenomena provides cross checks on data accuracy and enrichment of the conclusions researchers might present ... If research samples are selected to coincide with sites that possess observable traits that are key factors in the hypotheses to be tested, researchers can ensure that desired phenomena are being scrutinized and that trail markings are left to guide subsequent researchers wishing to replicate or vary a portion of the pioneer study's inquiry. (Harrigan,1983: pp.401, 402)

The hybrid-design features of multiple sites, multiple evidence sources, and complementary data analytical techniques adopted in this design will be explained in the subsections which follow.

#### **4.1.1 Sample Design**

Resource constraints represented one of the major stumbling block in sample design. The lack of a travel budget meant that the multiple sites had to be largely within the Montreal area. Time considerations imposed a basic constraint on the size of the sample which could be managed by the researcher.

It was decided that the study would best balance objectives and constraints by sampling organizations within a single, clearly defined, Montreal based industry. This would fulfill the requirements of a comparative design, without bringing in the problems of interpreting relationship management practices across different industry settings.

To further control for possible confounds on the interfirm linkages to be examined, it was considered that the single industry should be fragmented (Porter, 1980).

A fragmented industry (is one) in which no firm has a significant market share and can strongly influence the industry outcome ... The essential notion that makes these industries a unique environment in which to compete is the absence of market leaders with the power to shape industry events. (Porter, 1980: 191)

In this type of setting, where no single firm exerts an overarching influence over other firms' major business strategy choices, it was



considered that studied organizations would be most likely to exhibit variance in relationship management approaches and techniques.

Firms interact with each other through the actions of boundary spanning personnel (Thompson, 1967). The study of interorganizational relationships thus inevitably brings interpersonal dimensions into the analysis, and raises the problem that interpersonal closeness might not correlate with interorganizational proximity. As a method of controlling for this, it was decided to restrict the study to those organizations where the boundary spanner is also the chief strategist. It was therefore decided that the studied organizations would be entrepreneurial in nature.

By focusing upon this type of organization, the sample would consist of relatively small organizations, in which the top manager was the principal or sole owner. In addition to acting as a means of controlling for the interpersonal dimension in the interorganizational relationships, an important benefit of this approach is that we would be relatively less likely to find any significant gap between the firms' "intended" and "realized" strategies (Mintzberg, 1978). An additional benefit of studying entrepreneurial organizations is that experienced internal and external uncertainties would be focussed at the top management level. Organizational responses would thus emanate from the CEO<sup>12</sup>.

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<sup>12</sup>The CEO who would also be the organization's chief financial officer, as well as its primary information processor.

#### 4.1.2 Industry selection

To provide a research setting in which relationship management as an uncertainty coping method was most likely to be visible, it was decided that the sampled industry be "highly uncertain". As previously discussed, theoretical identification of such an industry can be based upon identifying its level of "complexity" and "turbulence" (Duncan, 1972). Alternately, dynamism can be a considered dimension (Dess and Beard, 1984).

For the purposes of this inquiry, it was determined that an "uncertain industry" would possess the following characteristics:

- 1) Highly fragmented: A fragmented industry is a highly competitive environment (Porter, 1980; Scherer, 1980). The absence of a dominant industry leader whose behaviours can be imitated exposes industry players to extremely high levels of strategic uncertainty (Star and Crawford, 1987);
- 2) Volatile: Change (in the areas of technology and competition {Eisenhardt and Bourgeois, 1988}) would be both frequent and unpredictable;
- 3) Discontinuous: Firms cannot easily build upon past successes as insurance for the future.

The Montreal based clothing and textile sector seemed to meet the general features described above. Porter (1980) identified industries in

this sector as fragmented<sup>13</sup>. Mariotti & Cainarca (1986) analyzed the Italian clothing and textile industries, and identified a number of factors which made the sector highly volatile environments. First they noted that the average business cycle in these industries (3 years) is shorter, and more unpredictable, than that of an average manufacturing industry (4 to 5 years). Strategically significant environmental change is thus a basic contextual feature for firms operating in these industries.

Second, the authors argued that volatility and discontinuity are related to the nature of clothing and textile production. They viewed the sector as a mass production system, with production usually organized into sequential, technologically distinct stages. This impacts upon the market structure:

The economies of scale are product rather than plant specific. This results in important market structure implications: (1) The low entry barriers interact with the cycle fragmentability to permit the proliferation of numerous small, single phase firms; and (2) The production-distribution cycle, from fiber-processing to the final product for the end consumer, is a rather long one. (Mariotti & Cainarca, 1986: pp. 352-353)

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<sup>13</sup>His classification criteria is that the industry share (total market share) of the top four firms must be 40% or less. Included on the list (in all gender categories) were knit outerwear, suits and coats, dress shirts, neckwear, trousers, blouses and waists, dresses, childrens underwear, fur goods, and robes and dressing gowns.

A high rate of technological innovation further contributes to the sector's overall level of uncertainty:

The innovative waves caused by the chemistry of man-made fibres and dyestuffs and by electronics and process automation have simultaneously affected the main stages of the production cycle, and...has accentuated the unpredictability of related changes. (Mariotti & Cainarca, 1986: p. 353)

At the level of the individual firm, discontinuous change was seen as a growing problem:

The worldwide extension of markets, the international diffusion of production, the massive entry of new manufacturers (especially producers in the new industrialized and low developed countries) and the frequent application of protectionist measures...have made competitive relations in every phase of the productive cycle more unstable and unpredictable (Mariotti & Cainarca, 1986: p. 353)

Mariotti and Cainarca suggest that, ironically, firm behaviours contribute to the high volatility:

Competitive strategies of firms are based on product differentiation and fashion policy and supported by easy

access to a wide range of material and productive process alternatives. These strategies are aimed at obtaining a price premium and stimulating consumers to renew their clothing at a high substitution rate. For the textile-clothing system as a whole, the effect of these forms of non-price competition is to increase product variability and volatility. (Mariotti & Cainarca, 1986: p. 353)

The choice of an industry in this sector was thus deemed appropriate for this inquiry. The researcher's prior work experience in the belt industry led to this as a natural first choice<sup>14</sup>. Attempts to obtain market data on this industry, however, proved fruitless. Serendipitously, these preliminary efforts put the researcher in touch with the Department of Regional Industrial Expansion, in Ottawa. The official who monitored the belt industry's performance introduced the researcher to the industry which met all of the study's previously established requirements: the sweater manufacturing industry.

The sweater manufacturing industry represented a trade-off in only one significant dimension. Most Canadian clothing and textile industries are populated by privately held organizations. The researcher's contacts and experiences in the belt industry translated into a relatively deep level of initial industry familiarity, and nearly guaranteed the participation of at least a small number of firms. The sweater industry,

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<sup>14</sup>The "belt industry" involves the manufacture and sales of ladies, mens, and childrens fashion belts. This industry is part of the "fashion accessories" group of industries.

in contrast, was virtually unknown to the researcher. The lack of personal contacts, in conjunction with the relatively sensitive material which was to be the subject of the inquiry, meant that the final sample size was a constantly changing variable.

#### **4.1.3 Operationalizations**

It was decided that relationship management could be observed by examining critical operational transactions performed by all organizations in the industry<sup>15</sup>. The transactions which were selected were value chain transactions: critical resource acquisition transactions, and output disposition (channel) transactions. Using an input/output framework as a descriptive framework, the selected transactions are those by which the critical inputs are obtained, and through which organizational outputs are disposed<sup>16</sup>.

The most important criteria for selecting these transactions was the assumption that they constitute strategic "basics":

Most organizations perform specialized functions, and therefore must exchange with other organizations to obtain

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<sup>15</sup>The terms "manufacturer", "mill" and "knitter" are, from this point forward, used interchangeably.

<sup>16</sup>Throughput activities are not external and do not involve the establishment of interorganizational relationships. Thus, even though strategic in impact, internal activities were only nominally examined.

necessary resources and to market their output (Cook, 1977:  
p. 64)

This assumption facilitated the inquiry's operationalization of organizational strategy as the market behaviours of the examined firms, in conjunction with their behaviours relating to the major input/output transactions.

Relationships were operationalized in a relatively unusual manner. A paradigm for comparative relationship analysis is offered by "network analysis" techniques (Aldrich & Whetten, 1981; Thorelli, 1986; McGuire, 1988). Their approach is to produce "maps" of relationships in which a focal organization is a party. These relationships are then measured on selected dimensions (eg. the transactional and/or information flows across them), and subjected to rigorous analysis. The problem of data confidentiality, in conjunction with the population characteristics of the selected industry (privately held firms; voluntary participation in the study), precluded these methods for this inquiry.

Relationships were instead operationalized by first identifying the organizational partner(s) with which the focal organization was interacting. These partner(s) were then categorized into a set of "partner forms", and selected characteristics of the transactions with these "forms" were measured (see below). The examined "relationships" were thus between a focal (studied) organization and its partner forms, rather than between a focal organization and each supplier or channel member.

Data could be collected on these abstract relationships without violating the privacy requested by the sampled organizations.

This method of operationalizing relationships allowed the full set of relevant interorganizational linkages in which a studied organization was a party to be represented in a relatively simply "configurational diagram". Figure 4-1 below is an example of this type of representation. It shows a studied organization involved in six "relationships". The firm employs three input forms (I1, I2, I3) to obtain its resources, and sells to three output/channel forms (O1, O2, O3).

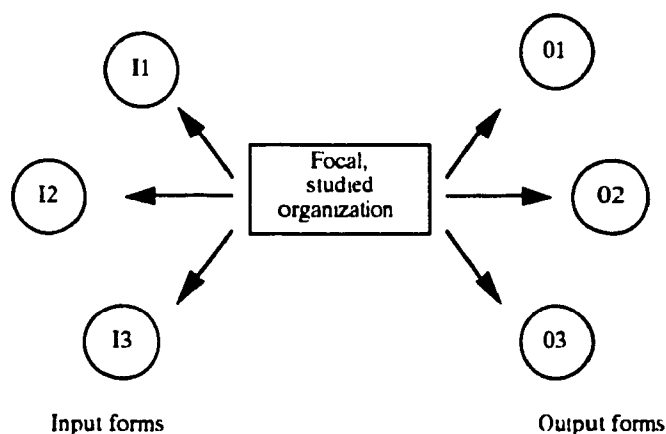


Figure 4-1: A Configurational diagram

Relationship management practices were operationalized as:

- 1) The objective features of the established interorganizational relationships; and
- 2) Described orientations and objectives to these relationship forms.



#### **4.1.4 Variables**

Given the lack of prior experience in the industry, it was necessary for the researcher to obtain a basic "feel" for the industry. Library research, tours of local retailers, and contacts with hand knitters provided an initial familiarity with the product's characteristics and production methods. Through informal contacts, a preliminary tour and interview with one of the sweater manufacturing industry's leading members was next obtained<sup>17</sup>. Interviews were then conducted with a government official familiar with the industry, and with a consultant to many of the industry firms. From these preliminary inquiries, the following variables were identified as strategically important, and were measured in the study:

##### **4.1.4.1 Market behaviour variables**

**The average price of the firm's products:** The retail prices of Canadian sweaters runs from \$20 to \$100, (manufacturers sell their products for roughly 50% of the retail price). The firms' prices were coded as follows:

- 1 = Low = \$20-30 retail
- 2 = Low-moderate = \$30-40 retail
- 3 = Moderate = \$40-50 retail
- 4 = Moderate-high = \$50-75 retail

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<sup>17</sup>This firm ultimately chose not to participate in the study.

5 = High = \$75+

**The price range of the firm's products:** Firms could focus their efforts upon selling within a relatively narrow price range, or they could increase the scope of their product line in an effort to touch upon more retail price points. The firms' price point ranges were coded as follows:

1 = Narrow = \$10 retail price spread

2 = Low-moderate = \$20-30 retail price spread

3 = Moderate-wide = \$40-70 retail price spread

4 = Wide = \$75+ retail price spread

**The percentage of sales made "in house":** Two basic selling techniques were present in the industry. A firm could choose to employ commission salespeople to sell its product line, or it could choose to sell the goods from its own facilities (with the president acting as the chief salesperson). The firm could also choose to mix the two selling techniques;

**The percentage of sales from related (non sweater) items:** Knitting methods can be easily turned to the production of non-sweater items (eg. skirts; gloves). Theoretically, a firm could choose to diversify its production out of sweaters completely;

**The percentage of sales from imported products:** If it was willing to endure the attendant financial risks, a strategic option for sweater manufacturers is to diversify their product lines by importing an unrelated item (eg. T-shirts; dress shirts)<sup>18</sup>;

**The percentage of sales to the ladies market:** Firms can choose the gender market(s) to be served. The ladies market dominates the retail environment in terms of total sales. Firms could choose to either concentrate on the single segment, or "blend" sales to include products for different gender segments (these other segments consist of men's, girl's, and boy's sweaters);

**The percentage of sales to the men's market:** The mens market is the second largest (in terms of retail sales). Firms could focus sales upon this segment, or serve other gender segments as well;

**The percentage of sales to the children's market(s):** The childrens markets represent a very small percentage of total industry sales. Never-the-less, firms could easily produce "smaller" versions of their adult styles, and sell these to childrens segments.

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<sup>18</sup>While it is also possible to import sweaters, such efforts serve only to hurt a manufacturer's production operations.

#### **4.1.4.2 Resource acquisition variables**

The preliminary research revealed that yarn constituted the most important externally obtained resource. Four distinct forms of yarn acquisition were identified and measured<sup>19,20</sup>:

**The percentage of yarn obtained in dyed form, from a sales agent or broker;**

**The percentage of yarn obtained in dyed form, from a local dyehouse;**

**The percentage of yarn obtained in undyed form, from a sales agent or broker;**

**The percentage of yarn obtained in dyed form, from a spinner.**

Also measured were the total number of yarn sources being used by the manufacturer, the mill's perception of the power holder within the relationship, and descriptions or indications of prior histories of joint product development or promotions with yarn suppliers.

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<sup>19</sup>A description of each input form is provided in the next chapter.

<sup>20</sup>The specific yarn sources identified by the studied organizations were assigned (as previously described) to one of these four categories.

#### **4.1.4.3 Output disposition variables**

The preliminary inquiries indicated the three major output forms which were measured<sup>21,22</sup>:

**The percentage of sales made to chain stores**

**The percentage of sales made to major department stores**

**The percentage of sales made to independent retailers**

Once the data collection began, it became clear that additional factors were relevant to the inquiry:

**The percentage of programmed sales:** Programmes constitute long term efforts (2 to 3 years) to jointly develop and produce an exclusive product line for the retailer;

**The percentage of non-programmed sales with the product bearing the retailer's label:** Many retailers prefer to sell products carrying their own house label. Provided the product is standardized in construction, these "private

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<sup>21</sup>A description of each output form is provided in the next chapter.

<sup>22</sup>The specific clients identified by the studied organizations were assigned (as previously described) to one of these three categories.

label" sales give the retailer maximum flexibility in terms of suppliers;

**The percentage of non-programmed sales with the product bearing the manufacturer's label:** The theoretical inverse of private label sales, branded sales represent the means by which a manufacturer can "differentiate" itself from its competitors. In practical terms, such efforts involve marketing expenditures which strain the resources of most industry players.

Also measured were each subject's total number of clients, the mill's perception of the power holder within the relationship, and descriptions or indications of prior histories of joint product development or promotions with clients.

#### **4.1.4.4 General elements**

Two contextual features specifically relevant to the relationships were measured:

- 1) The age of the principal relationships within each "form";  
and
- 2) The studied organization's perceived power holder within the relationships.

General contextual dimensions which were measured included the age of the mill, the average number of employees, and the square footage of the production facilities.

#### **4.1.4.5 Industry uncertainties**

From the preliminary inquiries, the following areas were identified as potential uncertainties:

**Labour and technology:** The industry had recently adopted new electronic production technology. This served to greatly exacerbate an already tight labour market and, because some mills became more adept than others with the new machinery, produced a stratification within the industry;

**Design and product life cycle:** As a fashion item, the life cycle of a sweater style is four to six months, i.e. the length of an average "season". Hitting the "right" style is thus a matter of luck; keeping the style proprietary within a season is nearly impossible.

**Client continuity:** Partly a function of the design volatility inherent with the product, and partly rooted in the frequent buyer turnover within each client, the mills cannot count on the successes of even the preceding season to produce sales in the next period;

**Raw material acquisition:** Delivery, product quality and product consistency are the particular concerns of the manufacturers. If the received raw materials are of inferior quality, or arrive late, the entire selling season may be in jeopardy.

As will be described below, interviews were used to probe the firm reactions to each of these topic areas.

#### **4.1.5 Data collection**

The nature of the industry imposed a significant constraint upon the data collection procedures which could be employed. Two issues were particularly problematic:

a) The owner/presidents of these organizations were generally distrustful of the research process. This meant that potentially intrusive data collection techniques (such as tape recorders or questionnaires) could not be employed without risking the loss of that mill's participation; and

b) The data collection took place during the busiest time of year for these executives (June–December). Executives were able to give only limited amounts of "contact-time".



The principal data collection technique, as suggested by Bouchard (1976), was a "funnel sequence" of interviews:

Generally, data to be gathered can be subdivided into a limited number of domains. Each domain should be approached first with the broadest and most open questions and unspecified response formats. More specific questions with fixed response formats should come next. If responses to the structured questions contradict the earlier free responses, he can "loop back" and ask why (Bouchard, 1976: p. 372)

The industry association, based in Montreal, has a total membership of 51 firms. The president of each of the 28 Montreal based firms was contacted, and that organization's participation was requested. Twenty one firms agreed to preliminary interviews (these interviews were intended to explain the nature and particulars of the inquiry, and request the organization's participation (see Appendix A). Three association members were subsequently dropped by the researcher, as they were subcontractors<sup>23</sup>. Two mills elected not to participate beyond the preliminary discussions and two others withdrew from the study after completion of the first of the three interviews. This left a total Montreal participation of 14 firms.

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<sup>23</sup>Although interviews with each were conducted, and that information was used as contextual reference.

Resource constraints prevented a similar sampling procedure for the 16 Toronto firms. Three firms were selected at random, and three others were selected by an industry expert as likely to be agreeable to participation. The preliminary interviews were conducted on the telephone, and their participation obtained. One subsequently withdrew, leaving a total Toronto participation of 5 firms.

For each participating mill, data collection was undertaken through interviews with the company president. For each mill, three semi-structured interviews were conducted:

The first interview (Phase I: one hour), usually taking place immediately following the preliminary interview, was a strategy assessment interview. The structured format probed the strategic market behaviours of the firm, and the relevant factory features which were expected to impact upon the firm's cost configuration (see Appendix B);

The second interview (Phase II: one half hour), conducted roughly 6 weeks after the first phase, was a relationship mapping exercise (see Appendix C). While some firms were initially reluctant to reveal the names of their transaction partners, all participated fully;

The third interview (Phase III: one and a half hours), conducted roughly 6 weeks after the second phase, was divided into two stages. As a validation check, the subject

was first shown a drawing of his organization's configurational diagram, determined from the previous interview. Changes were noted and corrections made, where necessary.

A semi structured interview then proceeded (see Appendix D) to explore the firms approach to the diagrammed relationships.

Each interview followed its own sequence. It was rare for an interview to start at the beginning of the questionnaire. More often, the interviews began with whatever the executive had on his mind at that moment. Once underway, response coding went directly onto the questionnaire forms and onto separate note paper. After every interview, the researcher wrote an interview report, expanding upon the notes, and logging personal opinions and comments. Quotations were paraphrased, where possible<sup>24</sup>.

Interview scheduling of the subjects was extremely important. Phase I scheduling was random. Subject to the subjects' availability, the researcher attempted to schedule Phase II and Phase III interviews such that one or two of the firms with which a rapport had been established

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<sup>24</sup>The best way to ensure 100% accuracy with the quotations would have been to tape the interviews. As suggested at the start of section 4.1.5, it was decided that tape recorders would be so intrusive as to endanger the willingness of the subjects to participate in the study. Interview notes were the only means of recording the subjects' statements. Where quotations were short, the researcher was able to take them down verbatim. Longer statements, however, could only be summarized with "key words".

were interviewed early in the cycle. No firm was scheduled "early" in more than one phase. Each phase was completed before the next was started.

Showing the subject a sample of the organization's configurational diagram was pivotal to the third phase. First, as indicated above, it was a feedback loop which validated the data collection from the previous meeting. Second, it brought the respondents into the inquiry's world (Bouchard, 1976) by presenting the subject matter of the study in a tangible, easily comprehended way (approximately two thirds of the respondents looked at the diagram and said the equivalent of "So that's what you meant!") Many then began drawing on the sheet handed them, to show changes which had taken place between interviews, make corrections where appropriate, or explain their strategic plans).

#### **4.1.6 Data analysis**

The mix of quantitative and qualitative variables necessitates the use of multiple techniques of data analysis. The identification of management approaches and orientations to their key relationships was performed using inductive analysis (Mintzberg, 1979) of industry vignettes and incidents. A similar method was used to examine the relationship between these techniques and the uncertainties experienced by industry firms.

With the exception of "Average price" and "Price range", all collected data were of the ratio type. This allowed the use of multivariate

techniques to more systematically probe for patterns underlying the collected data, and to provide statistical guidance for the qualitative interpretation of the studied phenomena. The following techniques were employed:

1) R and Q factor analysis: The former was used to reduce the set of variables to underlying "factors"<sup>25</sup>, while the latter was used to "group" firms exhibiting similar behaviours on selected variables;

2) Hierarchical cluster analysis: This technique was used to group firms into "clusters", in a manner similar to that performed in strategic groups analysis.

Strategic groups may be defined as "a group of firms in an industry following the same or a similar strategy" (Porter, 1980: p. 129). The earliest strategic groups studies were performed by Hunt (1972), Newman (1973), and Porter (1973). In their studies of the "white" goods, producer goods, and consumer goods industries (respectively), the three identified asymmetries among competing firms. Hunt (1972) found similarities in the product lines of competing firms (differentiating between the degree of product diversification, differentiation, and the extent of vertical

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<sup>25</sup>The R-Factor analytic method was "stretched" to include the ordinal variables (Average price; Price range). The rationale for this was that the factors were derived from a correlation matrix, rather than the raw data.

integration); Newman found similarities in the levels of vertical integration; and Porter (1973) used relative firm size as his grouping criteria.

Hatten (1974) was the first to use a mix of cluster analysis and regression analysis to identify strategic asymmetries within the brewing industry. This method has been widely advocated (Miller, 1978; Harrigan, 1985) as a means of rigorously identifying commonly adopted strategies within an industry. A wide stream of research (Cool and Schendel, 1987; Hatten and Hatten, 1985; Hergert, 1983; Mascarenhas, 1989; Oster, 1982) has followed the pioneering studies, in the process enriching the conceptual base of strategic groups theory.

The purpose of clustering in this inquiry was to highlight commonly adopted responses within the industrial setting. In contrast to the studies noted above, the clustering techniques were not intended to identify "strategic groups", as they were conducted using a relatively narrow set of variables. The clustering did not "make" any arguments; instead, the methods only served to support and illustrate qualitatively drawn conclusions;

3) Discriminant analysis: This method was used to test the significance of identified clusters. Grouping schemes identified by the techniques identified above were used to

develop a discriminant function, whose significance was then tested. The discriminant function was then used to generate a "confusion matrix", to test the predictive capacities of the discriminant function. This matrix was then compared to the actual data, and the results qualitatively interpreted; and

4) ANOVA, MANOVA: These techniques were used to test the association between groups of variables.

#### **4.1.7 Reliability and validity**

As a necessary prerequisite for validity, measurement reliability was a central concern in this inquiry:

Whenever a novel research technique emerges, the question of reliability becomes pertinent (Zetterberg, 1965: p. 125)

It was decided to build *congruent reliability* into the design by employing multiple measures and multiple data sources. The alternate data sources included:

1) Government records: Statistics Canada and DRIE each provided background information on the industry;

2) Published surveys: These afforded current estimates on the state of market, and the relative performance of each mill's brands;

3) Trade journals and newspapers: These gave indications of new technological developments, and allowed a tracking of the labour shortages experienced by the mills;

4) Interviews: Special interviews were conducted with the two major machine suppliers, three of the four local dyers, and two of the country's leading retailer chains;

5) Expert opinion: A number of experts were consulted during the study:

1) A government official involved in monitoring the industry's performance;

2) An independent expert on the local spinners and dyers;

3) A consultant to many of the studied firms;  
and

4) An academic observer on the practices of the Toronto firms.

On a number of occasions during the data collection process, information pertaining to general industry conditions was verified by the governmental expert. Where discrepancies were found between the expert's and



researcher opinions, the expert contacted the manufacturer's association for clarifications and/or corrections.

This expert opinion also helped buttress the judgments necessary for content validity (Kerlinger, 1973). With the assistance of the multiple secondary sources, efforts were also made to validate the quantitative and behavioural information provided by each subject. In most cases, such efforts proved successful.

Unfortunately, constancy and objectivity remain reliability problems which the design could not overcome.

#### **4.2 Conclusion**

In this chapter, the research design was developed. It was shown that the nature of the theory's development necessitated an exploratory inquiry, using interviews as the primary means of data collection.

A comparative design was adopted, to facilitate identification of certainty creation practices. It was decided that a turbulent, uncertain, and fragmented industry populated by entrepreneurial organizations would serve as the most likely environment in which to observe the theorized phenomena, while at the same time controlling for potentially confounding factors.

The nature of the variables to be measured necessitated a qualitative inquiry; quantitative methods were included to support and illustrate (where feasible) the qualitative interpretations and conclusions.

## **CHAPTER 5**

### **The Canadian Sweater Manufacturing Industry**

#### **5.0 Introduction**

In this chapter, the features of the studied industry are examined. The chapter is divided into five distinct sections. The first two sections presents an overview of the product, and identifies the basic production techniques. The third and fourth sections examine the Canadian sweater manufacturing industry and marketplace, and assess the representativeness of the inquiry's sample. In the fifth section, the basic transaction forms (see section 4.1.3 above) are identified.

#### **5.1 A brief product history**

Sweaters are a form of knitted outerwear worn on the top of the body, and put on either by being pulled over the head or buttoned down the front. They first appeared in the 15th century on the English Channel islands of Guernsey and Jersey (sweaters are still called Jerseys in England). These knitted shirts were made of natural wool, a fibre which retained its oil and thus afforded the sailors protection against the dampness. The jersey's popularity spread throughout Europe, especially among workingmen.

It wasn't until the 1890s that the jersey was adopted by US athletes, and renamed a "sweater". The first sweaters were heavy, dark blue pullovers, worn before and after athletic events.

In the 1920s, designers such as Lanvin and Chanel first introduced sweaters into their couturier collections, making the product a part of a fashion wardrobe. Today, sweaters are worn by women, men, and children of all ages. As befits a fashion item, sweaters have also become considerably more complex than the original jersey:

- a) Styles vary by sleeve length, neckline, and general body shape;
- b) The colouring and patterning range from solids to complex, jacquard designs;
- c) The material composition ranges from low cost, easy care synthetic fibres to high priced natural fibres (both cotton and wool).

The popularity of the sweater is cyclical. While the 5 year period 1983-87 represented a boom of unprecedented length for the domestic industry, the historic pattern has been of a three year cycle. This would suggest that the soft market of 1988-89 will persist well into 1990.

## **5.2 Sweater production**

The first sweaters were produced by hand knitting, an ancient technique which probably originated among the nomads of the Arabian Desert around 1000 B.C.<sup>26</sup> The basic action of knitting is the same as that

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<sup>26</sup>Hand knitting spread from Egypt to Spain, France, and Italy. By the latter Middle Ages, knitting guilds were established in Paris and Florence. Austria, Germany, Denmark, and the Netherlands soon specialized in distinctive types of patterning and stitching (Enclopaedia Britannica, 1987).

performed on a child's corking loom. A hooked needle reaches through a closed loop of yarn, grabbing a new strand of yarn, and pulling it through the loop. The new loop which is formed uses the first loop to create the closure. The needle is then pushed through the new loop to hook another yarn strand, repeating the process.

The invention of the frame knitting machine in 1589 revolutionized knitting. It allowed production of a complete row of hundreds (or even thousands) of needles in a fraction of the hand knitting time. The basic element of a mechanical knitting machine is the needle. The type commonly used in sweater knitting machines is the latch needle. It is composed of a curved hook, a latch that swings on a rivet just below the hook, and a stem. While needles vary in thickness and length, the sweater manufacturer differentiates needles in terms of the gauge, i.e. the number of needles per inch. Typically, sweater gauges run from 4-gauge (heavy sweaters) to 12-gauge (fine garments).

Knitting machines can be either flat or circular. Flat machines have their needles mounted on two needle beds which lie at right angles to each other, each at a 45 degree angle to the horizontal. The knitted fabric passes downward through the space between the upper edges of the plates. In the knitting process, the needles are pushed up and down by cams attached to a carriage which moves over the length of the machine. These machines are extraordinarily flexible in terms of possible stitch type. Virtually all Canadian sweater manufacturers employ flat machines, whether for basic production, or for knitting "trim".

A special type of flat machine, which controls the number of active needles on each course (i.e. adds or reduces the number of stitches per row), is called a full fashion knitting machine. While considerably slower than regular flat machines, the technology avoids most of the fabric waste associated with conventional production methods (up to 30%).

Circular machines have their needles located in grooves cut in the wall of a cylinder. In the knitting process, the needle stems move through cam tracks, causing the needles to slide up and down to pick up yarn, form a new loop, and cast off the previously formed loop. Knitted fabric comes out in the form of a tube, which is then separated into single sheets. These machines are less reliable than the flats, and cannot knit all the stitches which flat machines can produce. They have, however, two to three times the knitting capacity of flats, and are standard among factories interested in high output volumes.

One of the most recent innovations in the industry has been the introduction of computerized control systems onto the knitting machines. Where complex jacquard cards (manually punched in a highly skilled and time consuming process) used to control the needle actions, floppy disks and microcomputers have taken over.

One direct advantage of the computerization is greater productivity. Circular machines operate at speeds four to six times greater than comparable, noncomputerized models. On flat machines, time savings of up to 16 hours per pattern change have been realized by the new technology. Computerization has also raised the Canadian mills' ability

to produce sophisticated styling. At the start of the decade, the Canadian sweater manufacturer could only produce relatively simple patterns. Today, industry design and production capacity are both world class.

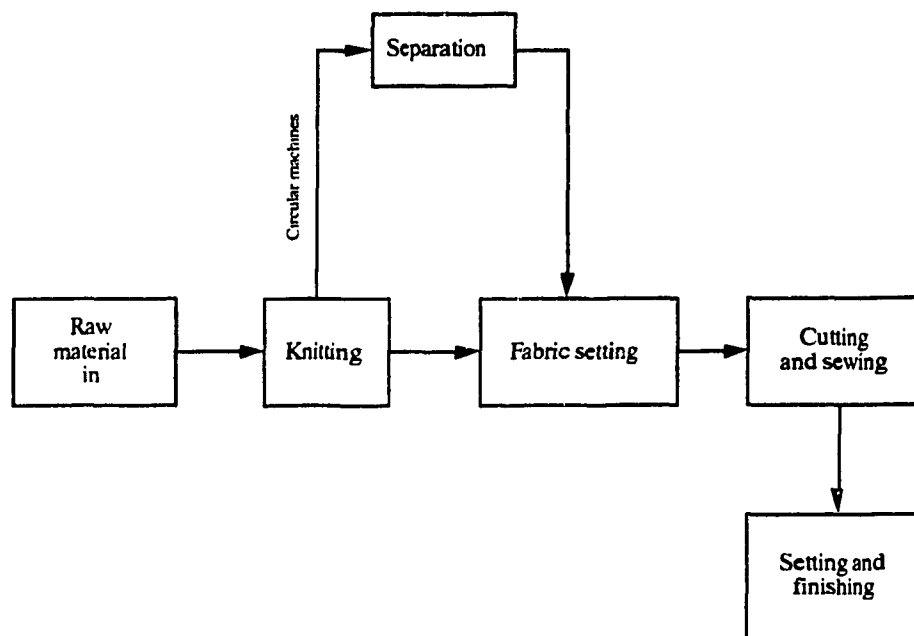
Computerization is, however, extremely expensive. Whereas 15 years ago, circular knitting machines sold for \$20- \$40,000, and flat machines sold for \$10-20,000, their modern electronic counterparts range in price from \$50,000 to \$250,000. The industry's changeover to this technology was aided by CIRB, a Federal Government program which paid for up to 25% of the investment in new equipment.

Sweater production involves two "basic" steps. The cloth is first knitted into sheets. These sheets are then cut into pieces, and these pieces are sewn into the final product form. The nature of the cloth, however, necessitates additional production steps. Knitted cloth is unstable, and must be "set" repeatedly. The initial setting takes place after the cloth has been knitted. While some manufacturers wash the cloth, most employ steam in this stage. The second setting is a part of the finishing process of each sweater, and is performed by hand steaming each garment.

Setting the cloth is one of the most labour intensive steps of sweater production. While automatic-feed machines can be employed to automate the first steaming, the finished product is not of the same high quality as when hand steamed. As a result, those manufacturers which

cater to price sensitive markets automate the first steaming, while those which attend to quality do not.

Figure 5-1 below summarizes the manufacturing stages:



**Figure 5-1: Stages in sweater manufacturing**

### 5.3 The Canadian sweater manufacturing industry

The sweater industry (SIC 2491)<sup>27</sup> is comprised of those firms which manufacture...

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<sup>27</sup>This new Canadian code first appeared in 1985, and was introduced to signal new data collection procedures by Statistics Canada. The old code was SIC 2392. The United States industry code is 2252 (per the CMA Key Business Directory).



...mens, boys, womens, girls, childrens and infants (0-6x) sweaters, pullovers, cardigans, and ponchos which cover the upper part of the body, and which are of constructions coarser than 19 cut, that is less than 19 vertical stitches per inch<sup>28</sup>.

As indicated in Table 5-1 below<sup>29</sup>, there are 78 sweater manufacturers in Canada, 82% of which are concentrated in Quebec and Ontario.

**TABLE 5-1**

**REGIONAL DISTRIBUTION  
OF CANADIAN SWEATER  
MANUFACTURERS**

	No. of est	Pct. of total
Maritime	4	5
Montreal Metro	39	
Other Quebec	7	
Total Quebec	45	59
Toronto Metro	16	
Other Ontario	2	
Total Ontario	18	23
Winnipeg Metro	2	2
Other Manitoba	-	
Sask.-Alta.	2	3
British Columbia	6	8
<b>CANADA</b>	<b>78</b>	<b>100</b>

In general, the industry firms are small, ranging in size from one to five hundred employees. The industry employs a total of approximately five

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<sup>28</sup>Department of Regional Industrial Expansion (DRIE), Control 50, January 1988, p. 8.

<sup>29</sup>ibid

thousand people nationwide. The product's maturity is reflected in the fact that nearly 65% of the industry's member firms have been in operation for at least 25 years<sup>30</sup> (see Tables 5-2 through 5-4, next page).

Despite the small mill size, a principal characteristic of the Canadian industry is the level of manufacturing integration. Most knitters perform every one of the production stages identified in Figure 5-1. It is this level of skill integration that lead the knitters to view themselves as unique members of the clothing and textile industry. They formed their own industry association at the start of the 1980's.

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<sup>30</sup>Statistics Canada Catalogue 34-252B 2491, 1985 Census of Manufacturers; Textiles, Clothing and Footwear Directorate, Office of Industrial Expansion, DRIE, November, 1985, p. 4.

**TABLE 5-2**

REGIONAL  
EMPLOYMENT  
IN INDUSTRY

Employment levels, 1985	
Maritime	x
Montreal Metro	2,772
Other Quebec	x
Toronto Metro	1,552
Other Ontario	x
Winnipeg Metro	x
Other Manitoba	-
Sask.-Alta.	x
British Columbia	x
 CANADA	 5,135
x = Confidential	

**TABLE 5-3**

AVERAGE AGE  
OF CANADIAN  
SWEATER MILLS

Number of years in business	Percent of firms
Over 50	7
25-49	58
15-24	19
10-14	7
5-9	7
Less than 5	2

**TABLE 5-4**

NUMBER OF  
ESTABLISHMENTS  
(by size)

Firm Size (#employees)	Number of establishments
0-4	9
5-9	12
10-19	8
20-49	13
50-99	21
100-199	11
200-499	4

### 5.3.1 The markets

The estimated Canadian market in 1987 was 58 million sweaters, valued at roughly \$720 millions<sup>31</sup> (see Table 5-5). The total market is traditionally divided into three distinct segments:

- \* Womens' and Girls';
- \* Mens and Boys; and
- \* Childrens and infants<sup>32</sup>.

**TABLE 5-5**

**THE CANADIAN  
SWEATER MARKETS**

Market Category	1987 Sales (million units)	1987 (\$ million)	Avg annual growth (units)
Womens and Girls	39.8	\$485.5	8.32%
Mens and Boys	14.8	206.3	5.20%
Childrens and Infants	3.4	22.2	6.77%

<sup>31</sup>Two sources were used in developing the size estimate of the Canadian sweater market. The Textile and Clothing Board (Control 50) publishes market size estimates (in both units and dollars), based upon Statistics Canada information (the latest available information was printed in January, 1988). DRIE was a second source. The multiple sourcing facilitated a determination of "average" unit prices within each market segment. These prices were then used to generate the estimates of the individual segment sizes.

<sup>32</sup>From this point, womens and girls will be abbreviated as the ladies market, mens and boys will be termed mens' market, and childrens and infants will be termed childrens' market.

The industry is highly fragmented. Using the H-Index as a concentration ratio<sup>33</sup>, we see exceptionally low levels of concentration over the past 5 years (see Table 5-6).

**TABLE 5-6**  
CONCENTRATION  
WITHIN THE INDUSTRY

INDUSTRY	1983	1984	1985	1986	1987
4 firm H ratios	.002	.002	.002	.001	.001
8 firm H ratios	.003	.003	.003	.002	.002

The industry firms make no overt effort to consolidate their fragmented field (Porter, 1980). In fact, the opposite appears to be the accepted industry practice, as all interested parties seem to desire the maintenance of the fragmentation. The manufacturers generally share a conventional rule of thumb that no single account should be allowed to account for more than 10% of total sales. The retailers show a marked preference for covering each of the price points with a different supplier. It thus appears that dependence avoidance is the general rationale maintaining the fragmentation.

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<sup>33</sup>Scherer, 1980, p. 58. The figures used in the calculation were Canadian manufacturers' total sales figures.

### **5.3.2 Environmental turbulence**

Two sources of general environmental disruptions can be identified:

- a) Imports; and
- b) Free Trade

Each is discussed briefly below.

#### **5.3.2.1 The role of imports**

Of crucial concern to the industry is the fact that "imports" represent the largest share of the Canadian sweater market<sup>34</sup>. During the 1980's, the respective growth rates of imports and domestic shipments were not symmetrical. Domestic shipments grew at an annual average rate of 5.2%, while import sales grew at an annual average rate of 8.4%. When broken down into respective market segments (see Table 5-7), the patterns of asymmetrical growth become more comprehensible:

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<sup>34</sup>In 1987, imports accounted for 65% of the units sold in Canada, and 54% of the dollars spent.

**TABLE 5-7**  
**IMPORTS AND THE**  
**MARKET SEGMENTS**

	Ladies	Mens	Childrens
Imports Avg. growth	8.71	9.97	3.46
Domestic Shipments Avg Growth	7.9	-2.61	13.11

The mens and boys market has been losing ground to the imports throughout the decade. The domestic suppliers in the womens and girls market fought the imports to a rough draw, while the Canadian manufacturers in the childrens and infants segment outperformed the imports significantly.

The decision to limit imports from a given country (by imposing quotas upon that source's exports) is as much political as it is economic. In 1988, four countries were classified as "Major Restrained Source" (see Table 5-8):

**TABLE 5-8**  
**PRINCIPAL**  
**IMPORT SOURCES**

Source	1986 \$ Imports (\$ millions)	% total 1986 imports
Hong Kong	96.8	28.48%
South Korea	66.7	19.63%
Taiwan	60.7	17.85%
Peoples Rep. of China	12.8	3.75%
Total, major restrained sources	237	69.71%

### 5.3.2.2 Free trade

On January 1, 1989, a Free Trade agreement (FTA) between Canada and the United States Went into effect. Sweaters and other knitted articles are currently protected from US imports by a 25% tariff barrier. According to the terms of the FTA, the duty...

...shall be removed in ten equal stages, commencing on January 1, 1989 and such goods shall be free of duty effective January 1, 1998.<sup>35</sup>

Yarn acquisition has become globalized in recent years. Sweater manufacturers are the only apparel manufacturers exempted from restrictions relating to yarn imports:

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<sup>35</sup>Free Trade Agreement Tariff Schedule of Canada, page \*, pp. 306-308.



Goods shall nonetheless be considered to have been transformed in the territory of a Party and be treated as goods originating in the territory of the Party provided that ... the value of materials originating in the territory of either party or both parties used or consumed in the production of the goods plus the direct cost of assembling the goods in the territory of either party or both Parties constitute not less than 50% of the value of the goods when exported to the territory of the other Party<sup>36</sup>.

In essence, the value added of the Canadian sweater manufacturers is so high that they are exempted from the potentially threatening yarn import restrictions applicable to other industries. This exemption may partially explain why, despite the undoubtedly great importance of the FTA on future industry viability, the impact of the agreement has to this point been relatively small. While other textile and apparel industries have launched a series of appeals for special treatment under the FTA, the sweater manufacturers are generally adopting a wait-and-see attitude.

### **5..3.3 The industry's structural features**

Porter's (1980) 5 forces model provides a convenient framework for understanding the competitive structure of the Canadian sweater industry.

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<sup>36</sup>The Canada-US Free Trade Agreement, 1988, p. 22.

a) *Threat from substitutes*: As a fashion item, the popularity of sweaters (especially in the ladies segment) is driven by what may be broadly defined as "design forces"<sup>37</sup>. The cyclicity of the product is tied to these forces. A by-product of the cycle is that the threat from substitutes is variable. During an "up" phase, there are essentially no substitutes for the demanded fashion item. The "power" in this stage is with the manufacturer; retailers queue up for merchandise, and order backlogs build. In an up phase, manufacturer margins rise and market segmentations are adhered to rigidly. During a down phase, however, the pendulum swings in the opposite direction. Prices and margins fall, and market boundaries blur<sup>38</sup>. When sweaters lose their "fashion" stature, and assume the role of either a wind breaker or top, they acquire many substitutes.

b) *Intensity of competition*: Competition in the industry is extremely intense. A partial explanation is that the competitors are roughly comparable in size, and their investments in fixed assets are extremely high<sup>39</sup>. As identified by Scherer (1980), however, the rivalry is rooted in deeper underlying dynamics:

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<sup>37</sup>The inclusion of the product in fashion designers' collections, the colours and patterns employed, etc.

<sup>38</sup>Manufacturers might, for example, produce scaled down versions of popular styles, and sell these in the children's markets.

<sup>39</sup>A variety of descriptions were given during the interviews. The one which came out most consistently was that the factories were "cash holes", i.e. sustainable only with relatively massive cash investments.

Retail prices tend to be set at traditional price points, and the discount that manufacturers allow retailers is also confined to certain standard percentage values. This leaves manufacturers relatively little pricing discretion. Competition then takes the form primarily of competition in quality, each producer adding increments of quality through better materials, more careful stitching, more liberal cooperative advertising allowances, and so forth, so as to make its product as attractive as possible ... (Scherer, 1980: p. 386)

Positive quality increments represent only half of the competitive dynamics. Equally common are decreases in quality<sup>40</sup> and price, as manufacturers produce "knock offs" (low priced imitations) of each others styles.

c) *Buyer power*: As shown by the market share data in Tables 5-9 through 5-12 below<sup>41</sup>, buyer power is extremely high, largely due to the high levels of sales concentration in the small number of major accounts<sup>42</sup>:

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<sup>40</sup>Lower price yarns, or less yarn per garment.

<sup>41</sup>All statistics in this subsection from Canadian Apparel Market Monitor (Camm), ISL International Surveys Ltd., Toronto Ontario.

<sup>42</sup>With the exception of Fairweathers and Tip Top, the Canadian retailers listed above are majors.

**TABLE 5-9**

OUTLET FORMS  
MARKET SHARES  
LADIES SEGMENT

Ladies	1987	1986
Majors	59.31%	61.98%
Chains	28.29%	27.69%
Independents	12.40%	10.33%

**TABLE 5-10**

OUTLET FORMS  
MARKET SHARES  
MENS SEGMENT

Mens	1987	1986
Majors	59.07%	57.86%
Chains	17.35%	24.29%
Independents	23.59%	17.86%

**TABLE 5-11**

MARKET SHARE  
INDIVIDUAL RETAILERS  
LADIES SEGMENT

Ladies	1987	1986
Sears <sup>43</sup>	12.0	11.0
Eatons	7.2	5.8
The Bay	5.9	8.1
Woolco	4.9	5.8
Zellers	4.5	4.2
K-Mart	2.8	2.8
Fairweather (ch)	<u>2.5</u>	<u>1.6</u>
Total	39.8	39.3

**TABLE 5-12**

MARKET SHARE  
INDIVIDUAL RETAILERS  
MENS SEGMENT

Mens	1987	1986
Sears <sup>44</sup>	13.6	13.5
Eatons	4.9	6.3
The Bay	6.1	8.6
Tip Top (ch)	11.1	9.7
Zellers	<u>7.8</u>	<u>3.9</u>
Total	43.5	42%

As discussed above, another factor contributing to the high buyer power are the efforts made by the majors to keep the field of sweater manufacturers fragmented. While such efforts are in general successful, the figures show that the fortunes of individual retailers are volatile from one year to the next. This retail turbulence contributes to the

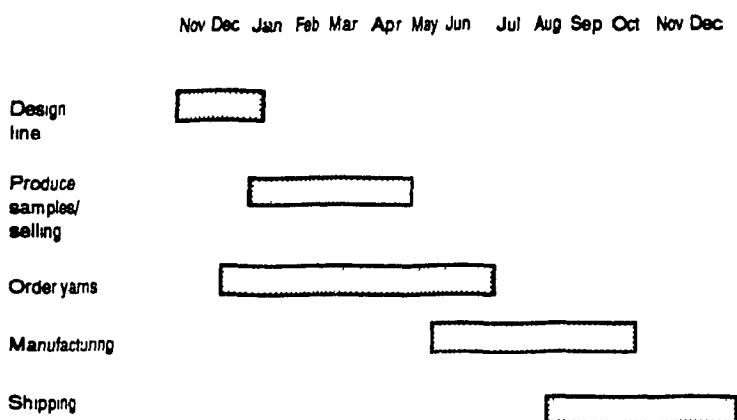
<sup>43</sup>[1986: Retail = 5.8%, catalogue = 5.2%] [1987: Retail = 6.4%, catalogue = 5.6%].

<sup>44</sup>[1986: Retail = 7.5%, catalogue = 6%] [1987: Retail = 7.6%, catalogue = 6%]

intense rivalry among the sweater mills. A mill serving major accounts whose fortunes have declined will have idle capacity. Even when prices are cut to attract customers, the orders may arrive too late in a season to be filled. This tends to spur a heightened wave of competitive interaction in the following season.

d) *Supplier power*: There are three key suppliers to the industry:

Yarns: Yarn acquisition has become globalized in recent years, with oil refining countries now producing inexpensive acrylics. The mills therefore have a wide range of supplier choices. As suggested in Figure 5-2, however, the production scheduling leaves little margin of error (in terms of prompt deliveries and consistent product quality). This makes the mills highly dependent upon the supplier(s) it has selected for that particular season.



**Figure 5-2:** Production scheduling and yarn supplies

**Labour:** The individual mechanics who keep the machines operating are critical suppliers<sup>45</sup>. There are barely enough mechanics to staff all the mills, creating a situation in which the mechanics are the most highly paid organization employees. A single job transfer sets off a chain of job movements which ripples through the industry, taking over a year to play out.

The situation is exacerbated by a number of additional elements. The first is the differential skill level within the mechanics themselves. Of the 25 Montreal mechanics, for example, only 5 are reported to be "first rate".<sup>46</sup> Second,

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<sup>45</sup>The knitters who translate designs into patterns for the machines are also important.

<sup>46</sup>This is a situation partly of the mills' creation. Adoption of the computerized knitting technology occurred at a differential pace (Utterback & Abernathy, 1975) across the various mills, thus creating a stratified level of skills within the labour pool. Late adopters of the technology were desperate for the technical competence to support their investments, and initiated a bidding war for those adequately trained. In the process, they began to overpay for mechanics who were trained but were not comfortable with

factories are ethnically and linguistically divided into two distinct types, effectively halving the supply of replacement mechanics. Third, there is no adequate apprenticeship program to train new mechanics.

The mills recognize their vulnerabilities, but have been unsuccessful at addressing them. Informally established rules regarding "raiding" are without enforcement teeth<sup>47</sup>. Efforts to stabilize the labour pool have been fractionalized<sup>48</sup>. Attempts at internalizing the labour market transactions (Williamson, 1975) have been unsuccessful; market forces have subverted all such efforts.

Machinery: The knitting machines form the heart of the mill's productive capacities. The technology is enormously complex, and in a state of rapid evolution<sup>49</sup>. Technical knowledge is generally proprietary to the machine supplier<sup>50</sup>, and the relationships between the mills and

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the machinery, and soon became willing to pay for the services of those mechanics who had received only partial training.

<sup>47</sup>During the period of the research, one mill broke the rules when chasing a mechanic. In the changeover, the mechanic took from his previous employer the computer diskettes which contained the upcoming season's styles and patterns. The industry was unable to discipline the mill which violated the established behavioural codes.

<sup>48</sup>Attempts to increase the overall labour pool by the establishment and administration of a mechanics training school have failed due to a general lack of interorganizational cooperation

<sup>49</sup>The advent of CAD/CAM is the next massive change.

<sup>50</sup>The suppliers provide training, but the mechanics who receive the instruction generally don't share this knowledge with their non-technical chief executives (Crozier, 1964)

machine sources are characterized by extremely high switching costs<sup>51</sup>.

One of the most important sources of power for these suppliers is the role they play in the scarce labour market. These suppliers have contacts with the home manufacturing operations, where the majority of mechanics are trained. Unsubstantiated tales abound about the machine suppliers' willingness and ability to help a desperate mill obtain an urgently needed mechanic. Rumours also address the suppliers' willingness to help favorite mechanics find better jobs.

The power distribution is balanced partly by the infrequency of machine purchase, and the extremely long life of the equipment. Also limiting their power is the cautious purchasing behaviour of most mills.<sup>52</sup>

*Threat of entry:* As might be expected in this industry (Porter, 1980; Mariotti & Cainarca, 1986), most conventional entry barriers are absent<sup>53</sup>. In fact, the low level of sunk costs suggests that this may a

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<sup>51</sup>The plants are generally "supplier specific", i.e. one machine type dominates. Conversion thus means multiple machine changeover, in conjunction with large personnel training costs.

<sup>52</sup>The mills usually buy machines with cash, and look for paybacks of one year or less.

<sup>53</sup>No scale factors present; there is no season-to-season differentiation among the competitors (you're only as good as your current designs); there are no switching costs for buyers; new entrants have easy access to channels; cost advantage is not a significant competitive factor.



"contestable market" (Baumol, 1982). The experiences of the most recent industry entrants, however, suggests that these benign images might be inappropriate. Barriers which are seemingly absent at the moment of entry confront new industry players after they have entered. Two types of issues appear particularly potent:

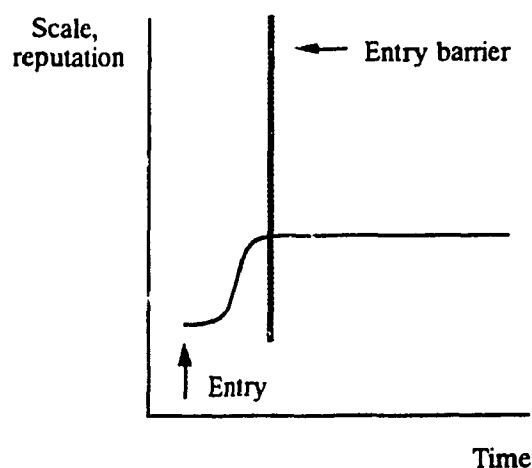
a) Entry with scale: One of the studied organizations was a new start up. He worked with second hand equipment, in an extremely small facility. His financial position was precarious throughout the interview process. One of the retailers recounted her viewpoints of his operations. While she liked his styling, her concern was his lack of productive capacity. She said that this was the reason she gave him only a small initial order. Cash flow problems were one of the reasons why he went bankrupt within 4 months of the completion of the interviews.

Another of the interviewed organizations said his startup capital was only \$10,000. He expanded, however, by acquiring debt. This forced him to keep his machines constantly turning. He accomplished this by subcontracting for other mills, but has therefore been prevented from designing and selling a fully independent product line.

b) Knitting expertise: One of the studied organizations was a startup with adequate capital to purchase a large number of new, sophisticated knitting machines. The message which

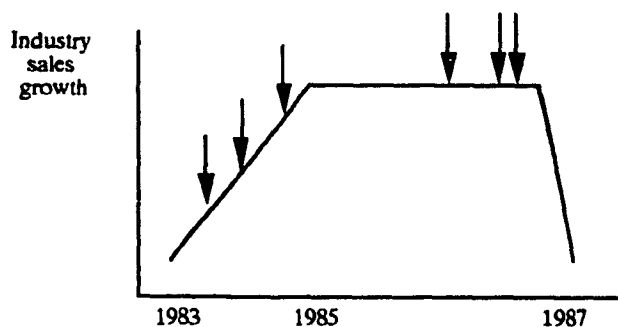
this purchase conveyed to the retailers, however, was clouded by the mill's lack of established reputation. The Canadian retailers seemingly see the mill as an apparel operation, using them to fill in last minute orders (at mercilessly squeezed prices).

As shown in Figure 5-3, these issues seem to suggest the presence of a delayed entry barrier for new entrants. If scale and reputation are not quickly established, new entrants may either fall out or drop into the category of subcontractor.



**Figure 5-3:** Mobility barriers within the Canadian sweater production industry

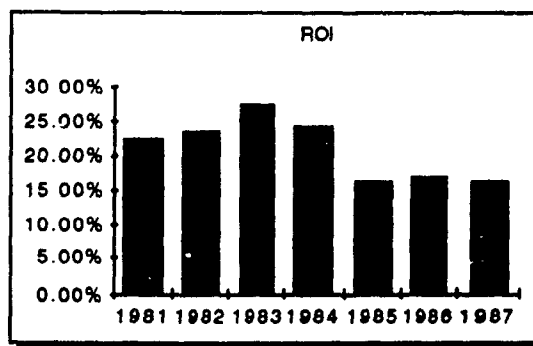
As displayed in Figure 5-4 below, the likelihood of success or failure for new entrants is also a function of the timing of entry. Each arrow indicates the date of entry for the six most recent industry entrants. Two of the three which entered after 1985 have failed, while the third has yet to earn a profit.

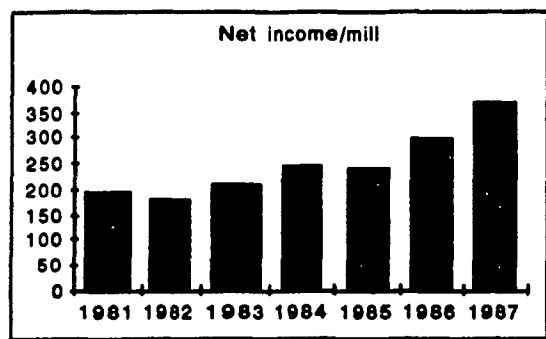
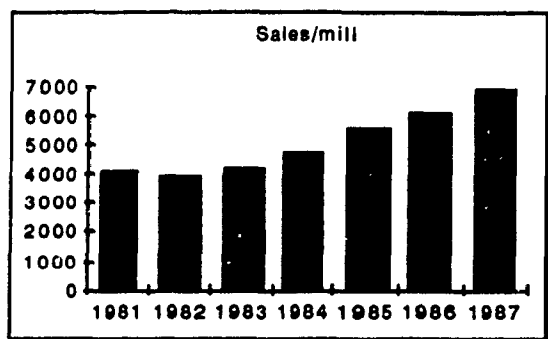


**Figure 5-4: New entrant dates of entry**

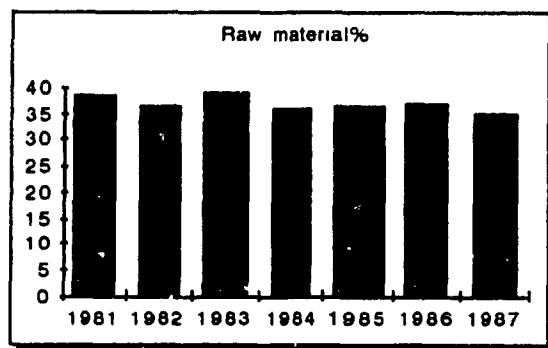
#### 5.3.4 Performance within the industry

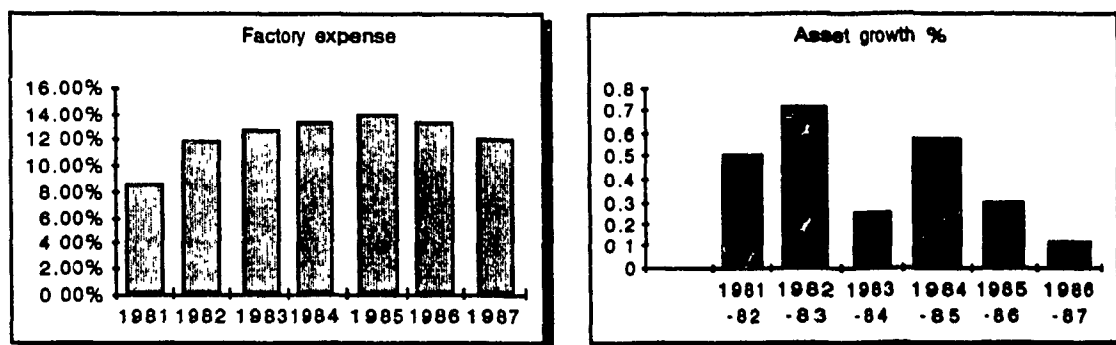
As indicated in the series of graphs below, the industry is extremely profitable, even though average return on invested capital fell sharply in 1985. The drop in ROI came at a time when net income per mill and sales per mill were both rising (the time of the up cycle).





It is also clear from the graphs that the drop in profitability was not related to mismanagement of basic performance expenses. Raw materials remained relatively constant at 35-40% of each sales dollar, labour remained at roughly 27%, and factory expense remained stable at 11-12%.





The explanation for the lowered overall profitability can be seen in the erratic patterns of asset expansion which took place over the period. In 1984, the level of asset growth rose sharply. The capacity expansions which took place in the middle of the decade are creating the severe "volume pressures" the mills are feeling today.

#### 5.4 The inquiry's sample

As described in the previous chapter, the final sample consisted of 19 mills (14 from Montreal, 5 from Toronto). Fifty percent of the Montreal based mills, and thirty one percent of the Toronto firms, thus participated in the study.

As discussed above, the forty four Montreal and Toronto knitting mills represent 56% of the industry's total number of facilities. The sample of 19 knitters thus included 43.2% of this group (24% of the total number of knitters nationwide).

The representativeness of the sample is revealed in Table 5-13 below<sup>54</sup>.

**TABLE 5-13**  
**THE SAMPLE:**  
**REPRESENTATIVE**  
**DATA**

	Sample Mean	Industry Mean	Sample Min	Sample Max	Std dev.
Age	24.7	30	1	68	20.0
Sales (\$mill.)	6.7	6.9	2	12.7	3.6
Number of employees	128	68	19	260	75.4
Square footage of facilities	56.7K	n.a.	13	112	29.6

As can be seen above, the sample represented a reasonable cross section of the industry. Two major elements should be noted:

- 1) The 1987 sales for four of the 19 mills were estimates made in conjunction with an industry expert; and
- 2) The discrepancy between the number of employees in the sample and that of the industry average is based upon the nature of Statistics Canada data collection procedures. Included in their 78 knitting mills are 21 firms with less than 10 employees. None of these *artisan shops* were included in this study.

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<sup>54</sup>All industry averages were provided by the Federal government.

Each studied firm was owned (either exclusively or in partnership) by the president, with whom all interviews were conducted. Ten firms served the ladies market exclusively, six sold in both the ladies and mens markets, and three were exclusively mens sweater manufacturers.

## **5.5 The input and output transaction forms**

As discussed in Chapter 4, a mill's relationships were categorized into "generic forms". In this section, the characteristics of these transaction forms are described.

### **5.5.1 Raw material transactions**

In sweater manufacturing, the critical raw material input is the yarn to be employed in product manufacturing<sup>55</sup>. While delivery scheduling is important, colour consistency is the most critical supply issue. Yarn dyeing is an extremely complex process, prone to both mechanical and human error. Defects are often undetectable until the knitter begins to work with the yarn. As long as the colour matches from spool to spool, knitters can "tweak" even poor quality yarns into finished products of acceptable quality. If, on the other hand, the colour varies from spool to spool, it is impossible to set up the largely unmonitored production runs characteristic of today's electronically guided knitting operations. In many cases, unmatchable yarns are deemed unworkable. If the knitter is

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<sup>55</sup>The industry uses primarily acrylic, wool, and blended fibres yarns. Cotton has recently become popular, as well.

unable to obtain replacement yarns within the season's production time frames, his orders may be lost.

Sweater yarn can be obtained in two alternate forms: (a) pre dyed; or (b) greige<sup>56</sup>. Traditionally, the basic yarn of the Canadian producers (high bulk acrylic, #2/24) was imported in greige form, and dyed by commission dyers. In 1983, Mexico (an "unrestrained source", i.e. a country whose exports to Canada are not subject to quotas) entered the Canadian market with inexpensive dyed yarns. When the United States placed an embargo on dyed Mexican yarns in 1984, the result was a doubling of Mexican shipments to Canada. By 1987, Mexican exports had quadrupled in volume from the 1984 level.<sup>57</sup> Other unrestrained sources (notably China and Indonesia) also became sources of dyed yarns. The result has been an increased range of choice for each sweater mill. The mills can buy dyed yarns from three different sources:

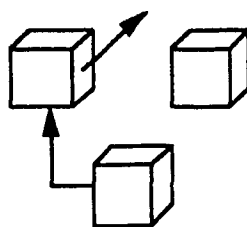
- 1) The most inexpensive method involves dealing with a sales agent who acts as an intermediary between the mill and the supplier (Figure 5-5 below). This is generally the way Mexican, Indonesian, and Chinese yarns are obtained;

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<sup>56</sup>Pronounced to rhyme with beige, this type of yarn is 'raw', in that it undyed.

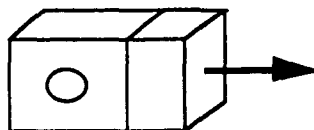
<sup>57</sup>Textile & Clothing Board, "Report on a Review Concerning Acrylic Yarn", Minister of Supply & Services Canada, Cat. No. Id. 46-6/1988, June, 1988.





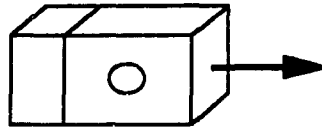
**Figure 5-5:** Agent, dyed yarns

2) A more expensive method involves dealing directly with the yarn spinner (Figure 5-6 below). For some yarns (fancy twists) this may be a domestic transaction, but for other yarns, Europe is the main supplier.



**Figure 5-6:** Spinner, dyed yarns

3) The most expensive method is for the mill to buy dyed yarns from local commission dyers (Figure 5-7 below). In response to the flood of dyed imports, Canadian dyers have begun to purchase their own greige, and keep it inventoried for either spot or large purchases. These yarns may be purchased by the mills either in the "basic" or the fashion colours.



**Figure 5-7:** Dyed yarns, local dyer

The costs associated with each transaction vary considerably. While lower in base price, the purchase of foreign dyed yarn is filled with hidden costs:

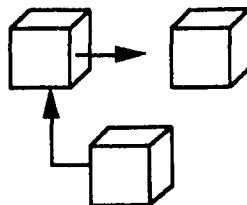
- 1) Order expediting is relatively difficult;
- 2) Brokerage and cartage delays can arise unpredictably;
- 3) Currency fluctuations can significantly affect prearranged prices; and
- 4) Bank arrangements (letters of credit) can significantly increase processing costs.

Foreign dyed-yarn transactions are also limited in the range of colours which can be purchased. Fashion colours cannot easily be obtained because the knitter cannot engage in a convenient sampling process with the supplier. As a result, these yarn purchases are generally restricted to "basic colours" (black, white, navy).

Dealing with local commission dyers is a relatively expensive route to follow, at least in visible and measurable costs. The tradeoff is the greatly reduced level of uncertainties associated with the domestic transaction. The mill's executive can get in touch with the supplier quickly, and deal only with the company president in these contacts.

The mills also know that, by dealing locally, they are doing business with a supplier who regards their orders as crucially important.

A final approach to yarn acquisition is for the mill to buy the undyed yarn, and then subcontract the dyeing (Figure 5-8 below).



**Figure 5-8:** Greige-dyer coordination

This method of yarn acquisition is the most complex, involving the greatest amount of management decision making and follow up attention. Flexibility and low price are, however, direct advantages of this method of yarn acquisition. Greige is largely a commodity, and purchases can be completed at extremely low prices. If the mill chooses, the yarn can be immediately dyed (the selection of available dyehouses is worldwide). Alternately, the yarn can be inventoried for future use. The logistical problems of following the latter route are reduced significantly by local dyehouses who today willingly inventory a customer's greige for future dyeing.

There is no single "best" method of yarn acquisition. As suggested in Table 5-14 below, each has its own costs and advantages. One of the interviewed dyers, however, suggested that there is an underlying logic to combining methods:

If I were a sweater manufacturer, I would buy my yarns in different ways. For the basic yarns, I would import them pre-dyed. I would buy my fancy twists from Canadian spinners, and I would use the local dyehouses for my fashion colours, and to fill in on the basics during a crisis

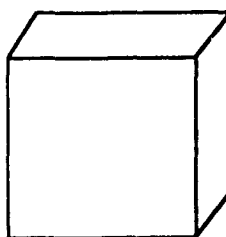
**TABLE 5-14**  
INPUT FORMS' FEATURES

	Lead time (weeks)	Product quality	Delivery reliability	Price	Relative Uncertainty
Local dyer, predyed	2-6	Low—med	Med—high	Med—high	Low
Spinner dyed yarns	4-8	Med—high	Med—high	Med—high	Low—med
Agent, dyed yarns	4-6	Low—med	Low—med	Low	High
Greige, select dyer	Varies	Med—high	Moderate	Low	Med—high

### 5.5.2 Output transactions

Broadly, the sweater manufacturers sell to three types of retailing clients. The most significant are the large department stores (Figure 5-9 below). As discussed above, these account for the vast majority of retail sweater sales. A number of factors make these clients particularly attractive to the mills:

- 1) Their large orders offer an opportunity for the supplier to generate relative scale economies, at least within a given style (Mariotti & Cainarca, 1986);
- 2) Even within the short selling seasons, these clients are likely to place repeat orders, allowing the mill a chance to eliminate at least part of the finished goods inventories which built up over the season; and
- 3) The majors present virtually no credit risk to the sweater suppliers.



**Figure 5-9: Majors**

The average purchase price (per garment) of these accounts is fairly low, and the margins on their orders are relatively tight. The mills which

wish to service the majors must therefore gear themselves to be volume houses. They must have large facilities (up to 100,000 square feet) filled with high speed circular knitting machines. This, however, makes the mills "volume dependent" upon the majors, who are a group of "powerful buyers" (Porter, 1980):

- a) The majors have the capacity to sidestep the Canadian suppliers completely, and purchase goods from foreign sources;
- b) Within the Canadian market, the majors also have the capacity to set price ranges (particularly in soft markets, where the manufacturers are hungry) and place tight delivery requirements upon the mills.

This power imbalance has led some majors to occasionally squeeze the mills unfairly on prices and delivery schedules. One subject understatedly described the majors as "Necessary, but not my idea of heaven".

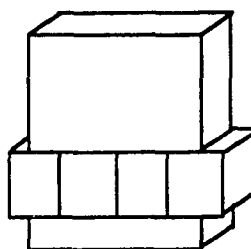
The mills also sell to chain stores, a group of retailers closely related to the majors (Figure 5-10 below). Chains are multi-outlet operations which carry a relatively narrow product range (clothing). Their retail price points are generally higher than the majors, and their purchase volumes can be quite large. This makes a chain's average order at least equal, in dollar terms, to that of a major.



**Figure 5-10: Chains**

Not all mills can effectively serve this second group. Their retail price points demand high fashion styling and quality, while their order scale require relatively large production capacities. To serve chain stores, the mills are thus forced to invest in relatively complex production facilities, comprising both flats and circulars. They must also possess a strong flair for design.

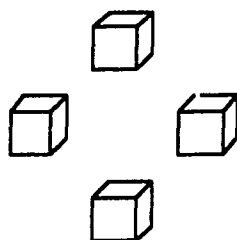
An important subset of mills see no difference between majors and chains. They identify the market solely in terms of order volumes (Figure 5-11 below), and distinguish clients on the basis of the quantities demanded.



**Figure 5-11: Volume accounts**

The final group of retailers served by the knitting mills are the independents (Figure 5-12 below). These are generally single store operations, and are scattered across the country. Mills which specialize in serving this type of account can have client lists with as many as

3000 names. The independent's average order (dollars and units) is a tiny fraction of that given by a major or chain. This means that a single independent account does not have the capacity to significantly "hurt" a sweater mill. This lack of dependence allows the mills to charge relatively high prices. The service given to these accounts is generally of lower quality<sup>58</sup>, and mills enjoy the greatest freedom of choice regarding plant configuration. The tradeoffs for dealing with these accounts are heavy paperwork costs, high credit risks, and complex issues of inventory management. The organization which serves these accounts requires a large sales force and extensive MIS.



**Figure 5-12: Independents**

As suggested in Table 5-15 below, there is no single "best" client group to serve:

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<sup>58</sup>Production economies come from pooling the individual orders, making deliveries relatively slow. Some mills don't offer repeats, given the extremely small size of such orders.



**TABLE 5-15**  
**OUTPUT FORMS' FEATURES**

	Gender Served	Avg. Price	Order Volumes	Continuity Likelihood	Credit Risk	Buyer Turnover
Independents	Mens Ladies	Med—high High	Low Low	High	High	Relatively rare
Chains	Ladies	Medium	Large	Med	Med	Frequent
Majors	Ladies Mens	Low—med Low—med	Large Large	Low	Low	Frequent

### 5.6 Conclusion

In this chapter, the characteristics of the studied industry were examined. It was shown that the sweater manufacturing industry satisfies the conditions established in Chapter 4 (see above): The industry is characterized by high uncertainty; it is highly fragmented; and it is an environment populated by small entrepreneurial organizations.

A total of seven transactions forms were identified<sup>59</sup> (four input alternatives, and three output choices). In the next chapter, the findings regarding the distribution of these transaction forms, and the sampled

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<sup>59</sup>As explained above, a fourth output category was also identified. This category is a hybrid of "majors" and "chains"

organizations' described orientations to these relationships, will be presented and analyzed.

## **CHAPTER 6**

### **The Findings**

#### **6.0 Introduction**

In this chapter, the inquiry's findings are presented and analyzed. The chapter is divided into three distinct sections:

- a) In the first section, the input and output configurations of the sampled mills are examined;
- b) In the second, the relationship configurations of the studied mills are examined;
- c) In the third section, the industry's social structure is examined.

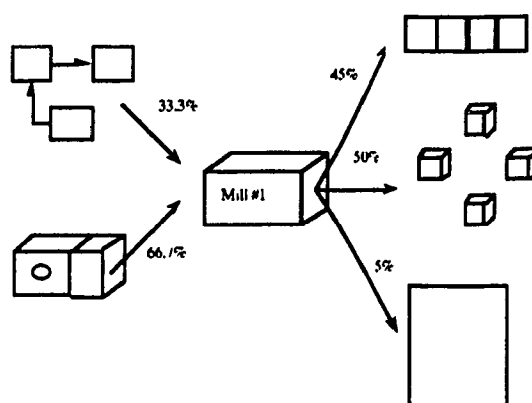
#### **6.1 The input/output configurational diagrams**

As described in chapter 4, each subject's transactions were categorized and summarized in a configurational diagram. The drawings place the sweater mill in the center of an input/output flow. Primary transaction forms are displayed in extruded (3-D) form, while secondary forms are displayed in 2-D.

The diagram for mill #1 is presented below as an illustration. It shows that this firm obtains its yarns (the left side of the diagram) in two ways:

1) The primary method (as indicated by the 3-D drawing) is by dealing directly with spinners (2/3 of yarns are obtained in this manner); and

2) A secondary method is by purchasing greige yarn from sales agents, and contracting the dyeing (1/3 of yarn purchases).



**Figure 6-1:** A sample diagram

On the output side, we see that the firm sells to three types of client<sup>60</sup>:

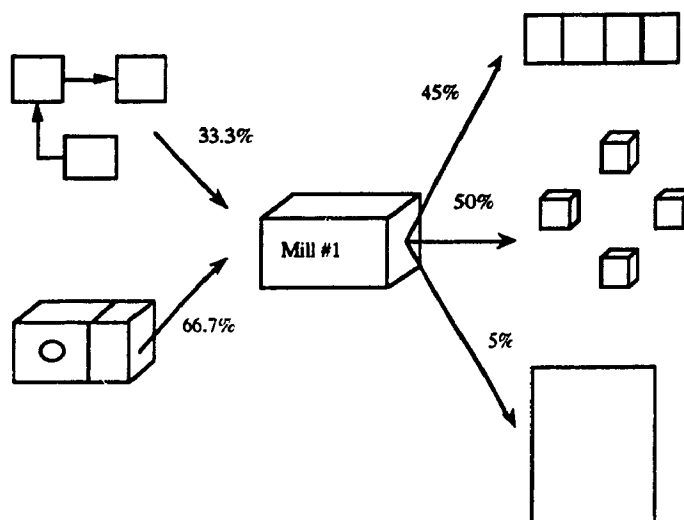
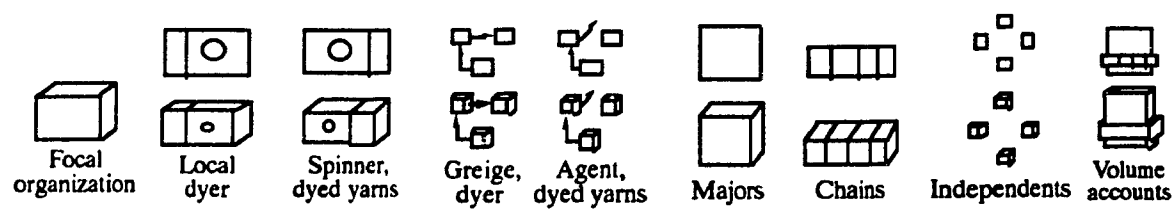
- 1) Most sales (50%) are to independents;
- 2) A significant portion (45%, displayed in 2-D) is sold to national chains; and

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<sup>60</sup>The input forms and output forms will herein be termed input and output configurations, respectively.

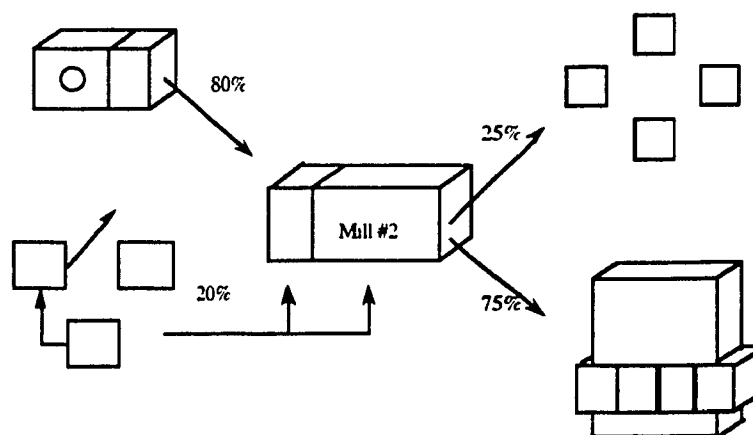
3) A relatively insignificant portion (5%, also displayed in 2-D) of sales go to major department stores.

As shown in the 19 subject diagrams presented below, the sample exhibited tremendous diversity in the ways input and output transactions were configured:



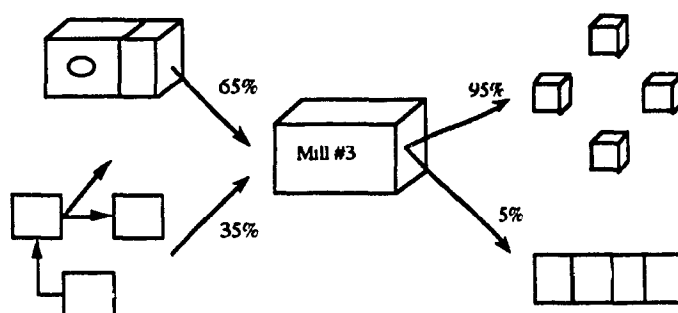
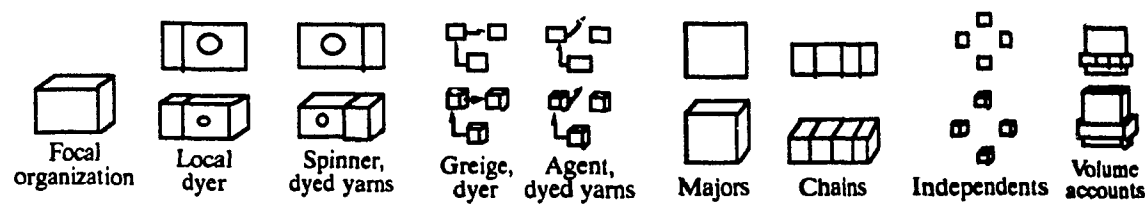
**Figure 6-2: Mill #1**

This ladies producer buys most of its yarn from spinners, and sells virtually exclusively to independents and chains.



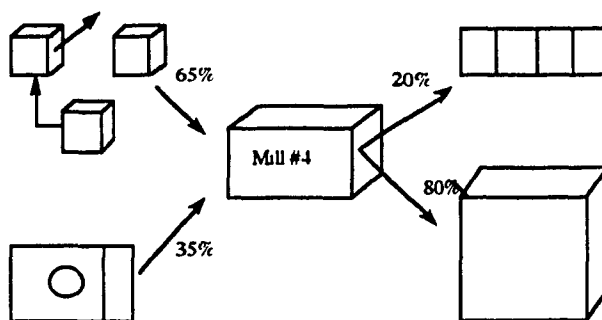
**Figure 6-3: Mill #2**

This manufacturer of ladies and mens sweaters, an owner of its own dyeing facilities, buys most yarns from spinners. It defines its primary market as "volume" accounts.



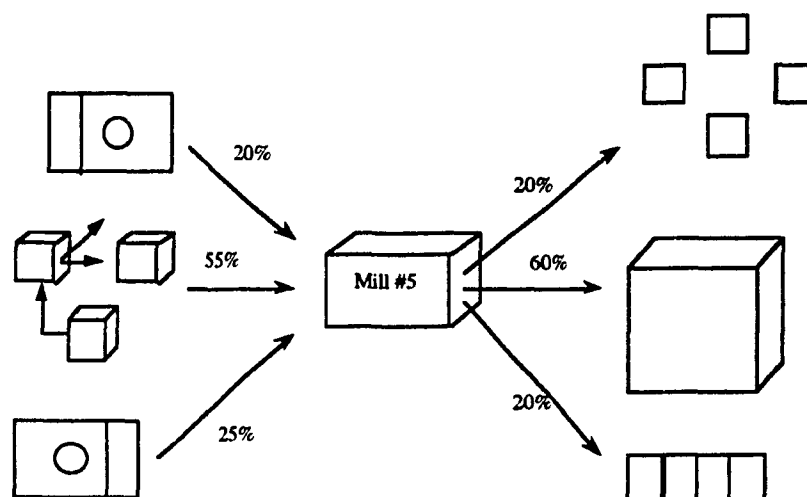
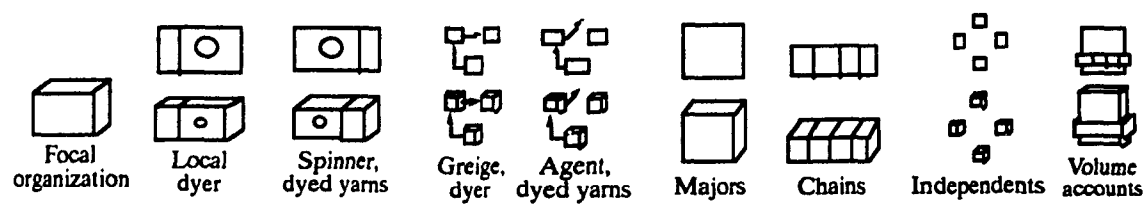
**Figure 6-4: Mill #3**

This men's manufacturer buys most of its yarn from spinners, and sells nearly exclusively to independent accounts.



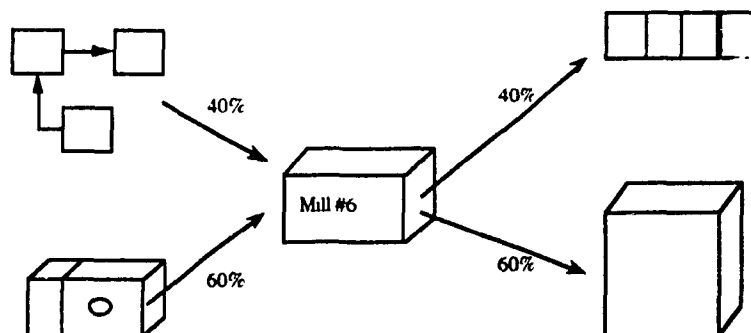
**Figure 6-5: Mill #4**

This ladies manufacturer imports most of its yarn, dealing with foreign agents. The vast majority of sales are to major accounts.



**Figure 6-6: Mill #5**

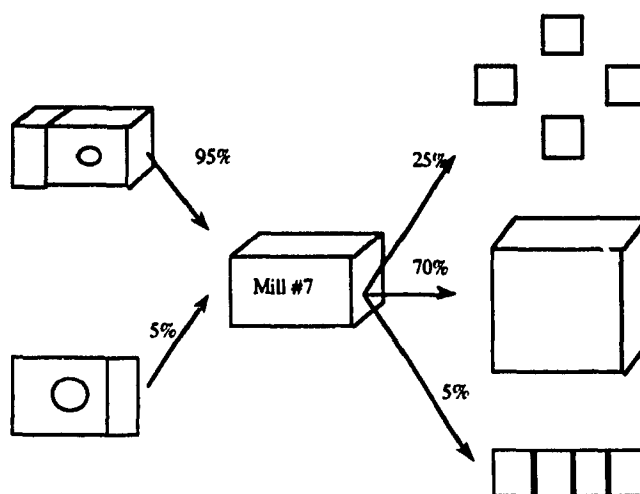
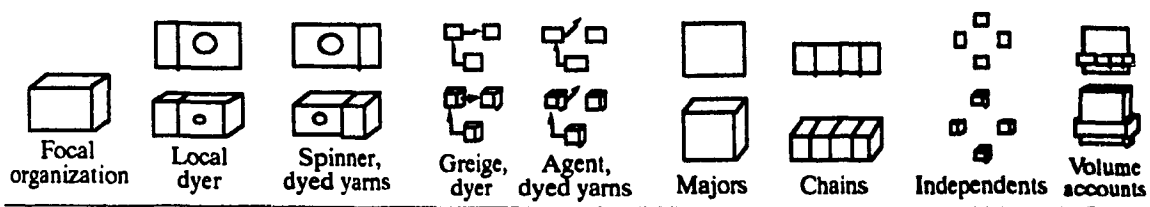
This ladies manufacturer obtains its yarn from four sources, each in roughly equal proportion. It buys dyed yarns from agents (22.5%), greige (22.5%), spinners (25%), and dyers (20%). Its output configuration is nearly as complex. Majors dominate, but chains and independents each contribute significantly to total sales.



**Figure 6-7: Mill #6**

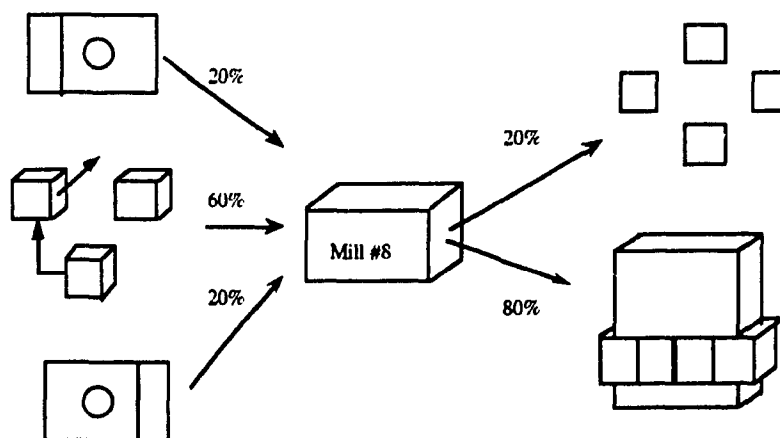
This ladies manufacturer buys largely from dyers, but greige purchases are a significant second source. Similarly, sales are largely to majors, but chains are also important.





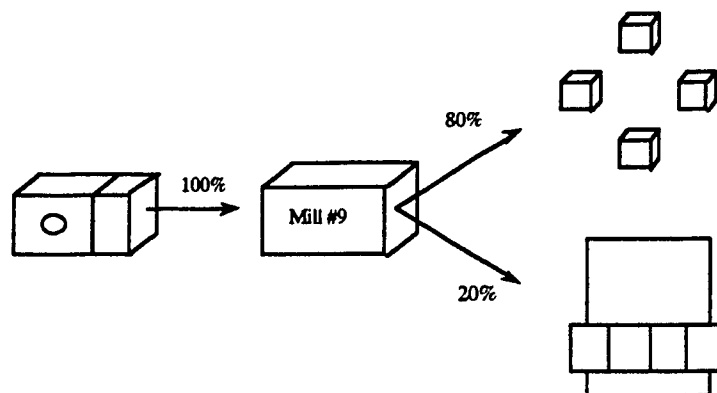
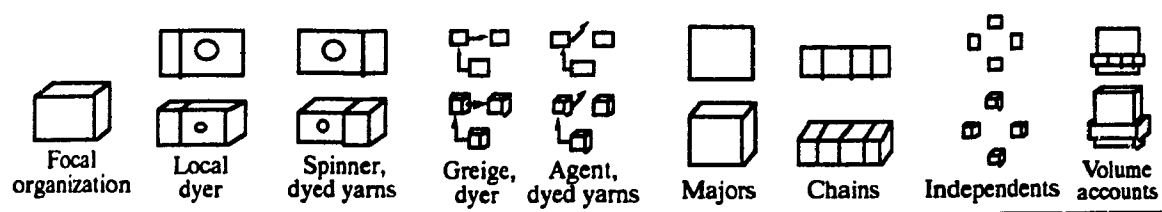
**Figure 6-8: Mill #7**

This ladies manufacturer buys nearly all of its yarns from dyers. Sales are largely to majors, although independents are also important.



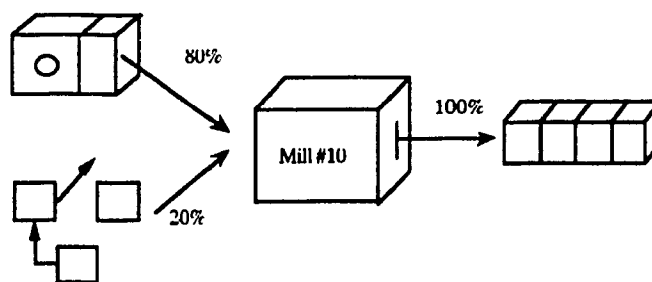
**Figure 6-9: Mill #8**

For this men's manufacturer, yarn is purchased primarily from agents, but both spinners and dyers are also used. Sales are largely to "volume" accounts.



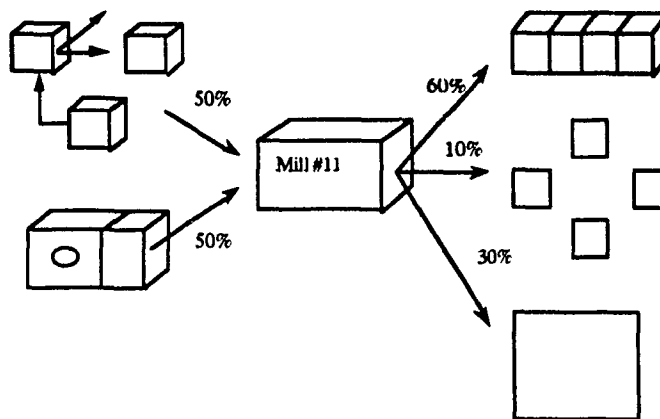
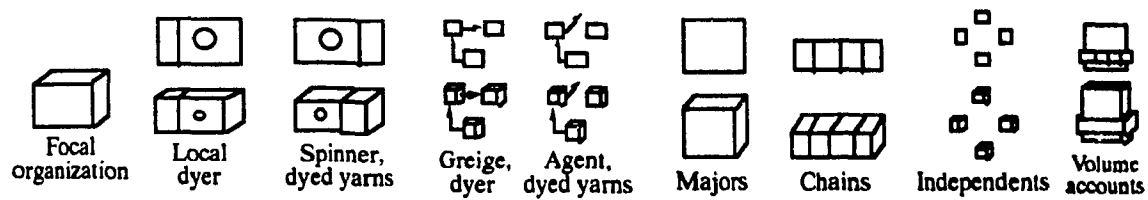
**Figure 6-10: Mill #9**

This men's and ladies manufacturer buys all its yarn from spinners, and sells the majority of its product to independent accounts.



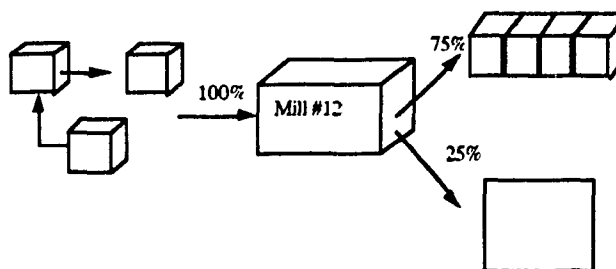
**Figure 6-11: Mill #10**

This ladies and men's manufacturer buys most of its yarn from spinners, and sells exclusively to chains.



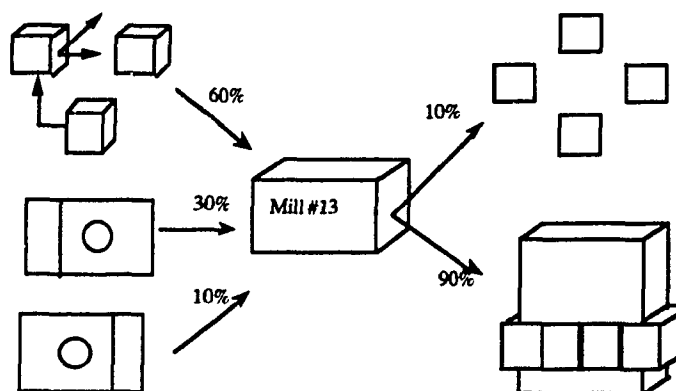
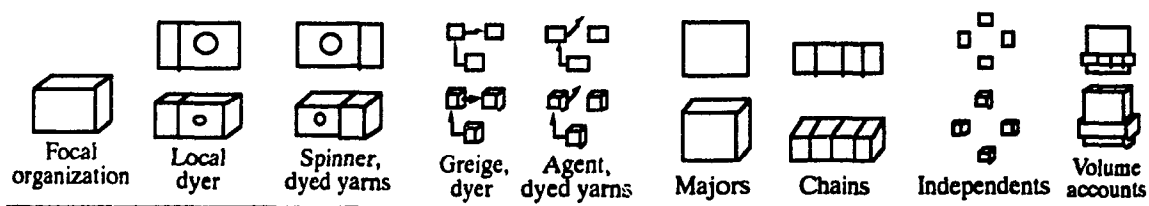
**Figure 6-12: Mill #11**

While this ladies manufacturer buys yarn largely from spinners, it also purchases greige (25%) and dyed imported yarn (25%) in significant proportions. Most sales are to chains.



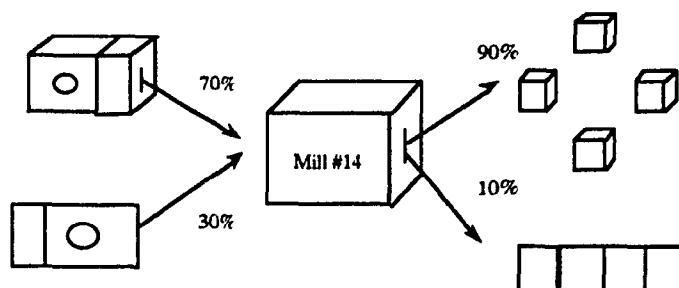
**Figure 6-13: Mill #12**

This ladies manufacturer buys only greige yarn, and sells largely to chains.



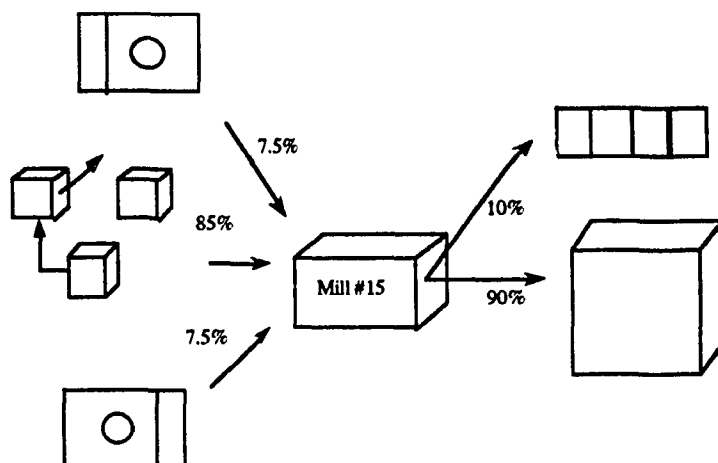
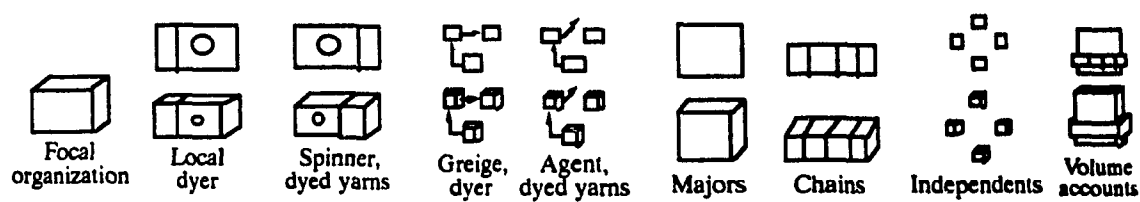
**Figure 6-14: Mill #13**

This mens and ladies manufacturer balances yarn purchases from agents, dyers, and greige (30% each). Sales are almost exclusively to volume accounts.



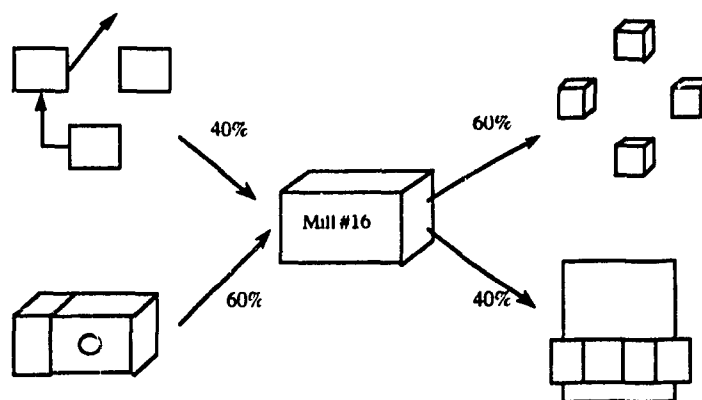
**Figure 6-15: Mill #14**

This ladies manufacturer buys largely from spinners, and sells largely to independents.



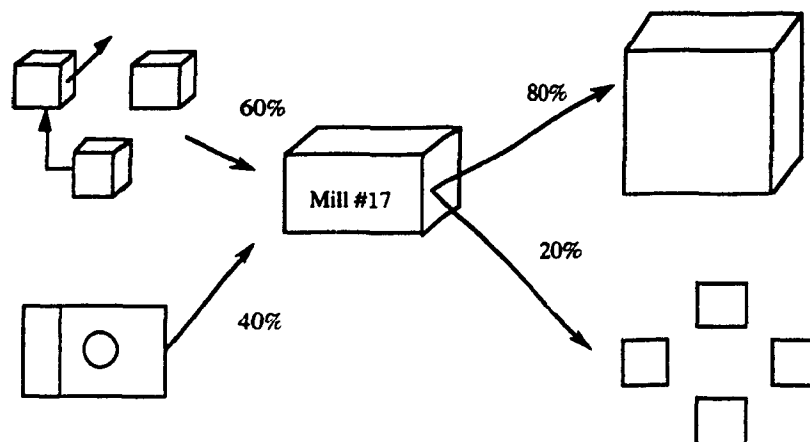
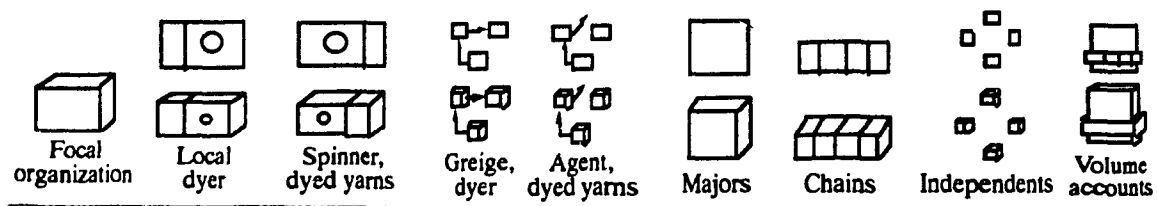
**Figure 6-16: Mill #15**

This ladies manufacturer buys nearly all its yarn dyed from agents, and sells almost exclusively to majors.



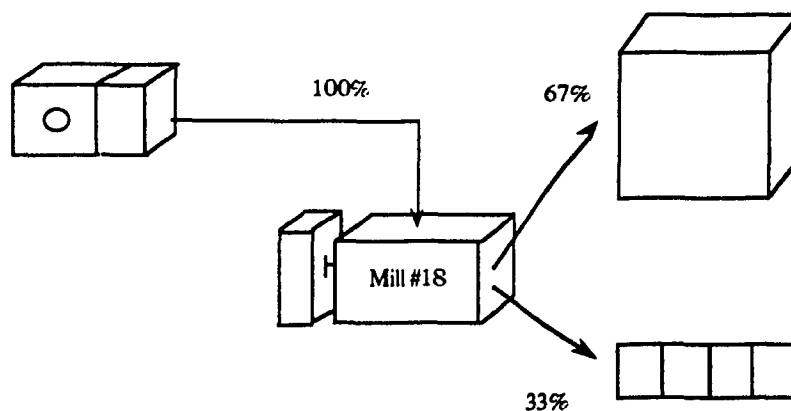
**Figure 6-17: Mill #16**

This men's manufacturer buys most of its yarn from dyers, although it nearly balances this with dyed yarn from agents. Sales are also roughly balanced (independents = 60%).



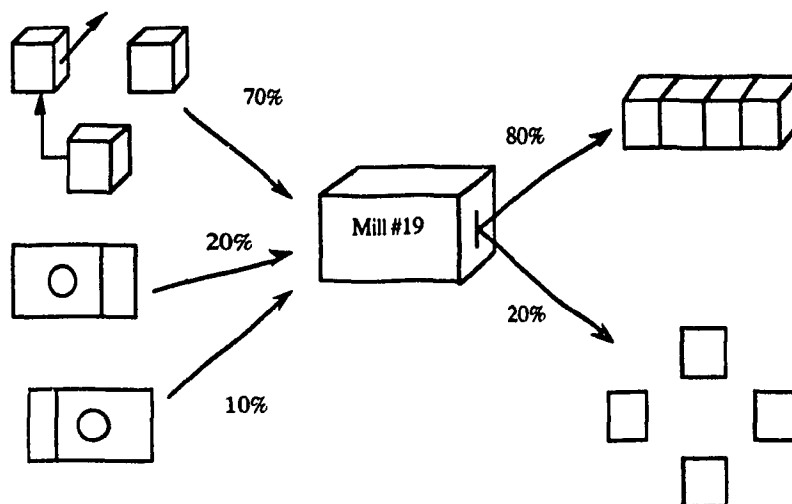
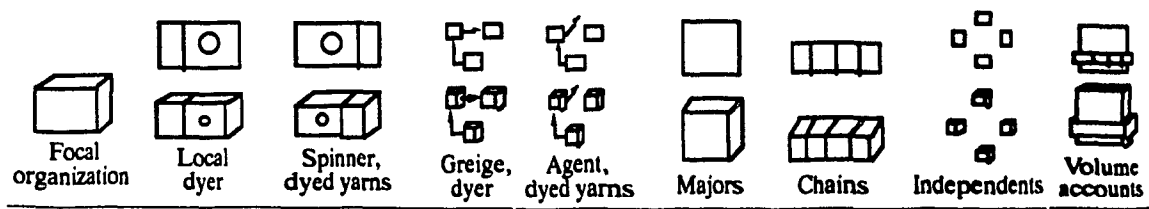
**Figure 6-18: Mill #17**

This ladies manufacturer nearly balances dyed yarn imports (60%) and local dyer purchases. Sales are largely to major accounts.



**Figure 6-19: Mill #18**

When this mens and ladies manufacturer buys its yarns, it does so exclusively from spinners (it also owns its own yarn source). Sales are largely to majors.



**Figure 6-20: Mill #19**

This mens and ladies manufacturer imports most of its yarns through an agent. Sales are largely to chains.

### 6.1.1 Input/output configuration analysis

Descriptive statistics for the sample's input and output configurational diagrams are provided in Table 6-1 below.

**TABLE 6-1**  
INPUT AND OUTPUT CONFIGURATIONS  
DESCRIPTIVE DATA

Configurational form	Min %	Max %	Mean	Std Dev
Dyed yarn from agent	0	100	27.421	28.183
Dyed yarn from local dyers	0	95	19.632	27.148
Greige yarn purchases	0	100	14.316	25.098
Dyed yarn from spinners	0	100	38.632	36.042
Sales to chain stores	0	100	27.526	33.160
Sales to independents	0	95	27.632	31.770
Sales to majors	0	90	29.842	35.054
Sales to "volume" accounts	0	90	16.053	30.938

The table shows that the "average" configuration diagram consists of four input and four output elements. Most yarn is obtained from spinners, with agents acting as the second most popular source. Dyers and greige purchases fill out the raw material acquisition options.

Sales are relatively well balanced between chains, independents and majors. A small group of firms, however, lump chains and majors into a single category, the volume accounts.



As a first step in looking for patterns underlying the wide diversity of structural configurations pursued by the mills, the analysis examined whether the composition of the configurational choices reflects the contexts under which the organizations operate. Three control variables were examined<sup>61</sup>:

The market served: Firms were coded on the basis of the sweater markets in which they participated. Three categories were employed: Ladies only, Mens and Ladies, and Mens only;

The average retail price of the firm's sweaters: As discussed in chapter 4, this variable was measured on a scale of five values. To obtain interpretable data for this analysis, the two highest price ranges were recoded into a single category. This produced four categories of average price: Low (\$20-30 retail); Low-moderate (\$30-40 retail); Moderate (\$40-50 retail); and High (\$50+ retail);

The market scope of the product line: The retail price range of the mills' sweaters was used as the measure for this variable. As outlined in chapter 4, four categories were measured: a) Narrow (\$10 retail price spread); b) Low-

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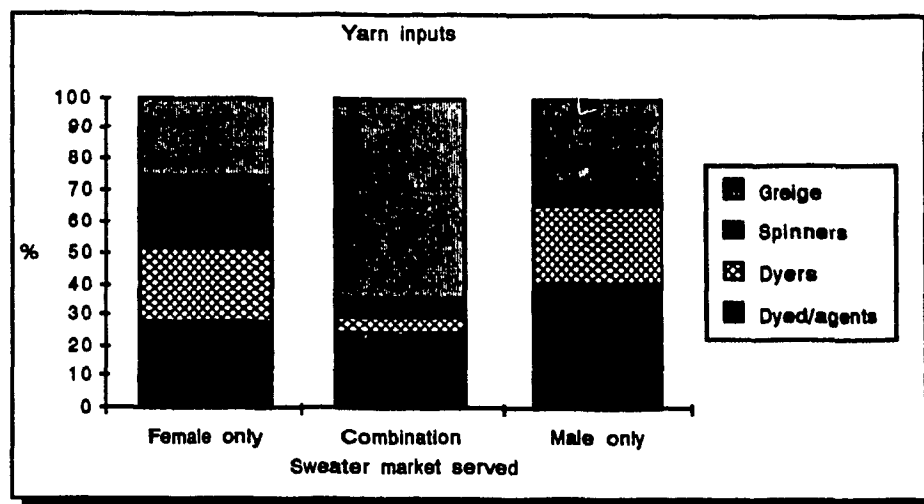
<sup>61</sup>Preliminary data analysis identified these variables as important. This was supported by the opinions of both industry participants and experts, who felt the market served and the prices charged were the most effective methods of distinguishing industry participants.

moderate (\$20-30 retail price spread); c) Moderate-wide (\$40-70 retail price spread); and d) Wide (\$75+ retail price spread).

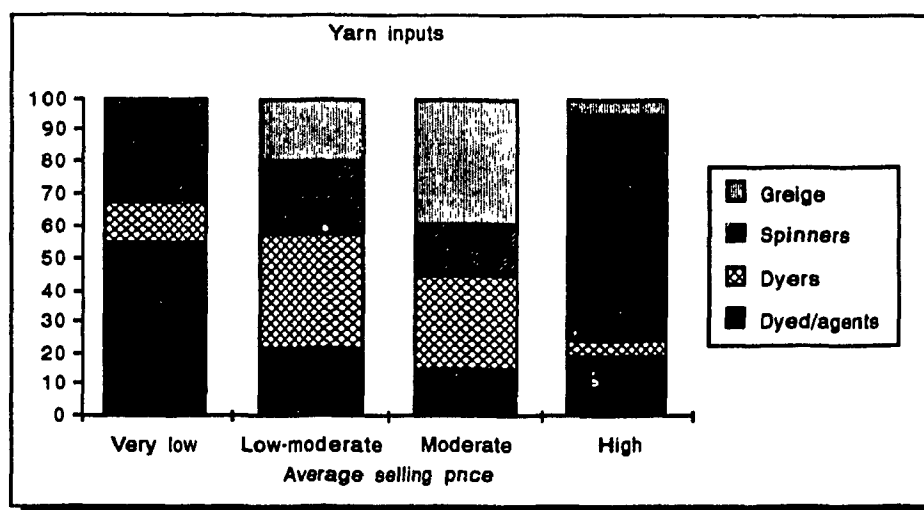
Descriptive statistics on the input and output configurations for each of the firms in the subgroups were developed. The results are reported in the figures below.

#### **6.1.1.1 Input transaction forms**

It can be seen in Figure 6-21 below that the adopted input forms are sensitive to the market being served. Firms serving only the ladies market ( $n = 10$ ) employed, in roughly equal proportions, four methods of obtaining yarn; firms serving the mens market ( $n = 3$ ) relied upon three types. Organizations which participated in both markets ( $n = 6$ ), however, focussed their yarn acquisition forms. They relied heavily upon greige purchases, a method which seemingly gives them the greatest amount of flexibility.

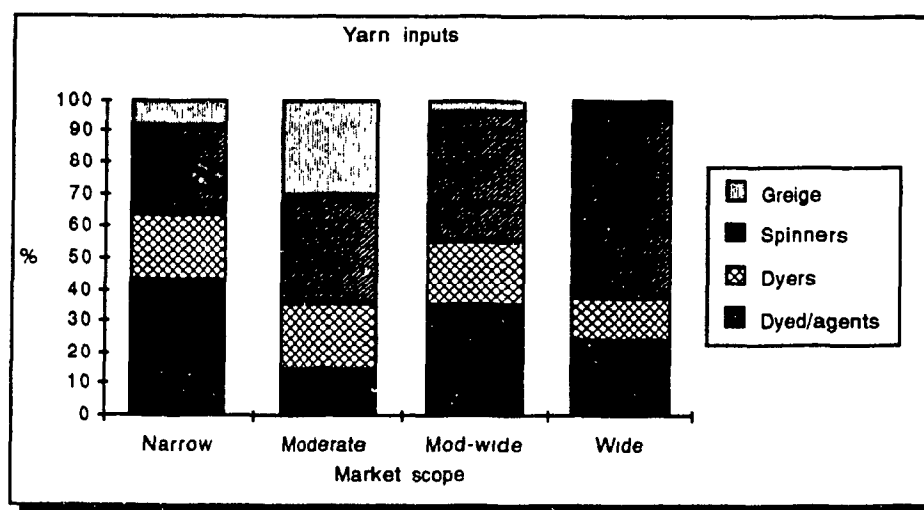


**Figure 6-21: Input forms and sweater markets**



**Figure 6-22: Input forms and average selling price**

The influence of the selling price upon the adopted input form (Figure 6-22 above) is most apparent at the extreme positions. The mills which sell inexpensive sweaters ( $n = 5$ ), and those which sell high priced sweaters ( $n = 6$ ), both obtain their yarns by dealing primarily with agents and spinners. Mills which sell at the intermediate price points ( $n = 4$ ;  $n = 4$ ) are less likely to focus upon only two input forms for their yarn purchases; they have relatively complex input configurations.



**Figure 6-23:** Input forms and market scope

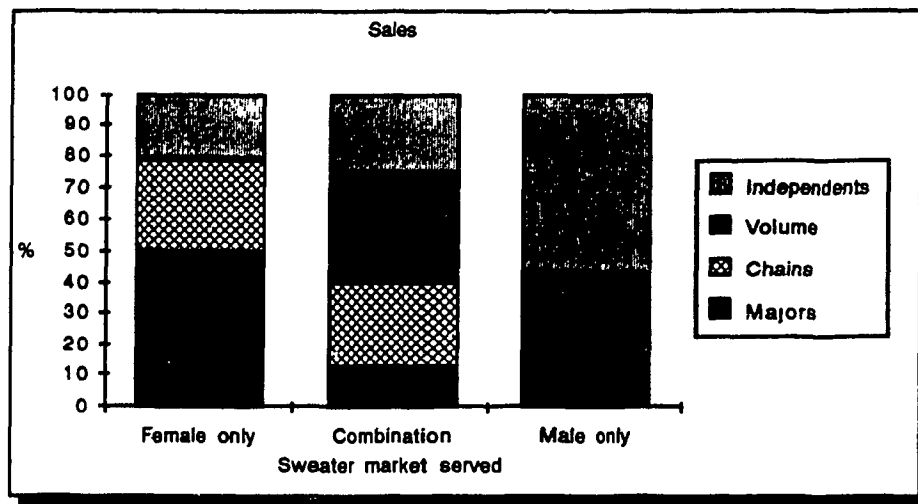
Market scope appears to have an impact upon resource acquisition preferences (Figure 6-23 above). At the narrow scope ( $n = 5$ ), where firms focus upon carefully defined market segments, the pattern is one of spreading the yarn purchases among a number of input forms. At the wide scope ( $n = 3$ ), however, firms exhibit a marked preference for dealing with one form, spinners.

#### **6.1.1.1.1. Review**

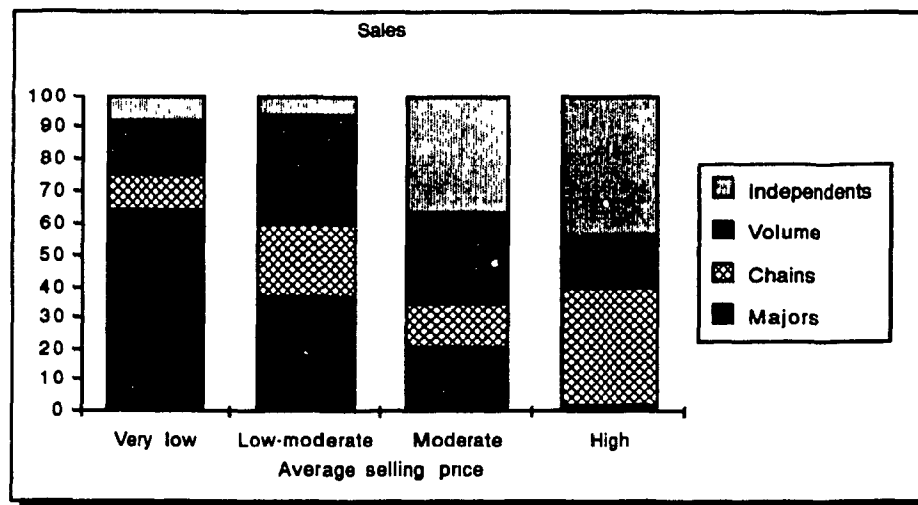
The basic finding from this analysis is that market focus tends to create more complex input configurations. The mills' descriptions suggest that restricting their client pool makes them feel relatively vulnerable. To balance this, a knitter will build insurance (in the form of multiple sources) into its input options. This supports Hypothesis 3, which predicted that flexibility would be introduced into strategic operations by the use of multiple transaction partners.

#### **6.1.1.2 Output transaction forms**

Figure 6-24 below shows that the market influences the mills' output configurations. Ladies manufacturers sell to three types of clients, relying most heavily upon sales to the majors. Mens suppliers, in contrast, tend to divide their markets into two categories, the independents and the "volume" accounts (majors and chains, lumped together). The mills which serve both markets appear to have the least amount of client focus.



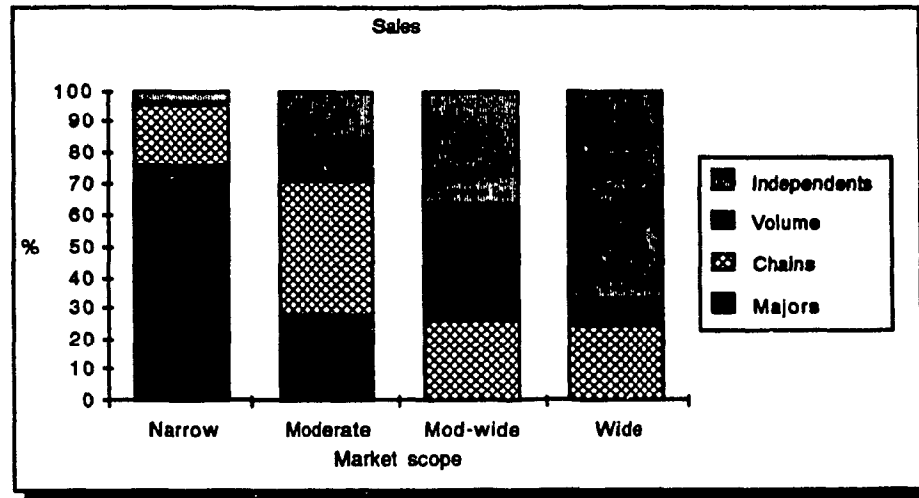
**Figure 6-24:** Output forms and sweater markets



**Figure 6-25:** Output forms and average selling price

The output configuration also exhibits sensitivity to the average selling price (Figure 6-25 above). At the low price point, the majors are the predominant client form, while at the highest price point, independents and chain stores represent virtually all of the market. In the

intermediate ranges, the client configurations are relatively complex in composition, with all four client categories served.



**Figure 6-26:** Output form and market scope

This pattern is echoed when market scope is considered (Figure 6-26 above). At the narrow and wide scopes, the client configurations are dominated by a single form (majors at the narrow range, independents at the widest scope). The moderate scope firms exhibit the most complex output configurations.

#### **6.1.1.2.1 Review**

The subsection found that market focus is associated with distinct client configurations, and thus differentiates firms from each other. Selling price appears to have a similar impact. Market scope, on the other hand, appears to influence the output configurations in much the same way as it influenced the input forms: Medium scope is associated with a relatively complex output configuration. The mills' descriptions suggests that more client types decreases dependence, and increases flexibility (again, confirming Hypothesis 3 above).

#### **6.1.1.2 Summary**

In this subsection it was shown that input complexity rose:

- a) When firms focussed upon a single market
- b) Sold at a moderate price point and
- c) Firms were narrow in their market scope.

The pattern was different, however, for the output configurations:

- a) Market focus created client differentiation, and
- b) Complexity was highest at middle ranges of price and scope.

To explain the pattern of input and output choices, it's necessary to look inside each configuration. It is to this that the analysis now turns.



## **6.2 The relationships: Introduction**

In this section, each mill's relationship configuration is developed and analyzed. This is accomplished in three stages:

- a) In the first stage, a classification scheme for the relationships is developed. This is done by reviewing a subset of the qualitative data along three inductively developed criteria;
- b) In the second step, the classification scheme is operationalized, using the data available to the researcher. Relationships are then classified, using objectively measured dimensions;
- c) In the third stage, the relationship configurations are subjected to a contextual analysis similar to that performed on the input/output configurations.

### **6.2.1 Developing the classification scheme**

In this subsection, a theoretical scheme for classifying relationships is developed. The discussion will bring to light three dimensions on which relationships varied:

- 1) Views of transaction partners;
- 2) Levels of commitment to the relationship; and
- 3) Aggressiveness to relationship partners.

### 6.2.1.1 Views of transaction partners

Some mills expressed adversarial views of their transaction partners. Others, in contrast, saw their transaction partners in nearly neutral terms, while a third group saw them as quasi-partners:

One mill (#16) described an incident involving his firm and the buying practices of one of the country's leading major accounts<sup>62</sup>. The mill president said that three years before, this account made a big move into soft goods, and purchased large quantities of domestic and imported sweaters. Unfortunately, the buyers were inexperienced, and the styles which they selected sat unsold on the store shelves. Shortly after last year's buying season, a new merchandise manager intervened, and cancelled orders placed with this mill for over 250,000 new garments. For the mill, the direct costs for this were of course quite high. They included the raw material which had been purchased, and the other orders which had been refused in lieu of producing goods for this major's orders. The account did not offer compensation for these costs. Instead, it insisted on receiving volume incentive discounts on the uncanceled

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<sup>62</sup>While no other subject shared such explicit details, many others in the sample complained about this account's buying and cancellation practices. It was widely discussed within the industry that this account had purchased virtually nothing domestically in the 1988 buying season; speculation about this was apparently a common topic of gossip.

merchandise. The mill refused. The customer started playing with the cancellation date on the remaining goods, changing it three times. The mill none-the-less met required delivery schedules, and still refused to give the volume rebates. The account no longer deals with the mill. The knitter says that behaviours like this make his customers his major competitors.

Two other mills (#6; #8) serve the same account as part of their client configuration. They approach relationships with all majors by taking a view of their customers as professionals who act in their own best interests. These mills choose to concentrate on their own merchandise. If it sells well, and if repeat orders are delivered on time, they believe that the client (as a professional operation) will come to rely upon the reliable performance they deliver. Volatility caused by buyer behaviours hurts both parties, and is likely to last only until the account realizes the cause of the problem and replaces the individual in question. In the situation described above, their approach would be to give the discounts, and then pull back from problem buyer, refusing to take any future orders from that person.

When describing his client configuration, one mill (#9) said "It all begins with our customers". This mill services independent boutiques. He and his partners each have

extensive experience in retail sales. They recently changed their client configuration, deliberately targeting this group. The executive took pride in the firm's sensitivity to their customers' positions and needs. He said they approach these customers with the intention of providing the type of service usually given only to the majors .

These views about serving independents aren't universally shared. One mill (#3) describes a different set of motivations for serving independents. He says that he focuses upon this client group because they are the most profitable. Catering to their demands, though, is described by this president as extremely difficult: "You can't please everybody." Another mill (#14) describes his similar client configuration as "Animals, but ones which are treated with kid gloves".

Differences in views of yarn sources are equally sharp. One mill (#7) describes yarn as a commodity, and thus sees yarn suppliers as not meriting anywhere near the attention he gives to his customers. In contrast, two other mills (#8; #10) describe yarn sources as critical<sup>63</sup>.

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<sup>63</sup>Each draws a similar analogy: One says "A baker needs flour, a sweater maker needs yarns", while the other says: "Producing a sweater is like making soup. The ingredients have to be right, and consistent from batch to batch".

### **6.2.1.2 Levels of commitment**

The mills exhibited sharp differences in their willingness to engage in long term contacts with each other:

One mill (#2) says he deals only with "friends". The president of this firm argues that this translates into business relationships in which trust is an important element. He believes this yields yarn suppliers will go out of their way to provide him with good service. The personal interaction between the two also lets him bounce ideas off his supplier, facilitating new product developments.

In contrast, two other mills (#6; #19) described a more cautious approach to supplier relationships. They say that personal relationships have no place in these dealings, because they don't want to become dependent upon any single yarn source. As a result, they only buy "stock" yarns in safe colours, and would not consider development of special yarns. One goes to far as to say that he likes to protect himself by having multiple suppliers for each yarn type he purchases. In fact, to pursue this approach, he deliberately feeds work to local dyehouses.

Comparable differences were exhibited regarding commitment to relationships with clients. One mill (#12)

describes his approach as "brutally honest". He lets his customers take part in the design of the product which will go on their shelves. He'll tell a client when he believes the styles and colours selected are inferior. In the face of these comments, he sees a few customers walk out ("It's difficult to be a gentlemen; honesty isn't always appreciated"). He maintains that those who stay with him do so because of his commitment to their success.

In contrast, another mill's president (#1) deliberately maintains a distance between himself and his customers. His firm deals with their clients almost exclusively through commission salesmen, and has never tried to get close to customers personally. The president acknowledges that this style has contributed to recent problems. One client, for example, changed their entire product mix within their stores, but the mill didn't know about until one year after the fact. Another problem was on-going during the interview process. The president said that his firm was still waiting for an extremely large account to make a "placing" with them—he had no idea where they were, or why they might be delayed. Despite these problems, the president says that the firm will continue to pursue the same approach with their clients: "It's a matter of personal style".

### 6.2.1.3 Aggressiveness to transaction partners

Firms varied widely in their willingness to test the limits of their transaction partner's tolerance. Some were extremely passive, feeling the partner to be the power holder in the relationships. Others, however, were quite willing to play on the margins of their partners' patience:

One mill (#4) describes his position in the currently soft market as captive of circumstances: "We carry the consequences of the clients' problems". He says that there's no room to change customers ("We need the volume"), and no opportunities for diversification ("Too much competition"). While waiting for a market rebound, the firm's response was to cut back on as many costs as possible.

The approach of another mill (#15) is an extreme contrast. At the lower price points, sweaters are often sold by weight, i.e. by the amount of yarn in the garment. A major customer (who also buys from mill #4 above) received merchandise from mill #15, weighed the garments, and found that each averaged roughly 15 ounces. While the mill protested his innocence vehemently, the buyer insisted that this mill was always trying to sneak a little extra margin on the product. Despite the mill's behaviours (anathema to mill #4 above), she still gave him a sizeable order.

Two mills (#3; #10) described problems which they experienced with "shaded" (unevenly dyed) yarn. In the case of the former, the problem was missed in his firm's internal inspections, and the yarn was knitted into finished garments. He couldn't sell these relatively high priced sweaters, and thus had to "eat the goods". The mill debited half the amount of the yarn cost from the supplier's invoice, claiming this was "fair"<sup>64</sup>.

Mill #10, on the other hand, responded differently to a comparable situation. The problem with the yarn was caught in the mill's pre-inspection. They notified the supplier of the potential problem, made a partial payment, and proceeded to knit the goods. When the yarn proved to be workable, despite the problem, the mill submitted payment on all outstanding balances. The president said that even if the yarn had been unworkable, he would have paid anyway ("The supplier would have owed me one").

The 19 subjects provided a total of 38 descriptions of their approaches to their input and output relationships. From these, three distinct relationship management styles are identified (see Table 6-2 below):

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<sup>64</sup>Yarn suppliers hate this aggressive practice by the mills. One of the local dyers said that such behaviours represented an attempt to make money off suppliers. He noted that the dyers had no response to such debiting, and thus felt that the mill which did this was taking unfair advantage.



**Mercantile style:** Mills which adopted this approach aimed for financially beneficial arrangements between themselves and the transaction partners. The firms had relatively short term strategic orientations, arguing that their industry allowed nothing else.

Unambiguous decision rules were applied to transactional behaviours. New partners, for example, were chosen largely on the basis of cost (suppliers offering the lowest costs; customers offering the greatest margins). The expectations which the mill held for each partner were clearly stated: Suppliers were expected to deliver the promised performance, and clients were to accept shipped merchandise with a minimum of returns or complaints.

The transactions were simple, in large part repetitions of those conducted in previous seasons. This low level of transactional ambiguity was associated with high levels of aggressiveness, with parties trying to bend the established rules to suit their immediate needs. The major moderating variable to this tendency was the perceived power holder, which the executive's saw as determined by the overall supply and demand conditions of the sweater market.

**TABLE 6-2**  
**MANAGEMENT APPROACHES**  
**TO RELATIONSHIPS**

		Mercantile style	Political style	Cooperative style
Views of relationship partner	<b>Operationalization</b>			
	New member selection criteria	Cost	Quality or delivery	Ability to work with other person
	Expectation of partner	Performance	Professionalism	Adherence to protocols
Level and type of commitment	Displayed behaviours	Conformity to standards	Honesty	Trust, loyalty Sacrifice
	Time orientation	Short term single season	Moderate Joint actions	Unbounded
Aggressiveness	Power holder	Varies; most often the buyer	Equal	Not applicable
	Ambiguity of transactions	Low	Moderate	Potentially high

**Political style:** Firms which adopted this orientation tried to form informal alliances between themselves and their transaction partners. The mills sought to establish relationships with relatively long time frames, in both the "basic" transaction domains (buying yarns; selling finished goods) and the more interrelated areas of joint product development and joint product promotions. The level of transactional ambiguity is higher than that of the mercantile approach, and was associated with a more constrained level of aggressiveness.

The decision to transact with a new organization was relatively complex. The potential partner's reputation for quality and delivery had to be assessed, and was often tested incrementally before major transactional commitments were made. It was expected that each transaction partner would display professionalism in all dealings, but the mill often imposed upon itself the additional requirement of trying to be honest. Such discipline wasn't altruistic: most felt that honesty bore fruit in the form of establishing and maintaining a good reputation for the mill. The interdependent nature of the transactions meant that the power balance was perceived as relatively equal.

**Cooperative style:** The mills which adopted this approach tried to form relationships with high levels both of formal and informal contacts. In addition to the transfer of basic goods and services, information (in the form of ideas and gossip) was made part of the basic transactional flows.

New transaction partners were selected both for the performance their organization offered, and on the mill president's belief in his ability to work with the other individual. This interpersonal "sympatico" was expected to produce relationships characterized by trust and commitment on both partners' parts.

Governing inter-firm behaviours were the "rules" of basic professionalism (meet payment and shipping obligations; maintain integrity of designs; etc). Important extensions ("protocols"), however, were added. One of these was that no firm would knowingly ship a problem to its partner. If merchandise was not up to standard, that firm would fully expect to sacrifice its short term concerns, and "eat" the goods. Another extension was that each partner tried to make the relationship reliably profitable for the other. This meant that small price differences between what was charged by one's transaction partner and that offered by possible transaction partner replacements would be absorbed by the purchaser.

These sacrifices create a relationship capable of handling extremely high levels of ambiguity, and which can persist for many years. Within this type of relationship, power is an inappropriate term, and aggressiveness is rarely exhibited.

## **6.2.2 Classifying the relationships**

In this second subsection of the relationship analysis, the theoretical classification scheme developed in section 6.2.1 above is operationalized, and each mill's input and output relationships are objectively classified. Limited data availability forced the researcher to classify the relationships with a restricted set of variables.

### **6.2.2.1 Relationships with resource suppliers**

The following criteria were used to identify input relationship management styles:

- a) The mercantile style should be associated with young relationships, with the mill (as the buyer) perceiving itself to be the power holder;
- b) The political style should correlate with "older" relationships, with a history of past yarn developments;
- c) The cooperative style should be associated with relatively old relationships, and the mill seeing the power balance as equal or not applicable.

The following variables were therefore used in the classification of the input relationships:

- 1) The approximate age of the relationships with key yarn suppliers;
- 2) A history of joint yarn developments; and
- 3) The mill's perceptions of the power holder in its relationships with yarn suppliers

Descriptive statistics for the classification criteria are displayed in Table 6-3 below:

**TABLE 6-3**  
INPUT RELATIONSHIPS: DESCRIPTIVE STATISTICS

Variable	Frequency (# of mills)	Percentage of sample
Participated in sales promotions	8	42.1
History of joint yarn development	3	15.8
<b>Power holder:</b>		
Mill holds power	10	52.6
Power is equal	8	42.1
Supplier holds power	1	5.3

These figures offer indirect support for Hypothesis 2. As outlined in chapter 3, influencing behaviours were theorized to involve both "partnering" and dominating. Over 50% of the sample see themselves in a position to dominate their suppliers; interviews with local dyers confirmed some mills' willingness to exercise that power. Subject to the perceptions of being to do so, and the personal willingness of a company

president to engage in such behaviours, indications of influencing behaviours (in the form of domination) were evidenced by the sample.

#### **6.2.2.2 Relationships with clients**

The output relationships were classified according to the dominant type of sales contract between the mill and its client group. The following criteria were used in the classification:

- a) Mercantile relationships should be associated with a high degree of private label sales<sup>65</sup>;
- b) Cooperative relationships should be associated with a significant level of programmed sales<sup>66</sup>; and
- c) Political relationships should be associated with a high degree of private brand sales, and with the mill perceptions of power as either equal or centered in the customer's hands<sup>67</sup>.

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<sup>65</sup>This type of contract provides the mill with needed volumes, and with a relatively low level of sales effort (the client often brings the business to the mill).

<sup>66</sup>Programmes are usually based upon client participation in the design process. They also, in general, represent exchanges which will persist over many seasons, and thus show a relatively deep commitment by both parties.

<sup>67</sup>Private brand sales, as a method of differentiation, tend to confer power upon the manufacturer. An expressed view counter to this therefore suggests an effort toward a more balanced relationship.

The following variables were therefore used in the classification of each firms' output relationships:

- 1) The percentage of non programmed sales with manufacturer's label;
- 2) The percentage of non programmed sales with retailer's label;
- 3) The percentage of sales under sales programmes;
- 4) The mill's perceptions of the power holder in its relationships with clients; and
- 5) History of participation in sales promotions with clients.

Descriptive statistics for the classification variables are identified in Table 6-4 below:

**TABLE 6-4**  
OUTPUT RELATIONSHIPS: DESCRIPTIVE STATISTICS

	Mill's own brand	Private label sales	Programmed Sales
Minimum	5%	0	0
Maximum	100%	95	90
Mean	51.316	36.316	12.368
Standard Dev	31.835	29.667	25.020



**TABLE 6-5**  
**PERCEIVED POWER DISTRIBUTION**

	Frequency	% of Sample
Mill holds power	3	15.8
Power is equal	6	31.6
Client holds power	10	52.6

Table 6-5 offers tentative support for Hypothesis 2. Unlike the input relationships, the power distribution within the output relationships appears to be balanced in the other direction. This suggests that even the most aggressive firms (viz. their suppliers) recognize the need to change their influencing behaviours under different circumstances.

Tables 6-6 through 6-11 identify the input and output relationship classifications:

**TABLE 6-6**  
**MERCANTILE INPUT RELATIONSHIPS**

<b>Mercantile Relationships</b>		
Center of Power	Relationship Age	Mill Number
Mill	1	5
Mill	3	7
Mill	2	13
Mill	2	16
Mill	3	17
Mill	1	19

**TABLE 6-7**  
POLITICAL INPUT RELATIONSHIPS

<b>Political relationships</b>		
Center of Power	Relationship Age	Mill Number
Supplier	4	1
Mill	7	3
Mill	5	6
Mill	5	11
Mill	10	12
Equal	8	4
Equal	6	10
Equal	5	15
Equal	3	18

**TABLE 6-8**  
COOPERATIVE INPUT RELATIONSHIPS

<b>Cooperative relationships</b>		
Center of Power	Relationship Age	Mill Number
Equal	20	2
Equal	10	8
Equal	15	9
Equal	12	14

The figures in Table 6-8 also support Hypothesis 2, in that the partnership behaviours (cooperative relationships) are clearly associated with an equal power distribution.

**TABLE 6-9****MERCANTILE OUTPUT  
RELATIONSHIPS**

<b>Mercantile relationships</b>	
Private Label Sales %	Mill No.
75	7
60	3
50	13
80	16
95	18
65	19

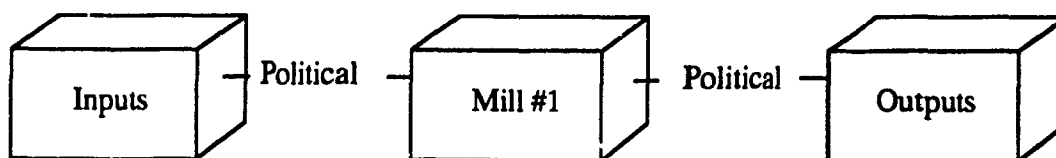
**TABLE 6-10****POLITICAL OUTPUT  
RELATIONSHIPS**

<b>Political relationships</b>	
Own brand %	Mill
80	1
50	2
100	3
65	4
60	5
95	9
80	14
80	15
80	17

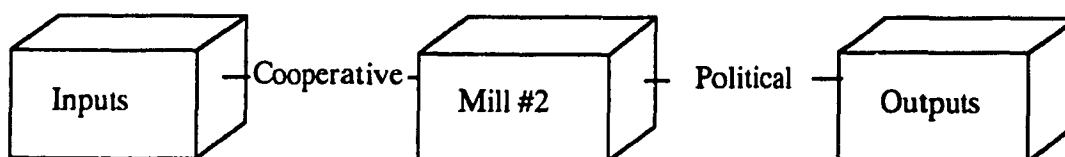
**TABLE 6-11****COOPERATIVE OUTPUT RELATIONSHIPS**

<b>Cooperative Relationships</b>	
Programmed Sales %	Mill
30	6
90	10
45	11
55	12

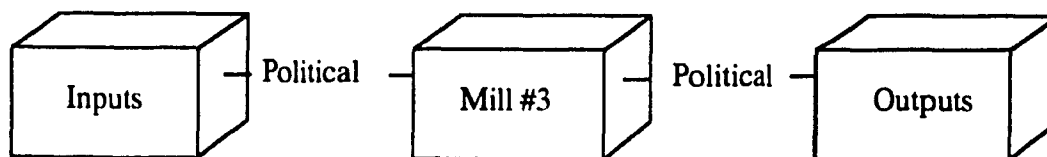
Each mill's input and output relationships are summarized in the following diagrams:



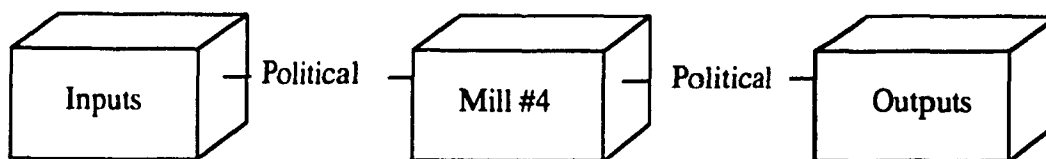
**Figure 6-27: Mill #1**



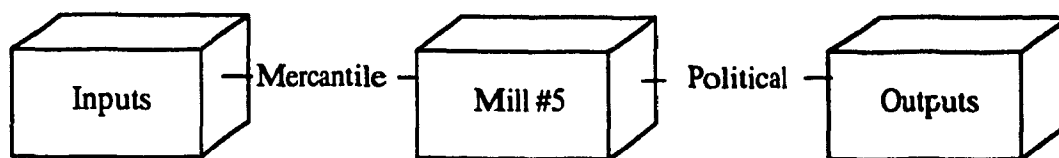
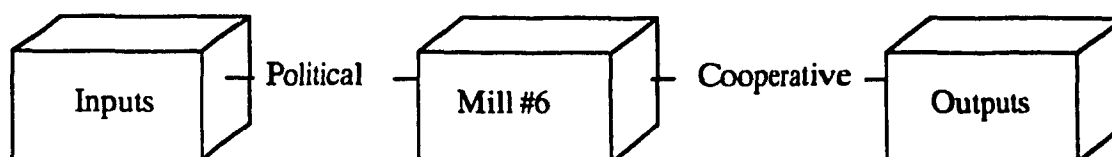
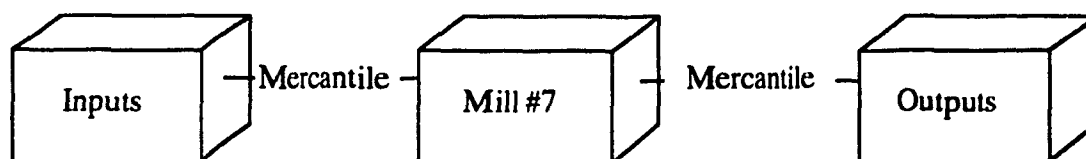
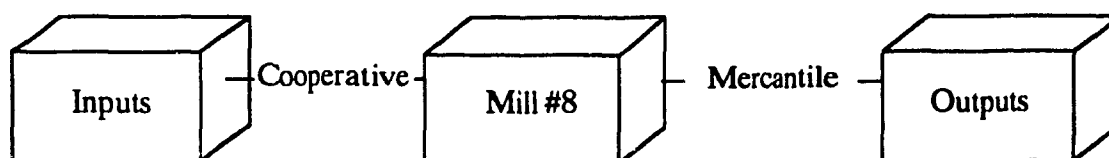
**Figure 6-28: Mill #2**

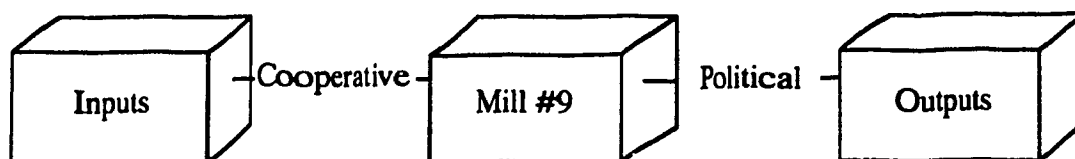


**Figure 6-29: Mill #3**

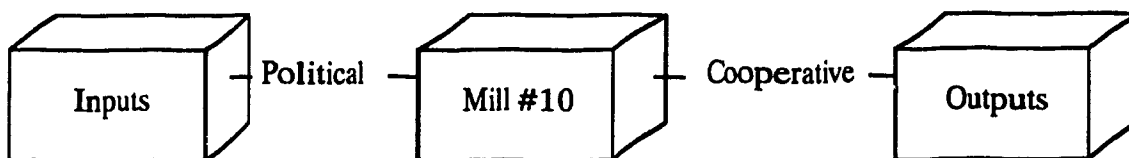


**Figure 6-30: Mill #4**

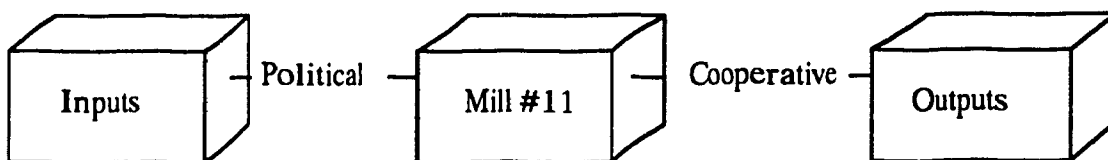
**Figure 6-31: Mill #5****Figure 6-32: Mill #6****Figure 6-33: Mill #7****Figure 6-34: Mill #8**



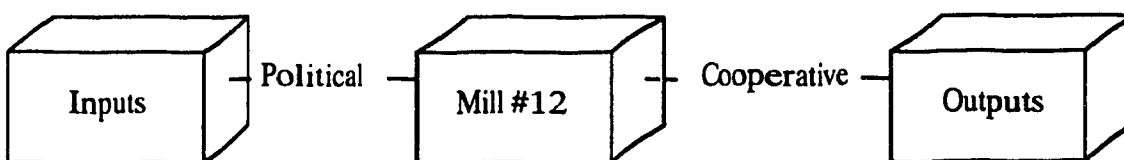
**Figure 6-35: Mill #9**



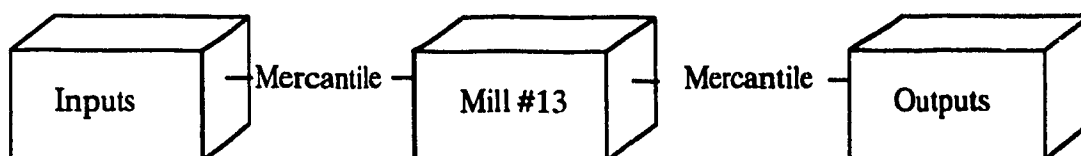
**Figure 6-36: Mill #10**



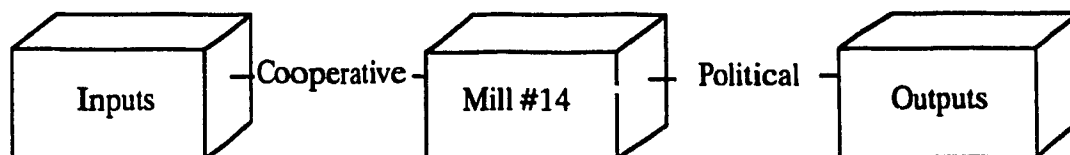
**Figure 6-37: Mill #11**



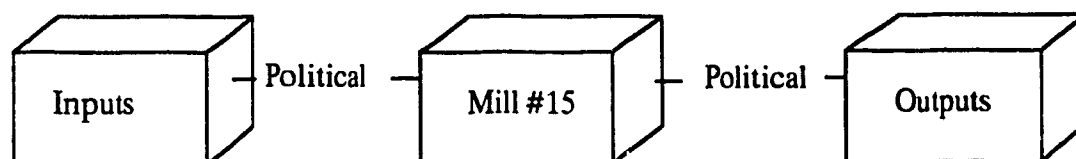
**Figure 6-38: Mill #12**



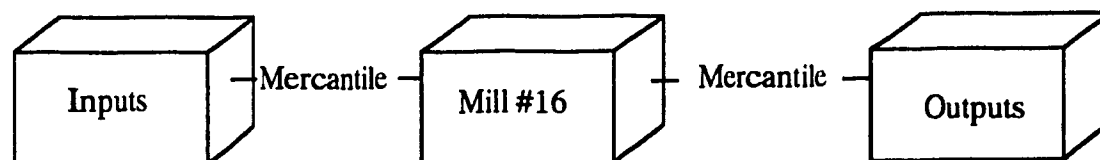
**Figure 6-39: Mill #13**



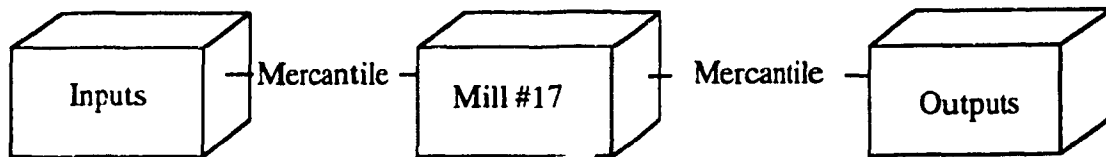
**Figure 6-40: Mill #14**



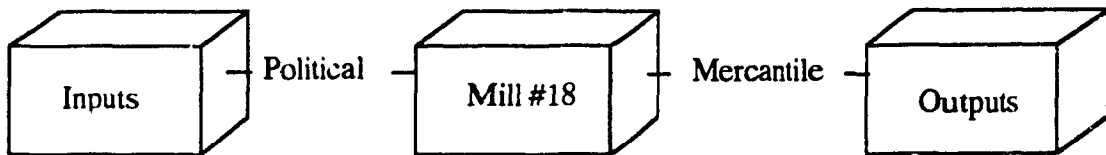
**Figure 6-41: Mill #15**



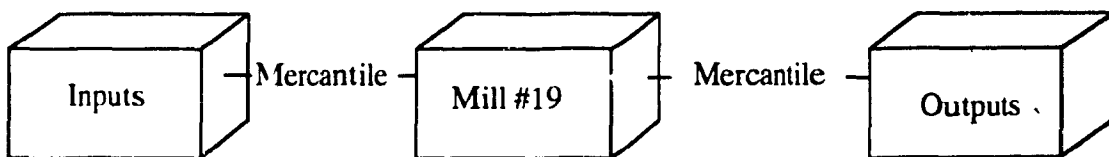
**Figure 6-42: Mill #16**



**Figure 6-43: Mill #17**



**Figure 6-44: Mill #18**



**Figure 6-45: Mill #19**

### 6.2.3 Relationship analysis

Examination of the relationship configurations reveals a wide distribution of "configurations"<sup>68</sup>. In this section, the analysis of these configurations is performed.

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<sup>68</sup>The firm specific set of input and output relationship types constitutes a configuration.



The descriptive statistics for the relationships are displayed in Tables 6-12 and 6-13 below.

**TABLE 6-12**  
RELATIONSHIP FREQUENCIES

Relationship	Total N	Pct	Input	Pct	Output	Pct
Political	17	44.7	9	23.7	8	21.1
Mercantile	13	34.2	6	15.8	7	18.4
Cooperative	8	21.1	4	10.5	4	10.5

The most common input relationship was political, with nine subjects having established these. The next most popular form of relationship was mercantile, with six subjects. The least common was the cooperative relationship, in which only four subjects were involved. On the output side, political relationships were again the most common form (eight knitters), with mercantile (seven firms) and cooperative (four) again the frequency ordering.

**TABLE 6-13**  
**INPUT—OUTPUT RELATIONSHIP COMBINATIONS**

		Output relationships		
		Mercantile	Political	Cooperative
Input relation- ships	Mercantile	5	1	0
	Political	1	4	4
	Cooperative	1	3	0

Table 6-13 shows that nine organizations had relationship configurations which were "symmetrical", i.e. the input relationships matched the output relationships. None of the sampled firms had established symmetrical cooperative relationships.

To probe for underlying patterns to these relationship distributions, two separate analyses were performed:

- a) The first performed a dummy variable regression analysis, to determine whether any structural options were more amenable to certain types of relationships;
- b) The second examined whether the relationship distributions reflect the contexts under which the organizations operate. The three control variables selected are those which were used to examine the input/output

configurations in section 6.1.1 above: 1) Market served; 2) Average selling price; and 3) Market scope.

### 6.2.3.1 Structural form and relationship type

As a first step in the relationship analysis, regression analysis was used to test whether structural choices (input and output transaction forms) were associated with certain relationship types. The results are reported in Tables 6-14 and 6-15 below<sup>69</sup>.

**TABLE 6-14**

REGRESSION ANALYSIS: INPUT ELEMENT—RELATIONSHIP TYPE

	Agents	Dyers	Greige	Spinners
Input relationships	1.124	4.560*	0.127	9.614*

† =  $p \leq .10$

\* =  $p \leq .05$

\*\* =  $p \leq .01$

\*\*\* =  $p \leq .000$

Table 6-14 above shows that closer input relationships are significantly more likely to develop when dealing with dyers and spinners. Table 6-15 shows that closer output relationships are significantly more likely to develop when dealing with chain stores.

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<sup>69</sup>All entries in the following tables represent computed F-scores.

**TABLE 6-15**REGRESSION ANALYSIS: OUTPUT ELEMENT—RELATIONSHIP TYPE<sup>70</sup>

	Majors	Chains	Volume	Indeps.
Output relationship	0.011	8.106*	2.870	0.350

† =  $p \leq .10$ \* =  $p \leq .05$ \*\* =  $p \leq .01$ \*\*\* =  $p \leq .000$ 

As will be shown in the following sections, these patterns were not as clearly visible in the contextual analysis.

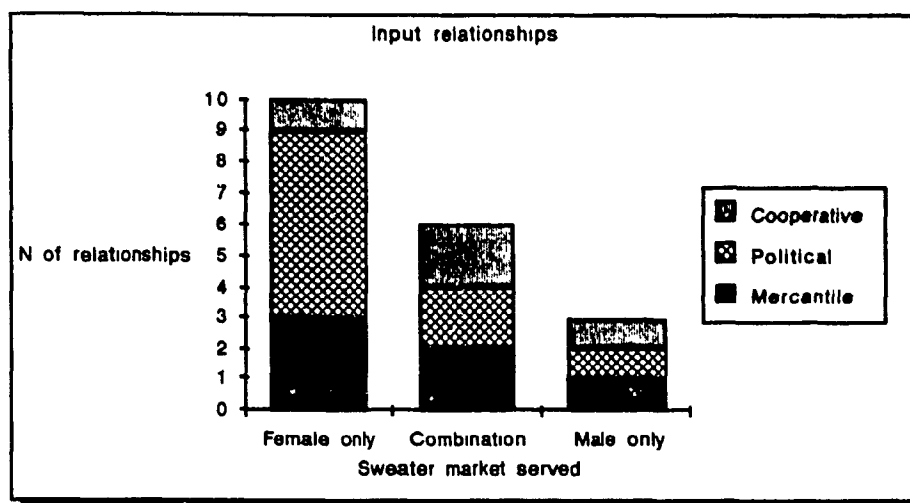
### 6.2.3.2 Input relationships

Figures 6-46, 6-47, and 6-48 show that the input relationship configurations exhibit relatively little sensitivity to the mills' strategic contexts.

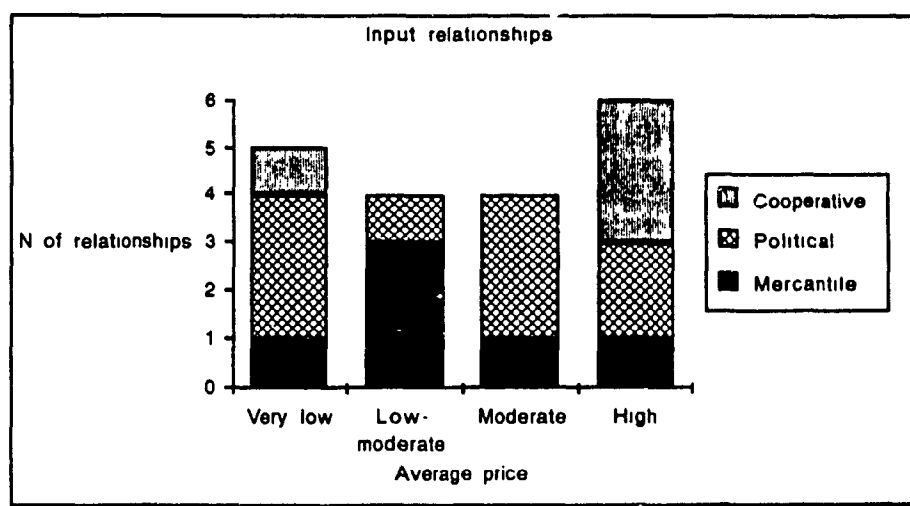
Figure 6-46 below shows that all three relationship types are in evidence within each market category. It appears, however, that closer linkages (political; cooperative) are most likely to develop for a firm serving the ladies market.

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<sup>70</sup>Descriptive statistics for the relationship types were developed in Table 6-4 above.

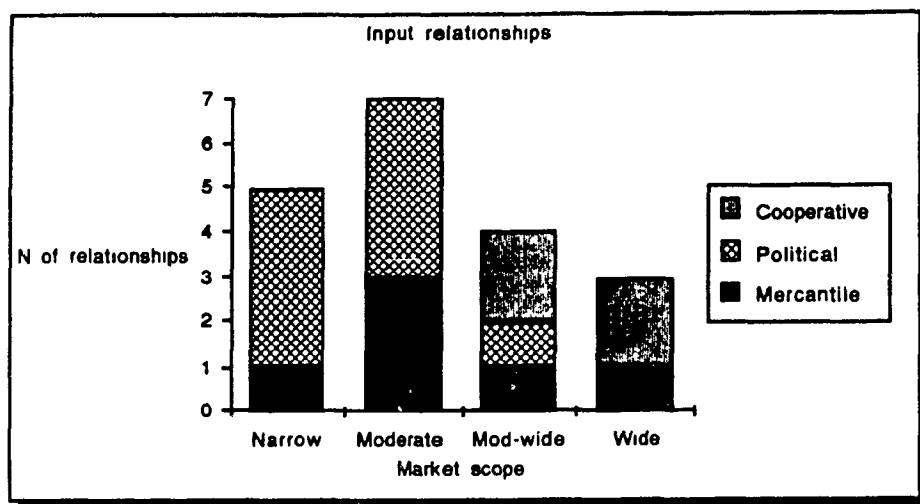


**Figure 6-46:** Input relationships and market served



**Figure 6-47:** Input relationships and average selling price

Figure 6-47 shows that cooperative input relationships seem most likely to develop when a firm is selling high priced sweaters, while political and mercantile linkages appear likely to develop at any price point.



**Figure 6-48:** Input relationships and market scope

Figure 6-48 shows that narrow scope appears to be associated with largely political linkages, while cooperative linkages are characteristic of wider scope mills. Regardless of scope, mercantile links are always possible.

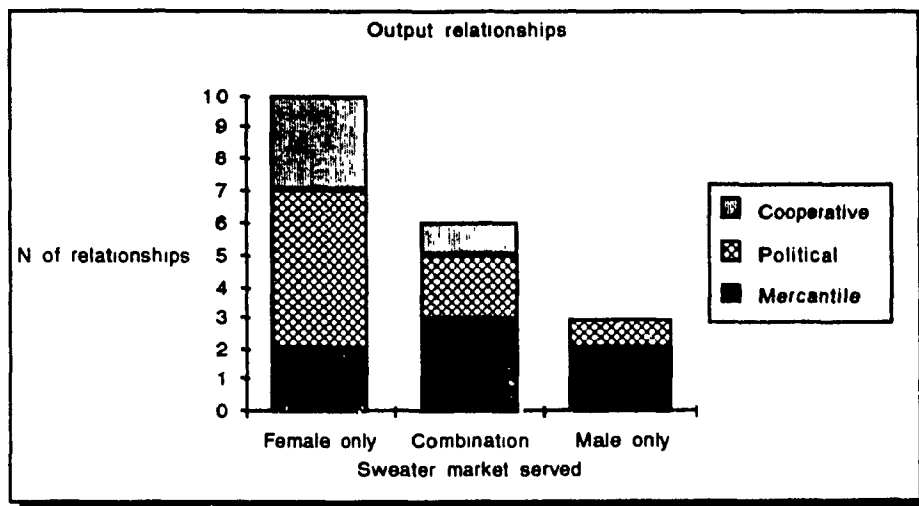
#### 6.2.3.2.1 Review

Input relationships seem to exhibit only a modest sensitivity to strategic context. Moreover, where variance does exist, its presence (from a purely structural perspective) is ambiguous<sup>71</sup>.

<sup>71</sup>It is unclear, for example, why a narrow scope strategy would not be **more** likely to yield cooperative linkages.

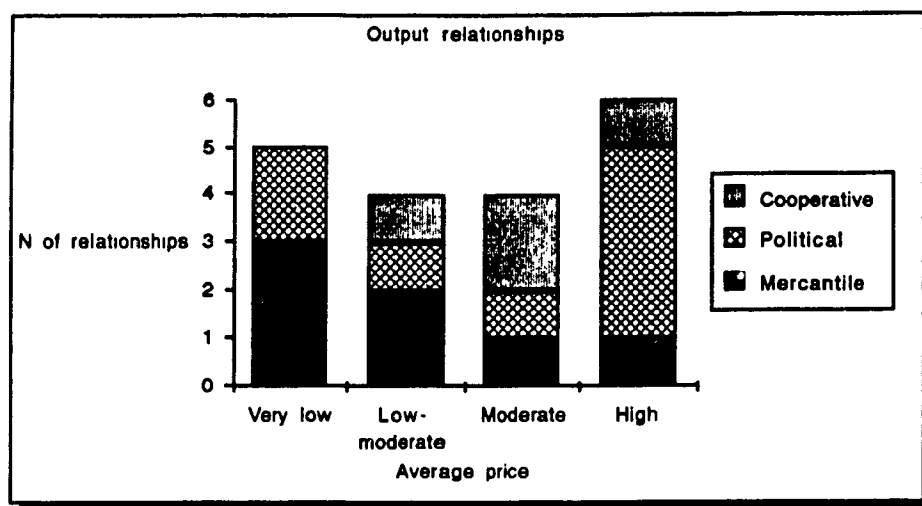
### 6.2.3.3 Output relationships

Output relationships appear to be more context sensitive than the input linkages. Figure 6-49 below shows that "close" relationships (political or cooperative) are more likely for ladies suppliers.



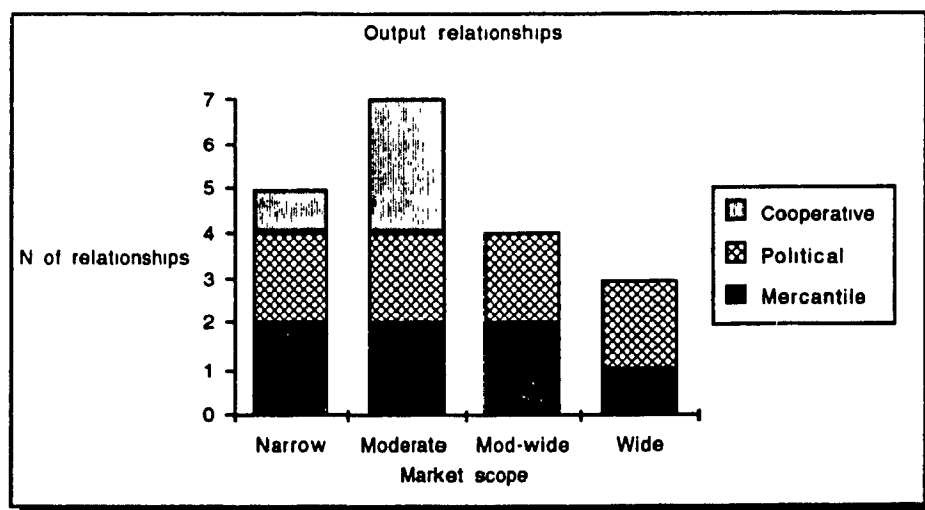
**Figure 6-49:** Output relationships and market served

Figure 6-50 below also shows context sensitivity. Firms appear to be able to develop closer output relationships when they sell at higher price points. Conversely, the lower price points appear to generate largely mercantile linkages.



**Figure 6-50:** Output relationships and average selling price

Figure 6-51 below shows that at the two narrowest price ranges, closer relationships are more likely to develop.



**Figure 6-51:** Output relationships and market scope



#### **6.2.3.3.1 Review**

In a manner consistent with the mills' strategic behaviours, output relationships appear to be relatively context sensitive. Ladies suppliers are more likely to develop close relationships with their customers. Higher price points and narrow scope both allow a mill to spend more time with a client, and thus are associated with closer relationships.

#### **6.2.3.4 Conclusions: Responding to uncertainty**

This section's analysis found that strategic context appears to influence the type of output relationships in which a mill can participate, while choice of partner appears to significantly influence the type of input relationship which can develop.

As shown in the examination of the configuration diagrams (section 6.1 above), however, the mills generally mix both input and output structural elements, i.e. they often employ two or three transaction forms in both their input and output activities. The conclusion which can be drawn, therefore, is that two criteria used by the mills in selecting their transaction partners:

- 1) Building flexibility and insurance into their operations;  
and
- (2) The establishment of good overall relationships.

Where possible, the mills will focus upon selected relationship partners; where necessary, they will add these "preferred" partners into their configurations.

In effect, it appears that input/output configurations and the relationships are, respectively, structural and process responses to the uncertainties which the firms face. Structural responses to the uncertainties<sup>72</sup> include the following:

Raw material acquisition: Some firms overcome the difficulties associated with obtaining raw materials by creating complex, multi-source input configurations. Others focus upon one or two sources, and restrict the types of yarns they purchase.

Continuity: Some firms address the problems of continuity and dependence by adding an extra client group, or changing their client configuration completely. Others define the market loosely (those which identify "volume" clients), and maintain maximum flexibility. A third approach appears to be to focus upon a carefully selected client group (while keeping a second "in reserve").

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<sup>72</sup>See section 4.1.4.5 above.

Design: This uncertainty is overcome in many ways. Three mills suggested that design issues are less crucial to certain types of accounts, thus implying that changing the client configuration is one type of structural response. Another very common structural approach is to deal with clients who provide the mill with the styles which they want the knitter to produce. A third structural response is to extend the configurations to include relationships with specialized "industry advisors", who guide the mill in making colour and other design decisions.

Process responses to uncertainties are linked to the type of relationships in which the firm is participating:

Firms involved in mercantile relationships essentially do not employ process based uncertainty responses. Instead, they managed their relationships to build flexibility into their operations. With mercantile ties, relationship management and input/output configuration management overlapped directly;

Knitters involved in political relationships tried to professionalize their interactions with others. To overcome the uncertainty of raw material acquisition, such professionalization involved the development of mutually profitable proprietary yarns. To overcome the uncertainty of

seasonal continuity, professionalization aimed at building a good reputation for the mill. Design uncertainties were addressed by bringing the clients into the design process;

Mills involved in cooperative relationships tried to personalize their interactions with others. Overt displays of loyalty to suppliers<sup>73</sup> were intended to overcome raw material acquisition uncertainties, while the creation of a "family environment" (trying to keep labour happy, and hence willing to stay) appeared to be the only effective way labour uncertainties could be addressed.

Table 6-16 below summarizes the uncertainty responses. It shows that the input/output configurations are used to develop responses to three of the four major uncertainties facing firms in the industry. Relationship management techniques are used to confront all four issues.

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<sup>73</sup>The most common was notification of the supplier if the mill could obtain comparable yarns at lower prices.

**TABLE 6-16**  
**RESPONSES TO**  
**UNCERTAINTY**

<b>Uncertainty</b>	<b>Structural Response</b>	<b>Process Response</b>
Labour & technology		✓
Design and PLC	✓	✓
Continuity	✓	✓
Raw materials acquisition	✓	✓

The uncertainty responses comprise a set of structural and process options available to firms. Structure and process supplement each other, and seem to address separate increments of the uncertainty in question.

#### **6.2.3.4.1 An inductive model of relationship evolution**

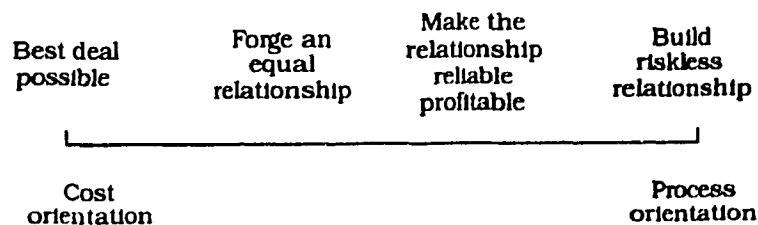
In the preceding subsection, it was argued that process responses to uncertainties depend upon the state and future of the established relationships. These conditions are a function of the relationship management efforts the firm is enacting. In this section, an induced, theoretical model of relationship evolution will be presented. The model will show that relationship management efforts are a complex product of style, objectives, and methods.

**Relationship management style:** The executives displayed a sharp difference in orientation to the relationships with other organizations.



At one extreme, managers exhibited a clear "cost orientation" to their relationships. They sold for the highest price they could, or bought yarns for the lowest price available. In essence, they defined their relationships in a purely financial context. At the other extreme, some managers adopted a "process orientation" to their relationships. They saw relationships as long term affairs; one mill (#10), for example, described the his business relationships in a 15 year time frame.

**Objectives:** When describing their objectives to business relationships, four themes emerged:



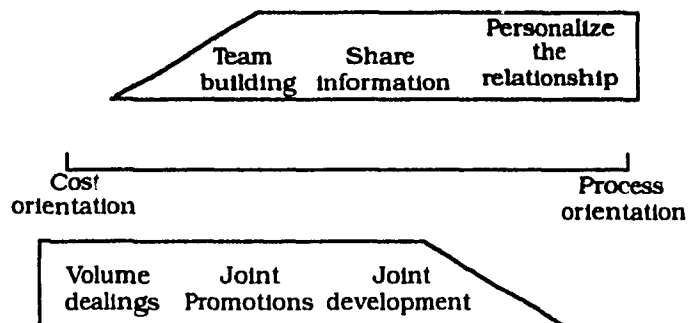
*Find the best deal:* Sell to the customers who pays the most, and/or buy yarns at the lowest price possible;

*Forge an equal business relationship:* Equality in a relationship means mutual respect. This professionalized interaction implies recognition of each others' profit motives, but with the acknowledgement that one's partner is an important factor to your own desired ends;

*Make the relationship reliably profitable for both:* This objective is associated with concerns for your own profitability, and for the impressions held by others of your own activities. To manage the latter, a mill must display loyalty, and must show consideration for the partner's problems;

*Make the relationship riskless for your partner:* Risklessness means that ones' mistakes will not be borne by the partner. This objective may place some of the partner's short term objectives ahead of one's own long term concerns; short term costs may need to be absorbed to ensure long term relationship continuity.

**Relationship management techniques:** To achieve the objectives, a number of techniques are employed. Three cost-based techniques were described by the subjects:



*Volume dealings:* These represent season-specific contracts, with volume and price are traded against each other. When reached with yarn sources, the seller agrees to fix his prices over the period of the contract (usually 6 months), and the mill promises to purchase a fixed quantity of yarns. With clients, the mill secures sales volume by selling the retailer a basic style to be marketed under the retailer's label. This "private label" becomes the retailer's exclusive style, for the season;

*Joint promotions:* Joint promotions bind the two organizations for a short period of time,



often as little as one season. The basic terms saw the mills and relationship partners trade participation in promotional efforts for more favourable contract terms;

*Joint development:* In general, joint development binds the organizations formally for an intermediate period of time. On the input side, these involve the development of proprietary yarns. On the output side, these involve sales programs, with the mill and client jointly designing an exclusive product line which (subject to season variations) the retailer will market over many successive seasons;

Similarly, three process-based techniques were described:

*Personalize the relationships:* Simple behaviours like being accessible to suppliers and customers serve to create bonds within relationships. A related method involves making one's personal life a part of the business relationships;

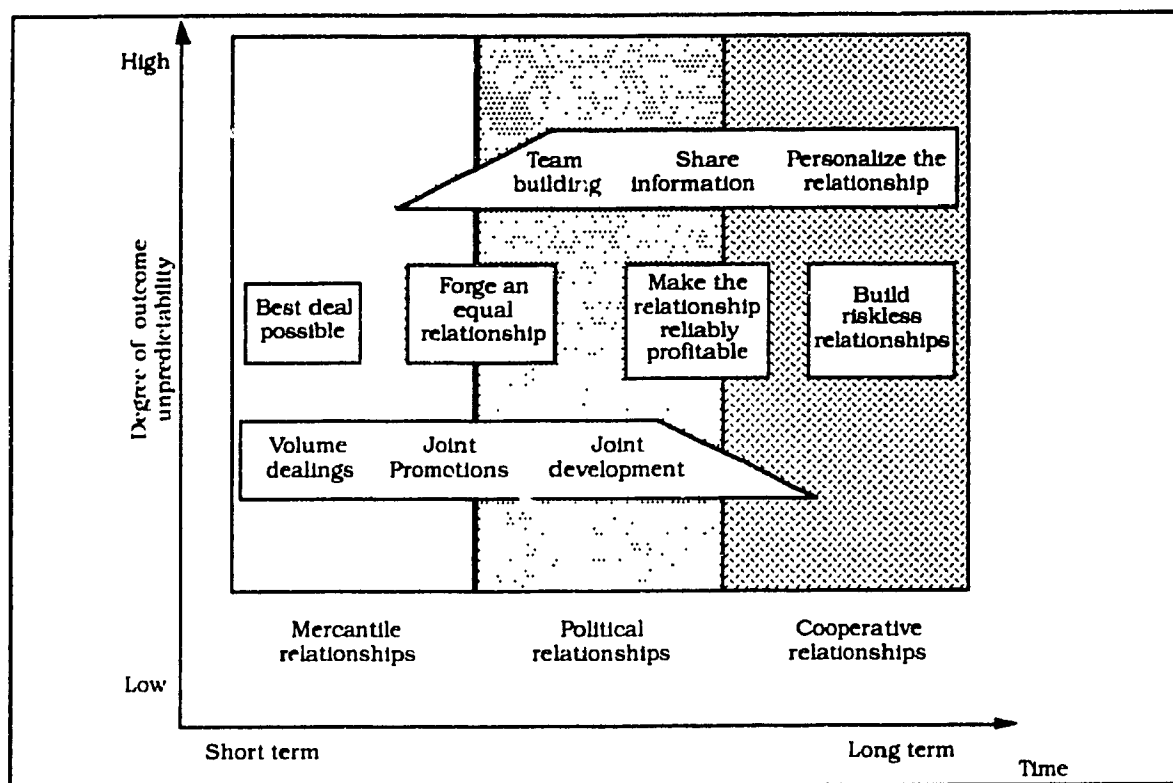
*Share information:* Whether done by offering expert advice, working the rumour mill, managing impressions closely, or by engaging in

inter-competitor contact, mutual exchanges of information create powerful bonds between firms. They can build up an inventory of unrecorded favours, and raise the levels of cooperation to high levels;

*Team building:* Trust and integrity are the foundations of a team-like relationship. To build this, "scrupulous honesty", to the point of absorbing the costs of your own mistakes, is required. Also important is the commitment you display to your partner. Supporting him where possible, and being open to regular contact and on-site visits, go a long way toward building reputational credits;

"Professionalism" is the watchword when engaged in team building. With clients, this is done by showing only those items which you believe will be top styles, or by tailoring lines exclusively for that account. With suppliers, it means paying bills on time, and not trying to make money on their mistakes.

As shown in Figure 6-52 below, these elements produce the three identified relationship types:



**Figure 6-52:** A process model of relationship evolution

Mercantile relationships are a product of a firm's cost orientation, and the use of techniques like volume dealings and joint promotions. They form quickly (within a season), and perish just as easily;

Cooperative relationships are a product of a firm's process orientation to its relationships. Personalizing the relationships, and sharing information, were the two described techniques

used to build this type of relationship. In general, these relationships require much time to develop (5+ years), because trust and reputational credits take a long time to establish. The parties are therefore less likely to casually discard such a relationship.

This model allows us to generate insights into the distribution of the identified relationship configurations:

One reason political relationships were the most commonly occurring in the study may be that the range of methods available for their construction was the widest. Techniques included joint promotions and joint development, information sharing, and team building efforts. The time frames to build these relationships runs from 6 months to two years, making these relationships which tend to persist through an industry's up or down phase;

One of the most significant moderating elements of relationship management efforts is the degree to which an organization can control the outcomes. The cost orientation techniques tend to be under the direct control of the each party. As such, the consequences of employing these techniques are more predictable. In contrast, the process techniques require that the relationship partner change

either their perceptions or practices. The outcomes of process management efforts are therefore more difficult to predict, and have the possibility of emerging with unintended nuances. This difficulty in employing process techniques may, in part, explain why cooperative linkages appeared so infrequently.

Difficulties employing process techniques may also be a factor explaining why no sampled firm exhibited symmetrical cooperative relationships (see Figure 6-13 above). Attempts at building cooperative relationships with both resource suppliers and sales channels would constitute a relatively risky exercise, and leave the organization vulnerable if both efforts were unsuccessful. A related factor explaining the absence of symmetrical cooperative relationships is the degree of interdependence which they imply. Executives may be reluctant to relinquish the degree of autonomy associated with dual cooperative relationships. A final factor explaining the absence of symmetrical cooperative relationships may be the amount of management effort required in the use of process-based relationship management techniques. Time and energy may be a fixed management resource, particularly in this type of industry. The establishment and maintenance of two classes of cooperative relationships may be too great a strain on the top managers.

### 6.3 The industry's social substructure

How do mills arrive at a balance between structural and process responses to uncertainty? To try to answer this question, it was decided that stratification of the sample through the development of a strategic groups mapping (Hatten, Schendel, and Cooper, 1978; Harrigan, 1985) would allow a more detailed examination of the firms' configurations<sup>74</sup>. The variables used in the analysis were the context elements discussed in sections 6.1.1 and 6.2.3 above (markets served; price range; average price), in conjunction with the selling techniques employed by the firm (the percentage of sales made "in house"), the extent of diversification (the percentage of sales from related, non sweater items), and the level of importing done by the firm itself. These variables were selected for examination because they are indicators of market decisions which each firm *must* make (Khandwalla, 1981; Star and Crawford, 1987), regardless of the level of uncertainty experienced by the chief executive. These market behaviour variables thus provide a convenient analytical framework through which firm behaviours might be observed.

The descriptive data for each variable is provided in Table 6-17 below.

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<sup>74</sup>As noted in section 4.1.6 above, this analysis is intended as a means of supporting and illustrating the qualitative conclusions drawn to this point.

**TABLE 6-17**  
**MARKET BEHAVIOUR VARIABLES**  
**DESCRIPTIVE DATA**

Variable	Min	Max	Mean	Std Dev
Average price (AVPR)	1	5	2.684	1.376
Pct. of diversified sales (DI)	0	100	25.421	23.405
Pct of in house sales (IH)	0	100	61.053	39.214
Pct. of imported items (IM)	0	90	7.368	22.071
Pct. sales to ladies market (LA)	0	100	68.158	38.050
Pct. sales to mens market (MN)	0	100	29.105	36.205
Price range of product (PRAN)	1	4	2.263	1.046

The correlation matrix is provided in Table 6-18 below.

**TABLE 6-18**  
**MARKET BEHAVIOUR VARIABLES:**  
**CORRELATION MATRIX**

	LA	MN	AVPR	PRAN	DI	IM	IH
LA	1.00						
MN	-.982	1.00					
AVPR	-.012	.037	1.00				
PRAN	-.455	.479	.717	1.00			
DI	.211	-.205	.189	.290	1.00		
IM	-.334	.165	-.084	.032	-.200	1.00	
IH	.189	-.200	-.560	-.536	-.275	.055	1.0

As shown in Table 6-19, factor analysis reduced the variable set to two distinct factors. These factors accounted for 68% of the total sample variance:

**TABLE 6-19**  
**MARKET STRATEGIES**

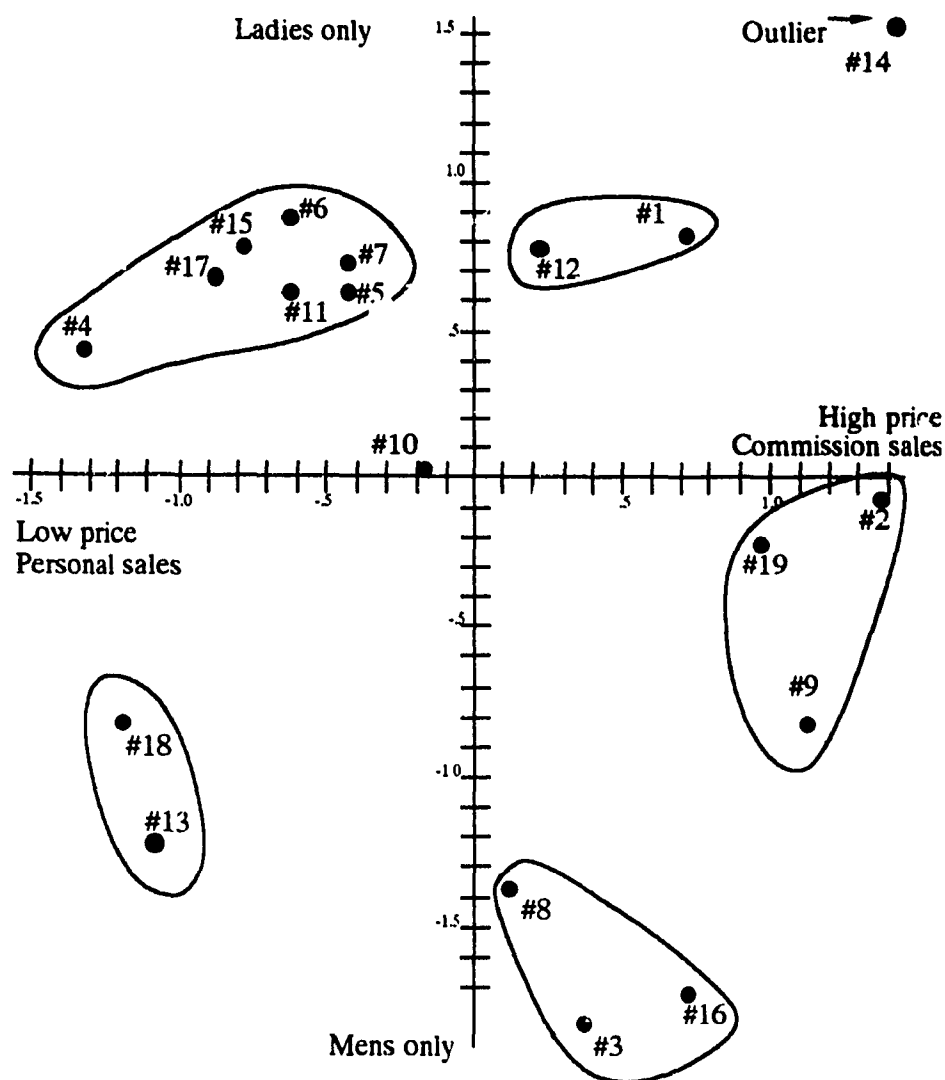
FACTOR 1 Price		FACTOR 2 Market
PRAN	.870	
AVPR	.835	
IH	-.797	
LA		-.956
MN		-.915

These factors parallel the context elements used in the previous subsection. The factor scores for each of the 19 mills were next developed (see Table 6-20 below) and plotted as coordinates on the two axes defined by the factors (Figure 6-53). Cluster analysis (Euclidean distance, complete linkage method) was next used to identify the strategic groupings within this mapping. Moving clockwise from the top left quadrant, Figure 6-53 shows that five distinct groups were identified:



**TABLE 6-20**  
**STRATEGY SCORES**

Mill number	Price	Market
1	0.741	0.887
2	1.134	-0.065
3	0.347	-1.807
4	-1.356	0.462
5	-0.448	0.65
6	-0.677	0.832
7	-0.443	0.766
8	0.092	-1.376
9	1.167	-0.873
10	-0.195	0.019
11	-0.657	0.632
12	0.234	0.798
13	-1.121	-1.209
14	2.401	1.515
15	-0.819	0.79
16	0.72	-1.678
17	-0.904	0.679
18	-1.204	-0.789
19	0.988	-0.233



**Figure 6-53: Strategic Groups Mapping**

1) Mass Producers (Mills 4, 5, 6, 7, 11, 15, 17): The largest single group consists of the seven Montreal based mills who service the mass market of ladies sweaters, producing large volume orders at generally low to moderate prices. Sales are almost always made by the chief executive.

In general, these firms recognize themselves to be direct competitors, but are able to use this to their individual advantages. The key is that, as firms in the same situation, they face the same operational difficulties. For example, sampling before a season begins often involves the use of small quantities of standardized but infrequently employed colours of yarn. It is common for executives of firms within this group to share sampling yarns, rather than pay expensive minimum order requirements.

Similar favours occur with machine parts. As each mill is largely a volume house, the machinery within each plant is highly similar. It is common for small parts to be exchanged.

Also noteworthy is the fact that this group contains four of the association's most active and influential members. This group therefore openly discusses issues relating to inter-competitor conduct. Topics addressed include the hijacking of competitors' labour, industry pricing practices, and collective issues (yarn shortages, import quotas, etc.). The degree and nature of this type of interaction offers preliminary support for Hypothesis 1, which predicted that information gathering would produce inter-firm dialogues which are both economic and social in nature.

Competition within this group, while gentlemanly in its etiquette, is intense. Comparable facilities, skills, etc. make these suppliers relatively interchangeable. It is not uncommon for accounts to stick with one mill for a year or two, switch to another within the group, and return to the original supplier one or two years later.

There are also breakdowns in the informal etiquette. Price cutting, for example, is particularly problematic in today's soft market. One of the interviewed mills described how a customer came to him asking for goods to be sold at \$8.50 a piece, when they had sold for nearly \$15 each in the previous season. The mill's initial reticence was overcome when the customer pointed out that, if the mill refused the order, alternate sources could readily be found. He accepted the customer's terms.

One of the most serious violations of the etiquette imposed by this group occurred during the data collection period. As described by a number of the subject mills, a new industry entrant was engaged in a fierce price cutting campaign. This mill, it was said, was heavily burdened by debt, and was thus desperate to obtain market share. Apparently seeing the higher margins associated with mens sweaters, the mill decided to move into this domain. Unfortunately, the new mill lacked the design skills required, and (per the

widespread speculation) decided to pirate the chief mechanic of a leading men's market player. When leaving the former employer, the mechanic took with him the computer diskettes containing the patterns and knitting instructions for the upcoming season's product line. The association was powerless, at least in the short term.

2) Design Specialists (Mills 1, 12): These two firms sell exclusively ladies sweaters at relatively high price points. In contrast to the approach of the dominant group, these mills carry their own lines of self- designed garments. Each "design mill" is an expert in a particular style and/or look, and short term success is directly related to the popularity of that style. Volumes are relatively small.

These mills describe the domain as difficult to sustain. One says that a major problem is the enormous pressure exerted by customers to reduce prices. "It's hard to turn away a quarter of a million dollars in discount business, especially knowing that you're waiting instead for a premium order which may not arrive. That takes guts".

Another pressure which makes this group difficult to sustain comes from the dominant group. The primary competitive advantage of the two "design mills", the style of their garments, is easy prey to being successfully "knocked

off" by firms in the dominant group<sup>75</sup>. As a defense, both mills have in the past tried to lock up control of the raw materials associated with their particular product lines.

A final feature of note is the geographic composition of this group. One of the mills is a Montreal based firm, the other is a Toronto based mill. This group is thus a "composite". Neither seemed to be aware of the other as a close competitor<sup>76</sup>.

3) Custom Blends (Mills 2, 9, 19): A number of features distinguish this group from the others. First, these firms are multi market firms. Each sells a significant proportion of its total output to both the ladies and mens markets. As a general rule, firms which do this do not set up parallel production facilities to handle the different lines. Instead, production is coordinated using the same facilities, deriving scope economies from linking as many production stages as possible (Porter, 1985).

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<sup>75</sup>All sweaters can be reduced to two elements: the style, and the materials. Inexpensive imitations can be produced by stealing the same style while cutting back on the quality of materials used in the garment (less yarn can be used; acrylic can be substituted for natural fibre, etc.).

<sup>76</sup>More is said of the geographic issue in the discussion of the Custom Blends strategic group.

Second, these sweaters are characterized both by their very high prices and by their relatively well known brand names. Most Canadian sweaters reach the customer "anonymously", i.e. without manufacturer identification. These mills' sweaters, however, are produced and marketed as designer collections, carrying the manufacturer's own labels. The markup reflects both the label, and that fact that each sweater line is independently designed (some work with a design teams, while others use an in-house designer).

Third, these mills are all based outside of Montreal. The sample thus displays what most of the sampled organizations believed to be a self evident truth: the Canadian sweater manufacturing industry is highly regionalized. Within each city, the mills are closely attuned to each other<sup>77</sup>. They are, however, little more than simply aware of their counterparts in the other city<sup>78</sup>.

This geographic dimension offers further evidence in support of Hypothesis 1. It shows that factors which are not necessarily economic influence inter-firm contacts. Within the Toronto environment, family-based linkages between

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<sup>77</sup>The mass producers, for example, are all Montreal based.

<sup>78</sup>The highly unstable design specialists group is composed of one Montreal mill, and one Toronto mill. Each expressed the opinion that its position within the industry was unique; neither is aware that the other is a near competitor.

organizations are very common. In Montreal, the firms are much more atomistic in nature. In Toronto, the hierarchy of firms is *relatively* clear (based upon total sales; firm age and experience), whereas in Montreal, competitive turbulence creates temporary "kings of the hill". In Toronto, the pool of low to moderately skilled labour is considerably larger; in Montreal, the pool of moderate to highly skilled mechanics is higher.

4) Extra Marketers (Mills 3, 8, 16) These Montreal based firms sell only mens sweaters. The garments these mills sell carry very attractive margins; the segment is thus under extremely heavy attack by low cost imports. Each of these mills has responded to the attack by maintaining margins, and engaging in extra market activities: two import, and a third is diversified into an unrelated item.

Despite the apparent congruence of strategic practices, the researcher received no hint that the mills even covertly coordinate their practices. The mills share the same operating credo, as expressed by the presidents of both mill #3 and mill #16: "I'm in this business to make money, not to be a contract knitter".

The spirit which produces defiance in the face of fierce competitive pressure reveals one of the industry's most



interesting dimensions. As explained by one mill, organizations run by younger managers tend to be more cooperative, while those run by older executives are more aggressive<sup>79</sup>. Two of the three executives in this group have over 20 years experience running their organizations; the third has been in the industry for almost 15 years. Only one of these organizations is a regular participant in the industry association.

5) The Fringe (Mills 13, 18): As with the design specialists, this is a composite group. One of the members is Toronto based, the other Montreal based. This group is most distinguished from the industry by its lack of "fit" with standard industry practices.

Where nearly every mill in the sample defines itself as a knitter, for example, mill #13 sees himself as an importer. To him, "a sweater is a sweater". His response to market downturns is to add gender segments, in the hope of "getting lucky" on one or two styles.

Mill #18, on the other hand, behaves like a subcontractor. Rarely selling his own product lines, this executive waits for clients to find him. His approach is to deal with clients who

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<sup>79</sup>The executive who offered this classification was himself one of the "younger" members.

are having delivery troubles with imports; his facilities fill the short term production gap.

It is interesting to note that while neither firm is aware of the other's presence (as with the Design Specialists above), both firms appear to be relatively unknown even within their own cities.

To test the significance of the grouping scheme, each firm's group membership was coded, and discriminant analysis was performed to test the significance of the classification scheme. As shown in Table 6-21, the model was statistically significant, and the confusion matrix tested perfectly (Table 6-22).

**TABLE 6-21**  
DISCRIMINANT MODEL: STRATEGIC GROUPING

	Value	Prob
Wilks Lambda	.002	
F statistic	4.242	.000
Pillai Trace	2.535	
F statistic	2.057	.009
Hotelling-Lawley	40.394	
F statistic	8.617	.000

**TABLE 6-22**  
**CONFUSION MATRIX: STRATEGIC GROUPING**

Actual group	No of cases	Predicted group membership					
		1	2	3	4	5	6
1	7	7 100%					
2	2		2 100%				
3	3			3 100%			
4	3				3 100%		
5	2					2 100%	
6	2						2 100%

The anecdotal evidence noted in section 6.2.1, in conjunction with the descriptions of the interactions within the statistically significant strategic groups, supports the prediction (Hypothesis 1) that economic and social dialogues would be a part of the industry environment.

Equally important, the strategic groups mapping has developed distinct combinations of competitors, price points, and served markets. In effect, the method has identified five distinct uncertainty domains within the strategic environment:

The price point differences influence the types of yarns which can be employed (creating different "raw material uncertainties" between each group) and the degree of

dependence upon skilled knitters and machinists ("labour uncertainty" therefore varies from group to group);

The market differences influence the choice of clients to be served (directly affecting the nature and level of "continuity uncertainty" between groups) and the product to be developed (design uncertainty).

This allows the possibility of testing the earlier conclusions regarding structural and process responses to uncertainty. In the next two subsections, the strategic groups will be examined for differences in the structures of their members' input/output choices, and the relationships distributions .

### **6.3.1 Input/output subgroup distributions**

Figure 6-54 identifies the input forms within each strategic grouping:

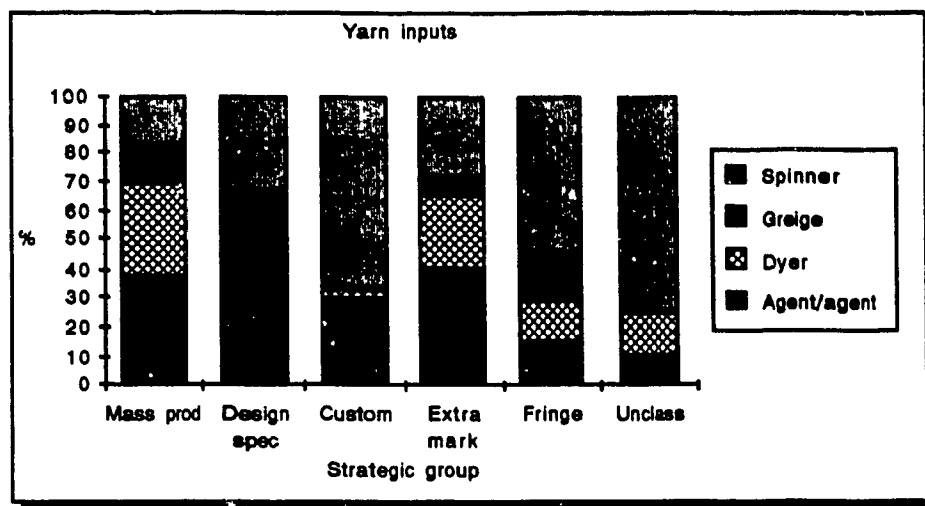
a) Mass Producers: These firms mix inputs from all four sources. Two methods are clearly preferred: Dealing with agents gives the mills the lowest possible price (this is made necessary by the low price points at which their merchandise is sold), while dealing with local dyers allows them flexibility to fill in rush requirements;

b) Design Specialists: The nature of this group's product results in the use of only two yarn acquisition methods: Greige is strongly preferred (primarily for the flexibility it offers in terms of colour), and spinners (the "premier" source) allow the mill to use relatively fancy, high quality yarns;

c) Custom Blends: This "premium" group relies most heavily upon spinners as their yarn source. Inexpensive dyed yarns (agents) fill out special item requirements;

d) Extra Marketers: Reflecting the wide price points these mills generally service, three yarn acquisition methods are employed (in roughly equal proportions): Agents/dyed, local dyers, and spinners;

e) The Fringe: This least cohesive group employs all four yarn acquisition methods, with spinners the preferred form.

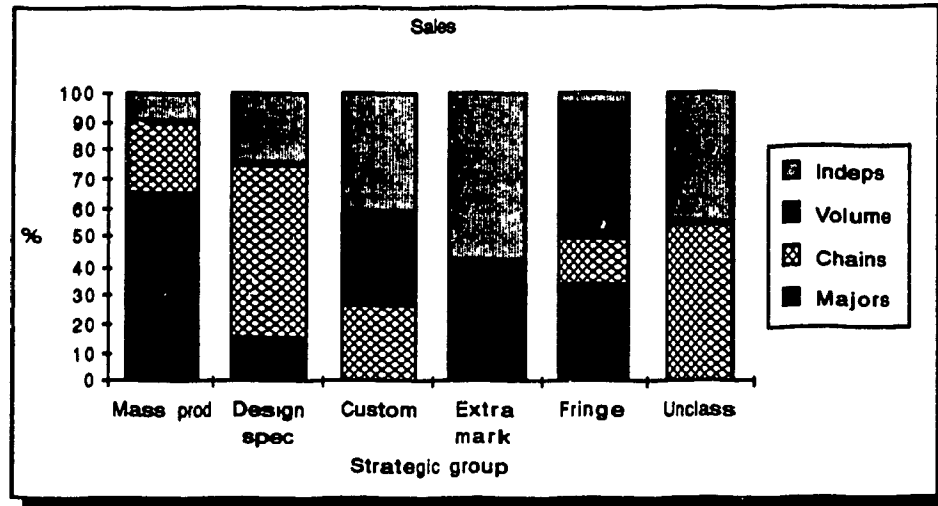


**Figure 6-54: Input forms by strategic group**

Figure 6-55 identifies the output forms within each strategic grouping:

- a) Mass Producers: Virtually all of this group's sales are to majors and chains
- b) Design Specialists: This group specializes in serving chain stores. Independents and majors "balance" the order books;
- c) Custom Blends: The higher priced goods are sold largely to chains and independents. Volume accounts are also an important group;
- d) Extra Marketers: Heavy reliance upon independents, supplemented by "volume" orders where they can be picked up, characterizes this group's sales activities;

e) The Fringe: Reflecting the manner by which sales are made, this group sells almost exclusively to majors and other "volume" accounts.



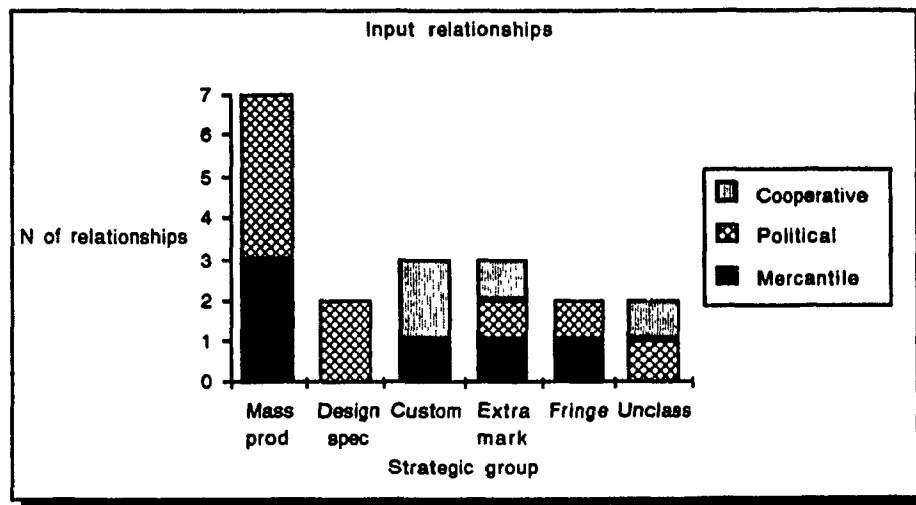
**Figure 6-55:** Output forms by strategic group

#### 6.3.1.1 Review

This subsection showed that firms operating within the same context adopt configurational options which are "internally" homogeneous, but significantly different from those operating in other settings. In effect, the firms have chosen different structural options to satisfy their contextual dictates.

### 6.3.2 Relationship distributions

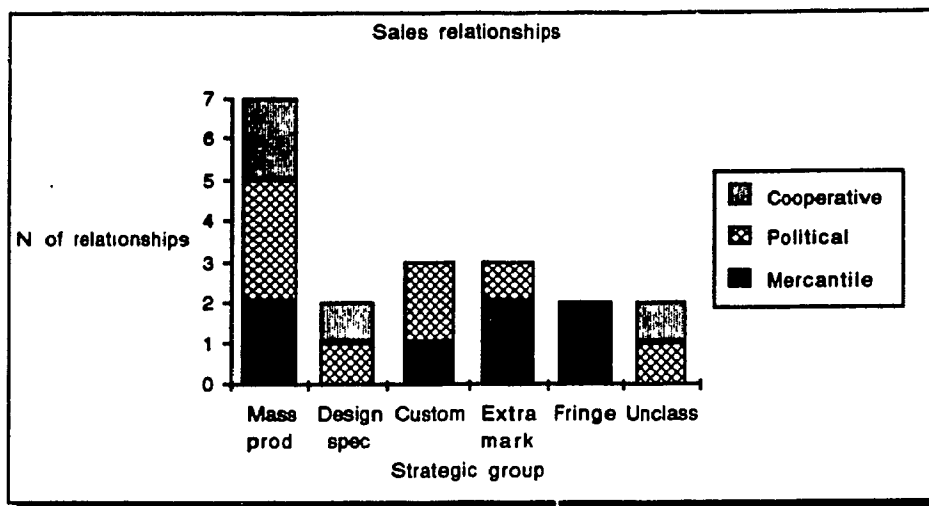
Figures 6-56 and 6-57 identify the relationship distributions within the strategic groups. The extremely small numbers produced by the subgrouping makes separate examination of the input and output relationships difficult to interpret. Interpreted as a group, however, we see the following in the relationship distributions:



**Figure 6-56:** Input relationships by strategic group

a) Mass Producers: While competing in a highly competitive domain, some firms form relatively close relationships with suppliers and clients. In fact, fifty percent of the linkages were political;





**Figure 6-57:** Output relationships by strategic group

b) Design Specialists: A possible clue to the group's ability to survive the is revealed by this analysis. The absence of mercantile linkages suggests that group members strive to build relatively close working relationships as an element of competitive advantage;

c) Custom Blends: With the practices of one firm as an exception<sup>80</sup>, the firms in this group actively and openly strive to forge and maintain close relationships with their transaction partners;

d) Extra Marketers: The complexity of this group's context is revealed by this analysis. To balance their relatively

<sup>80</sup>This firm has, since the data collection period, gone bankrupt.

contentious client relationships, the mills seem to try building closer relationships with their yarn sources;

e) The Fringe: Reflecting their strategic practices, these mills generally adopt an exclusively economic orientation to their relationships.

These diagrams confirm the importance of the geographic component to partner selection. The dyers are all based in Montreal, and the Montreal based Mass Producers and Extra Marketers are the groups most likely to deal with these yarn sources. Similarly, the marked preference of the Custom Blends and Fringe for dealing with spinners reflects the proximity of Canadian spinners to Toronto.

In both Montreal and Toronto, the mills expressed their preferences for local dealings by citing the "close, working relationships" which the proximity facilitates. Economic performance and closer relationships are balanced against each other, and relationships are clearly reflective of non-economic choice dimensions (Hypothesis 1).

Finally, within four of the five groups, cooperative linkages are present between at least one of the mills and a class of transaction partners. In the Mass Producers and Design Specialists, these relationships are formed with clients. In the Custom Blends and Extra Marketers, the cooperative linkages were formed with suppliers. In each case, the mill which established these relationships could be termed a "leader" within

its group<sup>81</sup>. Each group thus has a "linking-pin" (Aldrich and Whetton, 1981) within it. From this member's lead, and through both formal and informal channels<sup>82</sup>, it appears that the group's collective response to its operating context is developed and managed.

### **6.3.2.1 Review**

This subsection showed that relationship homogeneity is not characteristic of the strategic groupings. In fact, it appears that within-group variance in relationship distributions is more significant than between-group differences. This confirms one of the basic arguments made in Chapter 2: The quality of inter-firm relationships is a function of the efforts of the strategy-making mill. While partner choice was made largely on the basis of expected economic performance, a relationship element was also a considered factor for most (15) of the nineteen subjects.

### **6.3.3 Summary**

This section's analysis confirmed that the context influenced the input and output choices made by the sampled firms. By examining the

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<sup>81</sup>This is subjectively measured by the perceived cross-industry respect held for the mill, and by the researcher's perceptions of the mills influence.

<sup>82</sup>The primary formal channel is the association. Informal channels involve each mill's source(s) of industry gossip, and include the machine suppliers, yarn sources, customers, and contractors. In the words of one of the industry's primary contractors, "We're like a family. Nothing stays secret".

relationship distributions within each group, however, the presence of "linking-pin" organizations within each strategic group was identified. The analysis thereby uncovered a social substructure within the industry environment.

#### **6.4 Conclusions**

By confirming all three hypotheses, this study showed that the sweater manufacturers engage in certainty creation practices (section 3.2):

Hypothesis 1: The geographic character of information gathering activities, and the descriptions of interactions within the strategic groups, confirmed that dialogues among the firms were both economic and "non" economic (sections 6.3; 6.3.1);

Hypothesis 2: Relationships were shown to vary by age, and by the perceived power holder within them. Influencing behaviours varied with these dimensions: Power holders were treated more carefully, while potential victims were at times treated as such (sections 6.2.2.1; 6.2.2.2);

Hypothesis 3: Market focus created input diversity, with the mills building flexibility and safeguards into their configurations. Flexibility was also developed by building relationship slack into output transactions (adding clients

are added as a means of decreasing dependence) (section 6.1.1).

The inquiry discovered variance in the level of certainty creation activity between the firms. Each sweater mill developed its own responses to the uncertainties which they all confronted. Two classes of uncertainty management techniques were identified:

- a) Structural responses: The tremendous diversity of input and output configurations (Figures 6-2 to 6-20) shows that firms develop their own preferred mix of forms and sources;
- b) Process responses: The organizations possess a wide array of relationship management techniques (section 6.2.3.4.1), which allow them (with varying degrees of success predictability) to manage the tone and character of key inter-firm relationships.

The study found that relationships are not all equal. They varied in how the partner was viewed, how intense the commitment could become, and how much the firm was willing to engage in self serving behaviours (section 6.2.1). Those firms which engaged in relationship management did so to gain certainty based competitive advantages (section 6.3.2):

- 1) Reliable performance from the partner
- 2) Continuity of interactions, if the firm so desired; and
- 3) Reduced dependence, and increased flexibility.

The most commonly voiced reason was "reduced dependence", largely because it was independent of others' actions.

A related finding is that firms within the same industry do not face a homogeneous set of strategic uncertainties (section 6.3). The firms operated in distinct uncertainty domains, created, in part, by their own strategic actions. The level of certainty creation activities within the sample was influenced by the domain in which the firm was located.

Finally, this study identified the social mechanisms by which the mills gathered their uncertainty reducing information. By dealing with specialized agents, the mills were able to purchase critical information (style issues; credit information; industry forecasts; etc.). Equally important, however, was the role modeling and information channeling which linking pin organizations appeared to do (section 6.3.2). In effect, it is the linking pin organizations which others imitate.

## **CHAPTER 7**

### **Conclusions**

#### **7.0 Introduction**

In this chapter, the implications of the inquiry into the sweater manufacturing industry are explored.

#### **7.1 Strategy in a counterintuitive setting**

The clothing and textile industries have generally been ignored when strategic processes were observed and related theories developed. Indeed, with only a few exceptions (Porter, 1985; Allaire and Firsirotu, 1986), reference to these industries is usually of a historical nature (Chandler, 1977). An explanation for this is that the strategy making processes of these firms don't "fit" with those associated with the strategic management paradigm (Schendel and Hofer, 1979; Kuhn, 1970). Small, entrepreneurial firms have neither the resources nor the capacity for the development of rational, linear "strategies". They don't have the abilities to "fully" monitor and comprehend environmental events, and their responses are restricted in range and scope. Finally, and most problematic, the short time horizons of their strategic operations is incompatible with classic strategic thought, which associates strategy with stability and infrequent change (Mintzberg and Waters, 1982).

Mintzberg (Mintzberg, 1978; Mintzberg & Waters, 1985) defines strategy as patterns in streams of actions. One of the most significant aspects of

the inquiry is that, in this highly counterintuitive setting, clear patterns to operational decisions and actions were identified.

Broadly, two types of patterns were found. First the mills showed a pattern of sticking with a transaction-form for many years. Those mills which bought from domestic spinners, for example, preferred to continue dealing with these types of transaction partners. Even when it was necessary to find another supplier, the knitters tended to look first for another domestic spinner as a replacement. Similarly, mills which sold to a particular form of client (majors, for example) rarely changed their targeted clients. The loss of one major client meant that the mill would have to find another to replace it. Only rarely did the mills change their client configurations, and when they did so, it was a "radical" reorientation (Allaire and Firsirotu, 1985).

The other identified pattern was for firms to develop common structural approaches to contextual problems. Firms serving the low price end of the ladies market, for example, adopted similar input and output configurations. They tended to build redundancy into their input configurations, and chose to focus their client configurations. Firms serving both the ladies and the mens market, in contrast, developed more simplified input configurations, and crafted a different blend of targeted clients. Within each strategic group, the firms had both formal (direct) and informal (intelligence-based) contacts, a process which reinforced their selected responses (Grinyer and Spender, 1979).



The identified patterns in structural choices, relationships and market behaviours are all part of the sampled firms' "strategies". Three features of these strategies are of particular interest:

a) A high degree of "emergentness": Quinn (1980) argued that strategic subsystems are the sources of incremental strategic behaviours. In a fashion consistent with Quinn, most of the interviewed executives claimed they did not formally make strategies or plans, saying that their industry was not amenable to such activities. In essence, this study extended Quinn's arguments to those firms which are too small to have discrete subsystems;

b) A large element of "hustle": Bhidé (1986) distinguishes conventional, "big play" strategies from "hustle". The former, he argues are based upon erecting massive barriers to competitors, while hustle is a function of issues like style and timing:

Different execution styles lead to considerable variations in bottom line results ... Only a few hustle, and they get most of the business.  
(Bhidé, 1986: p. 61)

He argues that hustle, which emphasizes tactical execution (in contrast to grand designs and "big" competitive moves), is likely to be visible in businesses characterized by easy

entry, fast action, and service intensity. Such conditions are similar to those observed in the sweater industry. Indeed, in an industry in which styles are proprietary for only a short period of time, and in which the customer views manufacturers as interchangeable, hustle is one of the only way firms can compete;

c) A high level of social interactions: The mills were involved in an extremely high degree of interorganizational activity. While contacts between competitors were *relatively* infrequent, it was very common for the knitter to "talk business" with suppliers, customers, and mills who weren't competitors. In general, the conversations were used as a means of confirming the decisions made for that season, and as a source of intelligence on the actions of competitors, customers, and suppliers.

These aspects characterize a process in which the firms "grope", strategically. As discussed in Chapter 4, the industry's uncertainties make it virtually impossible for the executives to operate with anything but a short term orientation. Never-the-less, these uncertainties recur from season to season, meaning that all but the newest entrants have, in the past, encountered comparable strategic situations. Moreover, the firms know who to watch, and whose advice merits attention. Groping means that the firms are "knowingly blind" as they try to find their way through their uncertain domains.

Groping appears to be a strategy making approach which eliminates outcome extremes. A firm which adopts it can, with appropriate attention and vigilance, be assured that no competitor will pull too far ahead. Similarly, the groping firm can be reasonably certain that it isn't making any potentially catastrophic strategic errors. Groping produces strategic satisficing, and may be a major factor explaining why there has been no attempt at consolidating this fragmented industry.

## **7.2 Certainty creation and strategic behaviours**

Groping seems to rely heavily upon a firm's ability to learn and listen. In this regard, relationship management is central to strategic success. Indeed, certainty creation appears to be intimately related to a firm's strategic behaviours.

### **7.2.1 Certainty creation and uncertainty reduction**

One of the most striking aspects of this inquiry is the relative inability of the firms to eliminate the uncertainties which plague them. In fact, the residual uncertainties (Crawford, Gram, and Star, 1987) appear at least as great as the "eliminated" elements:

Labour: In virtually every case, the market pull was far greater than anything which the mills could offer their mechanics (Williamson, 1985). Despite promises of partnership and profit sharing, the mills could not make the

mechanics permanent organizational members (thereby absorbing this uncertainty [Thompson, 1967]);

Continuity: The root of this uncertainty is the frequent turnover of buyers, which makes it nearly impossible for the knitters to forge personal relationships with clients. The mills can never do more than work within the framework defined by this turnover;

Raw materials: Each sampled organization voiced the same theme: You can't buy guarantees. Problems with quality and delivery persist, despite the mills' efforts to hedge their bets by either dealing with multiple sources, and/or by dealing only with sources they know and trust. Vertical integration was an option tried by only two mills; those which owned their own dyeing facilities described resultant problems which seemed at least as great as those which they overcame.

The dominant uncertainties facing these firms were rooted in their external relationships. A fundamental lesson of this inquiry is that, contrary to the assumptions made by the schools of strategic management reviewed in Chapter 1, this type of uncertainty cannot be factored out of strategic processes. Attempts to do so reduce the developed model's descriptive and analytic capacities.

This study's discovery of distinct uncertainty domains within the industry suggests that a more refined conception of strategic uncertainty is in order. Theoretical models which assume a homogeneous influence upon all industry members present a "top down" view of uncertainty and strategic management. We lack a "micro", bottom-up perspective on strategic uncertainty

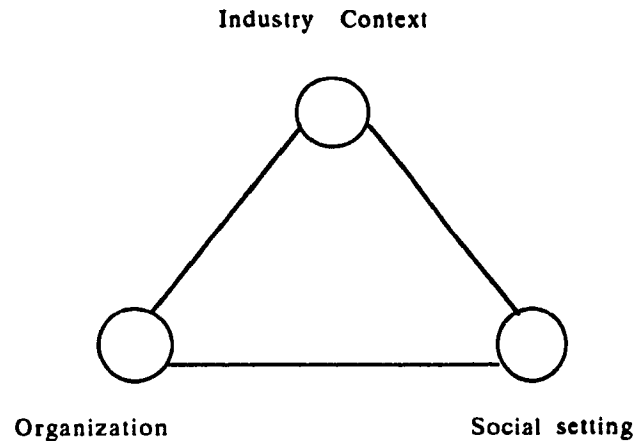
To begin building this new approach, we can use one of this inquiry's most significant findings: Firm actions influence strategic uncertainty (sections 2.1; 6.3). A theoretical model of strategic uncertainty would thus be related to a general model of strategy content (Schendel and Hofer, 1979). Star and Crawford (1987) represent a potential first step in these directions. They suggested that the range of a firm's strategic actions can be reduced to a set of five choices (the authors termed these "competitive levers"):

- 1) Price
- 2) Product differentiation
- 3) Advertising and promotion
- 4) Vertical integration, and
- 5) Diversification.

Star and Crawford proposed that changes on one of these levers precipitates predictable change on other levers. They suggested that strategy content therefore reduces to only two considerations:

- a) Choice of "lever-configuration" (replay a known pattern, or innovate into new combinations; and
- b) Attempts to influence the outcomes of that choice (certainty creation).

From this reduction of the theoretical range of a firm's competitive actions, it may be possible to develop models which predict differences in micro-uncertainty. As suggested in Figure 7-1 below, these models would have to consider at least three sets of elements:



**Figure 7-1:** Towards a model of micro uncertainty

Industry context: Examples include the number of participants, the level of fragmentation, and the industry's maturity;

Organization: Relevant factors include the nature of the firm's resource base, the type and quality of information it was able to obtain, and the nature of its competitive advantage; and

Social setting: These would consider issues like the ability of a firm to influence the outcomes of its past decisions

(certainty creation), and the degree and nature of interconnectedness among the industry participants.

Theoretical and empirical development is clearly indicated in this area.

### **7.2.2 Certainty creation and competitive advantage**

The input/output/relationship configurations developed in this inquiry are related to Evan's (1966) conception of the organization set. As such, they may be viewed as a type of "network" (Aldrich and Whetton, 1981), varying between firms on such dimensions as:

- 1) The intensity of the interfirm linkages;
- 2) The structural complexity; and
- 3) The degree of internal trust (Jarillo, 1988)

An interesting benefit of this perspective is that it allows us to gain insights into why some uncertainties (e.g. design issues) appeared to be significantly less problematic than others (e.g. continuity). Thorelli (1986) suggested that networks were a form "between" markets and hierarchies. In this regard, the sweater mills have been able to absorb the design uncertainties (through information purchases, imitation and bringing the clients into the design process), but have been unable to remove the other issues from their external base.

As identified in section 6.3, some firms used relationship management as an element of competitive advantage. Network theory, supplemented by insights from agency theory, can help explain why groups like the Design Specialists could survive.

As summarized by Eisenhardt (1989), agency theory concerns itself with relationships in which one party delegates work to another. Agency theory tries to determine the most efficient contract governing this relationship (subject to constraints imposed by outcome uncertainty, risk aversion differences between the contracting firms, and information).

Within mercantile structures, i.e. networks in which mercantile relationships are present, conflicts abound and partners are easily replaced. Cooperative structures, i.e. networks in which cooperative relationships are present, appear to be both more efficient and effective. Two factors are particularly relevant in this regard:

a) The frequent, often informal exchanges characteristic of cooperative and, to a lesser degree, political relationships provide the parties with low cost, immediately usable information (e.g. the elimination of contractual ambiguities; the ability to provide risk-free notification of problems and delays); and

b) Closer relationships encourage "unchallenged" returns for all parties. Many mills described relationships in which partners refused to haggle over small amounts, letting their partners make a small profit on the exchanges.



The Design specialists were the only strategic group which had no mercantile relationships (Figures 6-56, 6-57), supporting the view that tighter relationships are, *ceterus paribus*, relatively more effective.

### **7.3 Relationships in a strategic environment**

In its objectives, methods, and findings, this inquiry was similar to a strategic groups study (Hatten, Schendel and Cooper, 1978; Porter, 1979). The finding that the structural configurations could only be understood by considering the relationships within them implies that strategic groups theory (Hatten and Hatten, 1987; Harrigan, 1985) might benefit from a similar consideration.

One of the areas in which strategic groups theory has been criticized is the criteria used to develop the "groups":

The strategic dimensions chosen to define strategic groups (have been) rather haphazardly selected from a mix of corporate strategy descriptors ... Classification of groups by their mobility barriers is an appealing idea which stresses the cost advantages enjoyed by group members and emphasizes the elapsed time as well as the investment expenditures required of would-be "entrants" to overcome the barriers. (McGee and Thomas, 1986: pp. 149,150)

Within this industry, relationships are associated with mobility barriers (Caves and Porter, 1977). Without economic barriers to protect their

positions, the organizations in this inquiry erected social factors as their principal mobility barrier. Their frequently voiced complaints about their operating conditions were the only means of deterring others from coming into their markets<sup>83</sup>. The effectiveness of these efforts is striking: Despite the sharp slowdown in economic activity within the industry, only three firms ventured into new market segments as a response.

This link between relationships and mobility barriers may be common to all fragmented industries. Further empirical investigation is clearly needed.

### **7.3.1 Relationships and strategic choice**

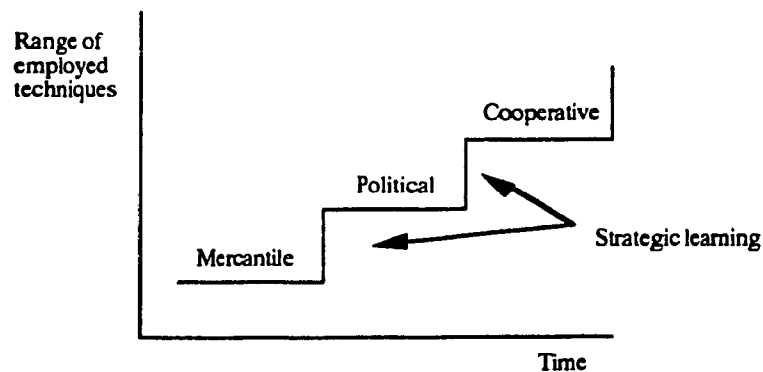
This study found that a firm's relationships were relatively insensitive to contextual influences. In this sense, relationship management appears to be a nearly pure element of strategic choice (Child, 1972). One of the few identified moderators to its active use, however, is (ironically) structural. Relationship management activities appear to be strongly influenced by the firm's position in the value chain. Firms looking upstream tended to see themselves in a position of power, while firms looking downstream felt themselves vulnerable<sup>84</sup>. Strength makes certainty creation an option; weakness makes it a hard-to-implement necessity.

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<sup>83</sup>The arguments were easy to develop, as no group could be termed a safe haven from the industry conditions.

<sup>84</sup>This was echoed in conversations with upstream sources (dyers, machine suppliers) and downstream sources (customers).

As shown in Figure 7-2 below, another major barrier to the use of relationship management methods is the level of skills possessed by the executives. This is likely to be an issue of strategic learning (Hedberg, 1981).



**Figure 7-2:** The evolution of relationship management skills

The experiences of the studied group of firms suggests that a firm's relationship management skills don't evolve smoothly over time. Instead, the subjects' descriptions suggest that relationship management abilities grow in a quantum manner (Miller and Friesen, 1984):

Mercantile linkages are the easiest to develop, as they require only a limited range of relational skills and techniques;

Political linkages can only be developed when a series of techniques have been mastered, and when their use will be believed by transaction partners; and

Cooperative linkages require the learning of yet another set of skills and techniques, and can only be developed when the use of these methods was believed by transaction partners.

The quantum evolution in relationship management is additive, in that a firm involved building cooperative relationships has the skills and experience to form lower level relationships. The quality and nature of a firm's reputation is crucial to that evolution. A major lesson of this inquiry is that, contrary to the assumptions of the strategic management schools reviewed in Chapter 1, the social context is central to strategic processes and outcomes.

#### **7.4 Limitations**

The conclusions drawn from this inquiry must be interpreted in the light of the study's limitations. Two factors which were deliberately included in the research design (Chapter 4) may reduce the external generalizability of the conclusions:

- a) The focus of the inquiry was a single, mature, manufacturing industry. Moreover, the sample was in part

self selected, and did not fully represent the Canadian industry;

b) This was a study of very small entrepreneurial firms. Strategic processes were concentrated exclusively in the hands of company presidents.

As revealed by the attempts to analyze the data, important variables were not measured. Notable in this area is the absence of a measure of the decision makers' perceived uncertainty<sup>85</sup>. Also significant by its omission was a rigorous measurement of the design processes employed by the mills<sup>86</sup>. Together, these factors restricted the range of analytic procedures available to the researcher<sup>87</sup>, and injected a note of subjectivity into the discourse.

The limitations must be put into context. Despite the hypotheses developed in Chapter 3, this theory building study was largely exploratory (Schendel and Hofer, 1979). As a result, the research design was relatively loose, and the measurements were less precise than those which would be used in a theory testing inquiry.

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<sup>85</sup>This would have provided an effective means of comparing uncertainty levels within the strategic groups.

<sup>86</sup>Future research employing a similar methodology will correct these weaknesses.

<sup>87</sup>This problem most apparent in the classification of the relationships (see Chapter 6). Objective coding was performed with only a small set of variables, and in a few cases, the results were in conflict with what would have been the subjectively coded result.

### **7.5 Suggestions for future research**

This inquiry has opened the door to a large number of related research questions:

Do relationship management styles and techniques practiced by entrepreneurial organizations in other industries display variance similar to that identified in this inquiry? Are the relationship management techniques employed comparable? Is the process model of relationship evolution a generalizable phenomenon?

Does relationship management impact upon strategic processes in more complex organizations, and if so, how? How does relationship management relate to other adopted uncertainty coping approaches in these organizations?

Is there a general relationship between operational decisions and emergent strategy?

Do transaction networks appear in different settings? Do input/output configurations in other industrial settings exhibit similar variance patterns as those encountered in the sweater manufacturing industry? Are these dimensions viable strategic grouping criteria?

What are some other external uncertainties which impact upon strategy formation processes? Are the unresolved residual elements always as large as they were in this industry?

Two design elements appear to be central to future inquiries into these questions:

Industry type: Similar industries would be other clothing and textile manufacturers, or other mature industries dominated by small, entrepreneurial organizations.

Setting: Similar settings would be based in Canada, and the firms would be reasonably close to both government officials, and industry association(s).

From these, four different research designs merit development:

Similar setting, similar industry type: This study would mirror the sweater study, but would (for example) examine other Canadian clothing and textile industries;

Similar setting, different industry type: This study would examine completely different Canadian industries;

Different setting, similar industry type: This study might (for example) examine the practices of sweater manufacturers in the U.S. and/or Europe;

Different setting, different industry type: This study would examine completely different industries, in non-Canadian settings.

An inquiry into the practices of different Canadian industries appears to hold the greatest short term promise for theory development.



## Appendix A

Firm name, address

Attention:

Dear Sir,

We would like to request your organization's participation in the conduct of a study on the way strategic relationships are maintained. The study is entitled "Uncertainty and Strategic Firm Behaviours". We hope to identify practices which will illustrate ways in which organizations successfully and unsuccessfully manage relationships with key suppliers and outlets. This information will contribute to our knowledge of strategic management practices, and may be directly beneficial to your operations.

We would like permission to interview you on selected aspects of your operations. Each interview will be restricted to approximately one hour. While estimates of the total time involved are difficult to do accurately, we expect that no more than three interview sessions will be required.

Our objective in this study is to identify and analyze the different ways firms in the same industry manage some of their most critical relationships. Identified behaviours and characteristics will be used for these purposes only.

All references to your organization will be disguised, and will be disclosed only with your permission. Any information obtained in connection with this study that can be identified with your organization, despite all efforts to disguise the source, will remain confidential, and will be disclosed only with your permission. Only averages and other descriptive statistics will be reported in any publication.

If you decide to participate, you are completely free to withdraw consent and discontinue participation at any time. If you have any additional questions, please do not hesitate to contact either of the undersigned. Thank you.

Sincerely,

Harry Star

## The Research Questions

While the research questions will touch at the core of your operations, the confidential responses will be aggregated with responses from other industry members. We are interested in patterns, i.e. what groups of firms within the same industry environment do in common, and what they do differently. The research involves three phases:

Phase I: In this interview stage, the questions which I will ask address two broad areas:

The market behaviours of your firm; and

The manufacturing processes behind these behaviours.

I am looking to identify patterns of behaviours between industry firms (for example, are those firms which move across market boundaries (a) more or less heavily capitalized; and (b) high or low priced sellers)

Phase II: This is a "mapping" phase. I will try to identify the firms with which you interact. I will try to distinguish describe:

Key relationships, i.e. those which must go right for you;and

Relationships which are less strategic.

Again, I am looking for patterns within the industry (for example, do all firms which buy yarn from supplier XYZ identify this relationship as a headache?)

Phase III: This is the area we know about the least about, and consequently hope to learn most. We want to know how you manage your key relationships. How, for example, do you do favours for each other? What unwritten elements comprise the relationships?

## **Appendix B**

### **BASIC PROFILE**

**Firm:**

**Age of firm**

**N of employees**

**Ownership**

**Family (private)**

**Public**

**Foreign subsidiary**

**Management. Do you have:**

**Middle managers**

**Managers with specialized skills**

**Do you engage in formal planning (explain, please)**

**Do you share views on industry with other industry players? (who??)**

## STRATEGIC PROFILE

1) Which sweater market(s) are you participating in, at the moment?  
Has this been your market over this decade? Please explain your views  
regarding which markets are viable.

	Present	Past
Mens and boys	Mens and boys	
Womens and girls	Womens and girls	
Childrens and infants	Childrens and infants	

2) What price points do you sell merchandise at?

3) Do you sell through a sales force, or in-house?

4) Do you change markets/price points easily?

Total sales (sweaters): (market share estimates, or dollar)

1987      1986      1985      1984

1983      1982      1981      1980

5) Have you diversified your product line beyond sweaters? If so, which other products are you now producing?

Dresses

Coordinates

Fleece

Velour

Active wear

Other

When did you diversify? What made you choose this type of diversification? How do you regard this area compared to the rest of your business?

Sales per segment (product):

1987      1986      1985      1984

1983      1982      1981      1980

6) Distinguished between "fashion" sweaters and "utility" sweaters, what is the relative split or your product line?

7) What materials do you produce sweaters in? What is the percentage share of each material?

Wool

Cotton

Acrylic

Other synthetics

8) Which seasons are you active in? How do you achieve year-round production and market activity?

9) Are imports a factor in your segment? How do you confront the problem they pose? Do you import goods for resale?

10) Do you export?

11) How do you keep abreast of fashion/demand trends developments?

12) Who does your styling? How many styles do you open a season with? How much change is there from season to season?

13) What is your business cycle (in weeks) for a typical season, i.e. how many weeks does it take from the time the line is conceptualized until the retail selling period is marking that item down, to clear it from their shelves?

Over 60 weeks

Between 40 and 60 weeks

Under 40 weeks



**14) Profitability**

Last year, did you make a profit?    Yes            No

What is the trend, over the past 5 years?

What factors account for this trend in your profitability?

## STRATEGIC COST CONFIGURATIONS

1) Are you expanding your client base, or focusing upon a more limited client list?

Extending base

Focusing

Maintaining

Is this situation by your choice, or by circumstance?

2) Production technologies

What percentage of manufacturing costs does labour represent?

Plant and equipment:

Have you recently participated in the C.I.R.B program?

- \* What type of equipment did you buy?
- \* How big was this investment?
- \* Was it restricted to machinery and equipment, or did the assistance include plant layout and marketing advice?
- \* Are you planning further expansion/equipment changes?

If so, how will you finance this?



Please explain the levels of backward or forward integration.

4b) In a sense, there are three distinct business operations involved in manufacturing this product:

Cloth design & manufacturing

Cutting and sewing

Sales and marketing

Which of these do you feel you are best at?

5) Do you own low cost producing facilities offshore?

6) Raw materials

Where do you obtain your:	Canada	Offshore (where)
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Basic yarns		
-------------	--	--

Fancy yarns		
-------------	--	--

Cotton yarns		
--------------	--	--

Who does your dyeing?

Done ourselves

Domestic source(s)

Overseas sources

7) What type of MIS do you employ? How do you keep track of orders running through your plant?

## Appendix C

### NETWORK MAPPING

1) Below is a partial list of Canadian yarn dyers. How much of your dyed yarns are handled by each of these sources (percentage)?

Commission dyers	% Share	<u>Specialized</u>	% Share
- Acme Dyers		- B.M. Dyeing	
- Bayside Dyeing		- Ben David	
- Colour Craft		- Imasa	
- Dynabrite		- Perfect	
- Gordon		- Varichrome	
- Hafner Fabrics			
- Industrial Dyers		<u>Spin/dye houses</u>	
- Lubertex		- Dominion Tex.	
- Performance Dye Works		- Glendale	
- Sheard Fabrics			
- Spinrite			
- Tex-Dye			

b) Please identify other Canadian dyers you deal with, and the amount of your dyed yarns which they handle (percentage terms).

c) Please identify non Canadian dyers you deal with, and the amount of your dyed yarns which they handle (percentage terms).

2) How much (in percentage terms) of your yarns do you purchase directly from your dyer(s)? Which dye houses do you obtain yarns from?

3) Please identify your yarn suppliers:

Source	Country	Types of yarn	% of total purchases
<hr/>			



4) Please identify (in percentage terms), your client list, distinguished between "majors department stores", "chains stores", and "others"

% of total sales

Major  
Department  
Stores

Chains  
Stores

Others

(Dept, chain	goods	of total
other)	purchased	sales

5) Do you subcontract any of your manufacturing? If so, with whom?

6) When you need critical personnel, how do you find them?

## **Appendix D**

### **A. General**

1. Are these structures deliberate, or have they evolved by circumstance?
  - a) What will they look like, 5 years from now?
2. Do these structures change, or are they fixed?
  - a) How often do you change them?
  - b) How long has the relationship been in place
  - c) How do you know when it's time for a change?
  - d) What factors do you look at when you make these decisions?
3. What is your objective regarding these relationships?
  - a) Develop a series of lowest cost relationships?
    - 1) Do you actively seek out the lowest cost supplier, or do you let them come to you?
  - b) Create a mix of working relationships?
    - 1) Is "working" different than lowest cost?
      - a> Is working more expensive than lowest cost?
  - c) Create a relationship which mixes business and personal dimensions?
    - 1) Do you think that the mix improves the business aspect of the relationship?

4. Business relationships can go sour. Some of these relationships have the potential to hurt you, if they were to go "off". Do you try to protect yourself against such eventualities?

a) How?

1) Contractually?

2) Personally?

3) Track record?

b) A loose description of this type of issue would be the term created certainty? What does this term mean to you?

1) Satisfaction with current dealings?

2) Equal partnership?

3) Certainty of future dealings?

4) Information confirmation?

5) Trust in your business partners is a big part of "certainty" Are there clients here with whom you would make a deal

a) On a handshake, or verbal promise on the telephone

b) Only with paperwork to confirm the deal

c) Only with paperwork, and a cheque in hand

d) Only with paperwork and a certified cheque

6. How do you gather "intelligence" about the industry?

a) Do you talk with key people/organizations?

1) Who are they?

2) What makes you choose these people over others that may be available?

3) How often do these intelligence gathering activities take place?

7. While competitors are competitors, this is an industry of gentlemanly codes of behaviour. For example, it seems that you can like some of your competitors on a personal level; in fact, you can socialize with them.

a) Do you socialize with any of your competitors? With who?

1) Do you socialize with any other members of the industry?

b) Do you meet informally with any of them? Who?? How often? Tell me about these interactions, please

**B. Yarn inputs**

1. What was the relationship structure 3 years ago?
  - a) If different, what drove the changes?
    - 1) You?
    - 2) Circumstances?
  - b) Are you satisfied with the relationship structure?
    - 1) More than before?
    - 2) What makes you satisfied?
      - a> Delivery?
      - b> Price?
      - c> Other?
2. Who has the "power" in these relationships?
  - a) Where is the power rooted?
  - b) How do you "know" where the power resides?
  - c) What does the power allow you/them to do?
3. Are any of these firms so important that you consciously put extra effort into working these relationship?

4. Do you create certainty in these relationships?

a) If no, how would you like to create certainty in this relationship?

1) What mechanisms would you employ?

2) What changes would have to take place for your firm to be able to create certainty in the relationship?

b) What would created certainty allow you to do?

c) If yes, how do you build it into these relationships?

1) Contractually?

2) Personally?

3) Track record?

d) Does it give you a competitive advantage?

1) If yes, what is the shape of that advantage?

2) If no, why do you do it?

5. What will structure look like 5 years from now?

**C. Clients**

1. What was the relationship structure 3 years ago?
  - a) If different, what drove the changes?
    - 1) You?
    - 2) Circumstances?
  - b) Are you satisfied with the relationship structure?
    - 1) More than before?
    - 2) What makes you satisfied?
      - a> Delivery?
      - b> Price?
      - c> Other?
2. Who has the "power" in these relationships?
  - a) Where is the power rooted?
  - b) How do you "know" where the power resides?
  - c) What does the power allow you/them to do?



3. Do you create certainty in these relationships?

a) If no, how would you like to create certainty in this relationship?

1) What mechanisms would you employ?

2) What changes would have to take place for your firm to be able to create certainty in the relationship?

b) What would created certainty allow you to do?

c) If yes, how do you build it into these relationships?

1) Contractually?

2) Personally?

3) Track record?

d) Does it give you a competitive advantage?

1) If yes, what is the shape of that advantage?

2) If no, why do you do it?

4. What will relationships structure look like 5 years from now?

5. Do you sell under your own labels?

a) What is the % split between your labels, and non-labelled (i.e. private label) sales?

b) Which do you prefer?

1) Why?

c) Do you work "programs" with any of your clients?

1) What is the % split between program sales and total sales?

**D. Machine suppliers****1. How long have these relationships been in place?****a) What services do they provide you?**

1) Which of these services are "above and beyond" the call of duty?

**b) Are they friend, supplier, or both?**

1) Which is the way to classify the relationship "first"? Second?

**2. Who has the "power" in these relationships?****a) Where is the power rooted?****b) How do you "know" where the power resides?****c) What does the power allow you/them to do?**

3. Do you create certainty in these relationships?

a) If no, how would you like to create certainty in this relationship?

1) What mechanisms would you employ?

2) What changes would have to take place for your firm to be able create certainty in the relationship?

b) What would created certainty allow you to do?

c) If yes, how do you build it into these relationships?

1) Contractually?

2) Personally?

3) Track record?

d) Does it give you a competitive advantage?

1) If yes, what is the shape of that advantage?

2) If no, why do you do it?

4. What will these relationships be like 5 years from now?

**E. Labour**

1. The most difficult issue in this industry is the shortage of skilled people. This question is therefore the most confidential of all -- what do you do to keep your mechanic on staff?

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