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PRODUCT PLANNING

IN APPAREL MANUFACTURING

by

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ABSTRACT

The purpose of this study is to explore marketing practices in Western Canadian apparel manufacturing, with emphasis on the contribution of marketing research to product planning.

Chief executives of firms in metropolitan areas were asked to participate in personal interviews. Mailed requests were sent to randomly selected firms in Winnipeg and Vancouver, while all firms meeting study criteria were approached in Saskatoon, Calgary and Edmonton. The response rate in each city was about thirty percent.

Semi-structured interviews focusing on characteristics and performance of firms as well as research for product planning were conducted from December 1982 to March 1983. Responses, examined for content and context, were classified using categories developed from the framework of marketing. Chi-square tests of association were used to test null hypotheses, using variables indicative of company performance, characteristics and research use. Significant associations ($p \geq 0.05$) were found between short-term changes in employment and such research activities as use of channel members, sales information, sales estimates and market trend research. Short-term employment changes were also significantly associated with import activity and product mix diversity. Long-term employment changes were associated with managers' perceptions of the importance of systematic research. Perceptions of the importance of both systematic and intuitive planning were significantly associated with long-term changes in dollar value. Perceived importance of systematic research was also

associated with firm size.

The data suggest that surveyed firms rely chiefly on the casual flow of information from other channel members. Manufacturer's marketing orientation is actually industrial because of their heavy reliance on retail approval.

Results suggest that firms favoring a systematic research approach perform better than those which use mostly casual information. Successful managers do, however, consider both intuitive and systematic decisions important to planning.

The results also indicate that increased use of consumer research and revisions in sales information processing lead to a reduction in planning errors. Additional studies are needed to further explore special research problems of apparel firms and fashion marketing decision dynamics.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

1.1 GENERAL STATEMENT OF THE PROBLEM

Economic conditions in the eighties demand that marketers, to be successful, use all available tools for developing marketing strategies. In addition to supplying goods and services to target markets of consumer segments, the marketer must plan and evaluate the marketing mix. Marketing research and marketing information systems are tools for this planning and evaluation.

Marketing research has been defined as "the systematic gathering, recording, and analyzing of data about problems relating to the marketing of goods and services" (Marcus et al. 1975). Marketing research is usually conducted to gain specific information about recurrent or nonrecurrent problems. In contrast, a marketing information system, or MIS, is a "structured interacting complex of persons, machines, and procedures designed to generate an orderly flow of pertinent information, collected from intra- and extra-firm sources, for use as a basis for decision-making" (Marcus et al. 1975). The most efficient information systems can provide executives with speedy access to the right information, greatly facilitating daily decision-making.

In the seventies, many refinements in marketing research techniques were developed by and for apparel firms. Large American-based firms began developing marketing research and information systems specifically to suit their needs. For example, marketing research helped fashion-oriented

companies like C. F. Hathaway and White Stag to identify new target markets, while sophisticated, research-based marketing information systems were developed by firms like Warner's and Jockey International (Richards and Rachman, 1978). The end result was a better understanding of the consumer and a reduction in costly errors, Although these marketers agreed that research could not replace creativity or experience, it helped to reduce risk in this highly competitive field (Richards and Rachman, 1978).

Apparel manufacture has "long been considered in a class by itself" among manufacturers, due to the unpredictability of fashion and long lead times between planning and production (Richards and Rachman, 1978). These factors, combined with the diverse product mix, have led some apparel manufacturers to reject marketing concepts that have been successfully applied to many packaged goods (Retail Week, 1980). Reports on the marketing concept in apparel manufacture in general, and marketing research and information systems in particular, are scarce (Richards and Rachman, 1978). This is especially true of reports from Canadian firms.

A report from the C. D. Howe Research Institute indicated that apparel manufacturing concerns in Canada could not survive independently of government intervention in the marketplace (Pestieau, 1978). As of 1982, Canada had seventeen bilateral agreements with countries which export textile and apparel goods to Canada and protection was scheduled to continue and be expanded (Textile and Clothing Board Report, 1981). Through continued protection the government hoped to improve the climate of confidence it tried to foster, and thus encourage capital investment. It was hoped that protection would prevent serious damage to vulnerable domestic firms, while giving government and manufacturers a chance to develop a competitive, modern, and efficient industry at home (Textile and Clothing Inquiry, 1980).

With the goal of strengthening the apparel sector, government and

industry have been examining the areas of advanced technology, capacity utilization, control of raw material costs, and the training of labour and management. Apparel manufacturers admit that there has been a lack of trained personnel in management and technical positions (Textile and Clothing Inquiry, 1980). The Textile and Clothing Board reported that an increasing number of firms were using the most up-to-date management skills, but the extent to which this trend is emerging in Western Canada is unclear. This study has been developed with the objective of examining the marketing practices of apparel manufacturers, with primary emphasis on research techniques and information systems used by Western Canadian firms.

1.2 ORIGIN AND IMPORTANCE OF THE STUDY

Western Canadian apparel firms have, traditionally, relied on intuition and experience to guide their product planning. A study by Lazer (1956) indicated that, in the early 50s, Western Canadian apparel concerns rarely employed professional management teams or used consultant specialists. Many of these firms were family-owned, with the owner-manager responsible for all decisions. Manufacturers relied on experience, rather than formal research, to guide decision-making. These managers were "retrospective-oriented", using sources like repeat orders, last season's best sellers, or reports from retail buyers to determine product mix.

Reports concerning the status of Western Canadian manufacturers in the eighties indicate that these firms have special concerns and characteristics which differentiate them from Eastern Canadian firms. Alsop (1982) reported that the shift of Eaton's buying function to Toronto, coupled with the adverse economic conditions of the recessionary eighties, resulted in a shrinking market for Vancouver manufacturers. While some manufacturers have been able to shift their emphasis to selling to small independent retailers, bankruptcies

have caused manufacturers to view the economic climate as one of "survival of the fittest" and the importance of reducing risk has become paramount to these firms. One Vancouver firm, Koret of California, reacted with plans for expansion, and other members of the B.C. Needletrades Association hoped that this positive attitude would improve confidence in the apparel sector. However, no reports are available on the risk-reduction tactics which these firms may employ at the management level.

The 320 million dollar apparel industry in Manitoba also felt the impact of adverse economic conditions and has urged the Federal Government to cut imports back to 1980 or even 1976 levels. Dennyson (1982) reported that, according to Ray Winston, executive director of the Manitoba Fashion Institute, apparel manufacturers in Manitoba have taken seriously government encouragement to invest and rationalize their operations. Winston indicated that the Manitoba industry is far more efficient in management and technology than the industry in Quebec and Ontario. Large firms in Manitoba employ graduates in law, accounting and engineering at the management level, and at least six companies use computers in production. Over the last five years, Manitoba firms have invested 60 million dollars in improving plant, equipment and engineering and garment shipments have increased dramatically since 1970. Although Winston indicated that management is becoming more sophisticated, no reports are available on the methods and techniques these managers are using to reduce risk.

Proponents of continued protection for Canadian apparel manufacturing point out that, in the event of a serious decline in apparel production, Canadians would be dependent on foreign sources of apparel which may not be reliable. Without a strong apparel sector at home, foreign producers would have a captive clientele and goods would be priced accordingly. Canadian manufacturers who wish to continue production would be forced to invest in

foreign plants, and the resulting high unemployment would reduce purchasing power in the Canadian market.

Canadian retailers have increased concentration of the buying function in Eastern Canada, and Western Canadian based manufacturers wishing to serve a national market are faced with the necessity of increased travel or the establishment of permanent sales offices in the East. The physical distance of these plants from the hub of buying activity suggests an increase in the importance of researching local, domestic and foreign trends. Apparel firms are also faced with competition from abroad, shrinking markets for their goods, and an uncertain future with regard to government support and protection. These and other factors make an evaluation of the decision-making processes of these firms timely. Western manufacturers have begun to contribute significantly to the Canadian clothing industry's total exports. Whether this increase in exports is the result of a concerted effort to research possible markets is undocumented.

An evaluation of product planning and research processes in this sector not only fills a need for information about an undocumented area, but serves to highlight the strengths and weaknesses of the industry. This evaluation is central to understanding the sector's special problems which will help in developing sound strategies for the future.

1.3 OBJECTIVES

The general purpose of this study is to explore the marketing practices of apparel manufacturers in Western Canada, especially the use of marketing research and marketing information systems.

More specifically, objectives include:

1) To determine the extent to which manufacturers use marketing research and marketing information systems to

determine product mix;

2) To determine which types of research are used in product planning;

3) To determine characteristics of marketing information systems used by apparel manufacturers;

4) To determine the role of "intuitive" decisions in product planning.

CHAPTER II

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter outlines the development of the marketing concept and its use by modern fashion goods producers, distinguishes between marketing research and marketing information systems, and formal and informal marketing research techniques, and reviews the use of these tools in apparel manufacturing.

2.2 THE MARKETING CONCEPT

The marketing concept is a company-wide consumer orientation with the objective of achieving long-run profits, through assessing and then satisfying consumer wants and needs (Beckman, 1982). This concept emerged as a viable business orientation in response to changes in the American marketplace of the 1930s. Before the 1929 stock market crash, the market had essentially been a "seller's" market where demand exceeded the supply of goods. Following the crash, the market changed to a "buyer's" market, where manufacturers and other businesses were forced to compete for very scarce consumer dollars. Many product-oriented companies, which concentrated on maximizing profit through improved production capabilities, were unable to compete in these depressed times. Marketing-oriented companies, which attempted to monitor consumer wants or needs, gained a foothold, especially in packaged goods (Drake and Millar, 1969).

Acceptance of the marketing concept was hindered by the false economic

conditions created by World War II. Shortages of consumer goods characterized a return to a "seller's" market, and, for a few years after the war, firms succeeded in maintaining profits through the "hard sell" approach. By the early 1950s, however, many firms realized that they could improve profitability and meet objectives more easily if they produced only what consumers actually wanted or needed. Determining the preferences of consumers prior to production became of primary importance to marketing-oriented firms, and these firms needed detailed information about both consumers and the marketplace in general. Modern marketing research techniques developed as more businesses adopted the marketing concept and began to take a scientific approach to gaining information (Schiffman and Kanuk, 1978).

Through the 1940s and 1950s, marketing research became important to many packaged goods companies, and these companies became more efficient at producing data about their operations. By the early 1960s, marketers had become aware of the increasing need to find ways to make the right data available at the right time for executive decision-making (Schewe, 1976). The concept of marketing information systems emerged as a way to handle both research and other relevant data, often in conjunction with computers.

2.2.1 Fashion Marketing

The marketing concept was not accepted easily by manufacturers outside the packaged goods industry, including apparel firms. Although a number of apparel firms have accepted the marketing concept as an important orientation of business, this trend has emerged only over the last 15 years. In the mid-1960s, Cacherel began to recognize the importance of building brand awareness, and other designers of ready-to-wear, like Pierre Cardin and Daniel Hechter, have developed well-defined marketing strategies (Lippert

et al, 1981). Some fashion firms have used independent agencies to promote their goods with a "packaged goods approach" (Advertising Age, 1981), but in the area of marketing research, methods of getting to know consumer wants and needs can be described as very informal. While designers like Bill Blass have acknowledged the importance of knowing the ultimate consumer's wants and needs, this type of information is often gathered casually during promotional events (Fisher and Blass, 1981). This "talking to consumers" approach has also been used in the promotional campaigns for several ready-to-wear brands. Notable examples include Calvin Klein, made by Puritan, Vanderbilt, made by Murjani, and Wonderbra, manufactured by Canadian Lady. For the most part, however, apparel manufacturers sell to buyers at the retail level, rather than directing marketing efforts to final consumers (Advertising Age, 1981).

2.3 MARKETING RESEARCH

Marketing researchers have developed sophisticated techniques for monitoring consumer wants and needs. Aside from segmenting markets through demographics, they have developed tests for psychographic characteristics in order to understand consumers' lifestyles, attitudes and interests, and thus their purchasing behavior. Information about business trends and the marketplace in general can also be gained through research. To facilitate research about recurrent or non-recurrent problems, companies draw on data from both internal and external sources. These data may be either primary or secondary. Survey, observation, simulation, or experimentation may be used to obtain data from primary sources, with samples drawn on a probability or non-probability basis (Emory, 1976).

2.3.1 The Research Approach

Research can be conducted to facilitate decision-making in all areas of

marketing, and can be classified according to the area concerned (see Appendix I). The nature of the research question governs the research design, regardless of the area. Methods by which information is collected and analyzed can vary tremendously.

Aaker and Day (1983) reported that research may be conducted to explore a problem or opportunity, describe an aspect of the marketing environment, or determine causal relationships. Exploratory research generates ideas about the nature of a problem when background information is scarce. Since exploratory hypotheses are usually vague or ill-defined, the research methods employed are often unstructured and informal. Managers may rely on exploratory research in preference to more structured studies because perceived benefits outweigh risks in terms of both time and money. These considerations make the exploratory approach common in business.

Descriptive research is used when managers want more specific information about some aspect of the firm or its market environment. Descriptive research encompasses many types of studies common to marketing, including the collection of demographic, socioeconomic and market share data. Descriptive research is usually collected systematically and often provides managers with enough information to facilitate decision-making.

Causal research is necessarily highly structured and adheres to scientific principles because its purpose is to isolate causal factors. For causal research to be successful, specific objectives and hypotheses must be defined which will govern the formal research design.

Before embarking on any research project, managers must weigh the costs and benefits. In some cases, exploratory research may be sufficient to enable the marketers to make informed decisions based on combined information from many sources. There is, however, a temptation on the part of managers

to stop short of using causal or even descriptive research, when exploratory methods uncover new aspects of a problem. Managers may find the time and expense involved in launching a formal study daunting, especially when this approach is untried or unusual. However, managers must recognize that exploratory research results are limited by the collection techniques employed and that research which isolates causal factors or provides comprehensive descriptions may pay for itself in the long run (Aaker and Day, 1983). Managers must draw on current information as well as past experience when evaluating the merit of any research project.

2.4 MARKETING INFORMATION SYSTEMS

Many types of businesses use research to help develop marketing information systems. Data obtained through research on consumer behavior or market trends may be used to establish objectives for these systems. According to Brien and Stafford (1968), who interpreted the American Marketing Association definition of information systems used here, a marketing information system must be planned to allow for continuous interchange of information among members. This interchange must be structured so that pertinent data for decision-making can be sorted and made available to executives.

The persons, machines and procedures involved may include top management, marketing or brand managers, sales management, new product groups, research personnel, finance departments, systems analysts and designers, statisticians, model builders, programmers and computer experts. The system must be constructed so that it provides an orderly flow of data among these persons and machines, so that pertinent data may be made available on a daily or weekly basis to executives. These data are obtained from both internal and external sources and are generated in forms useful to management's particular needs.

2.5 MARKETING RESEARCH AND INFORMATION SYSTEMS IN APPAREL MANUFACTURING

Marketing research aims to provide information for specific problem-solving. Since one problem of apparel manufacturers is the diverse and ever-changing product mix, psychographic research is particularly suited to the needs of manufacturers who want to sell a brand name or an image rather than a garment (Fisher and Blass, 1981). Marketing research has not been a priority for most apparel manufacturers, many of whom feel that past experience enables them to judge the market and know the consumer. However, some apparel manufacturers and others have, over the years, reported on the use of marketing research and marketing information systems in this field. Although marketing to the ultimate consumer is a fairly new concept for apparel firms, reducing risk through research becomes increasingly important in a recession economy. To understand the development of marketing research and marketing information systems in apparel manufacturing, it is necessary to review reports on these technologies as they are used by apparel manufacturers.

2.5.1 Management Orientation and Fashion Cycle Theory

Sproles (1981) reviewed fashion life cycle theory and its managerial applications. Four principal theories were outlined, including the upper class theory, the mass market theory, the subcultural leadership theory, and the theory of collective selection. Sproles reported that these and other fashion cycle theories were potentially helpful to decision-makers, despite the need for further refinements in the areas of fashion decline, diffusion through segments other than innovators, and consumer's perceptual processes. Though applications of fashion theory were increasing, most fashion managers viewed forecasting as a "gamble" and tended to perpetuate the "mystique" surrounding successful product decisions. These managers, who applied

fashion theory at the intuitive level, rejected its scientific application, since most of their decisions revolved around production or seasonal cycles rather than life cycles of given styles.

Troxell and Stone (1981) found that, in the early seventies, many fashion-oriented companies were still trying to force unwanted styles on the public. Product-oriented firms invested heavily in the midi, and consumers refused to be "force-fed" this style. Reynolds and Darden (1972) found that fashion rejection was a similar process to fashion acceptance, but concluded that no amount of promotion could save a style which, like the midi, did not satisfy consumers.

These reports indicate that many American firms have been predominantly product-oriented, and a report from Saddik and Wills (1973) indicates that the same orientation has been prevalent among British firms. Saddik and Wills studied product planning among British apparel manufacturers, and developed two models of their decision-making processes. The Present-Mix Oriented firms were most common, and they based their product planning on past sales, with very little outside information used to plan new lines. These companies were status quo oriented and mistrustful of marketing information sources outside the sales figures themselves. The Innovation-Oriented companies used technical or imitation-oriented research to develop new products (that is, relying on exhibitions or competition to gain new ideas, rather than consumers). Neither type used test marketing, although the innovation-oriented companies conformed to the textbook ideal of marketing information systems as previously outlined by Brien and Stafford (1968).

Saddik and Wills concluded that sheer ignorance of product strategy had led to misallocation of resources. Product offerings were made without any attempt to eliminate some of the uncertainty of the marketplace through research.

2.5.2 Management Orientation in Western Canada

Apparel manufacturers in Western Canada in the 1950s were not r oriented. According to Lazer (1956), there were only two "marketing-motivated" companies out of a total of 44 Manitoba firms. These "marketing-motivated" companies used sales forecasting, statistics on age distribution, and sales goals to help delineate product mix.

Lazer concluded that very limited use was made of marketing information of any kind by any Western Canadian firm. Although some sources of secondary information were available through trade association, their publications, government agencies, and general marketing literature, manufacturers ignored these sources, and company records were not organized to provide information for executive decision-making about products. No mention was made of marketing research in Lazer's study. Reports detailing the marketing practices of apparel manufacturers in Western Canada since 1956 are scarce.

2.6 RESEARCH AND INFORMATION SYSTEMS IN MARKETING-ORIENTED FIRMS

Reports from apparel manufacturers and independent research agencies indicate that, by the late seventies, these firms had begun to develop and implement marketing research techniques and information systems. Members of the American Marketing Association have documented the use of marketing research and marketing information systems by some apparel firms.

2.6.1 Lifestyle Segmentation

Matura (1978) reported that lifestyle segmentation has helped C. F. Hathaway and Company identify market niches in the shirt business, which in turn helped the firm to modify their product lines. Segmentation by lifestyle has also been used by White Stag, which implemented a nationwide interview campaign to elicit detailed information on consumers and their purchasing patterns (de Kupsa, 1978). Documentation of lifestyles as well

as details on actual purchases and items owned helped White Stag to set up a marketing information system.

Richards (1977) and Roth (1978a) have both reported on the use of lifestyle segmentation in the Active Sportswear Market for Warnaco. Attitude research was the basis of this segmentation. Richards (1978) has also reported on a multilevel application of lifestyle segmentation, including points on study formation and the implementation of results. Roth (1978b) has described the steps in lifestyle segmentation studies, including planning, execution and analysis and presentation.

Levi Strauss Company has delineated five categories of consumers as a result of research done in conjunction with Yankelovich's Monitor for lifestyle segmentation. The firm has been able to identify demographic and psychographic characteristics of their target markets, as well as identify the selling features of each of its product lines (Blackwell et al. 1977).

2.6.2 Marketing Information Systems

Marketing information systems based on marketing research findings have also been developed by American firms. Bachman (1978) reported the development of a Marketing Information System for Jockey International based on diary panel-researched lifestyle segmentation. The research resulted in redefined product lines, changes in media mix emphasis, and analysis of market potential in each segment. Based on these findings, the firm was able to develop a system for handling information on demographics, new markets, apparel trends, and other market data, as well as tracking promotions and advertising.

Sturman (1978) documented the development of a Marketing Information System by Warner's Slimwear. The company used secondary sources from the U. S. Federal Government and a consumer purchase panel to gauge industry

trends, lifestyle segmentation to establish target markets, brand share and image, and product testing (both visual and wear tests). Visual tests involved collecting data about consumers' reactions to the appearance of new products, while wear tests were set up so that consumers actually judged new products after normal use (that is, washing and wearing them over a period of time). These methods provided measures which the company used to establish its "umbrella" Marketing Information System.

Lefkowitz (1978) of Lieberman Research Inc. has reported on the use of research-generated information about customers, competition, product and communication, for establishing marketing information systems. His model details continuous communication between the seller (manufacturer) and the buyer (the ultimate consumer) rather than the retail buyer.

2.6.3 Consumer Show and Wear Tests

Consumers' Show or Visual Tests, combined with Wear Tests, helped Warner's develop their Information System, but these methods can also be used to solve nonrecurrent, specific product development problems. Roth (1978c) reports that manufacturers can use show tests, usually conducted in shopping malls, to get reactions from consumers about product appearance. Wear Tests, sometimes combined with show tests, involve the customer actually washing and wearing the product for a given period. These tests are a great aid in new product development.

2.6.4 Estimation of Market Shipments

Hill (1978), of Lynn Hill Associates, reported on three methods to estimate wholesale market shipments, using both census and panel data. These methods, which help manufacturers to pinpoint specific trends in apparel consumption, are shipment trend projections, per capita estimates projected to total population, and item share projection.

2.6.5 Logistic Response Analysis

Logistic Response Analysis (LRA) has been used by Popielarz (1978) to estimate probabilities of consumers becoming loyal users of certain brands of apparel goods. After establishing a dichotomy such as heavy versus light users, the researcher then uses LRA to identify the minimum number of probabilities that must be specified to describe the behavior being studied. LRA helps to analyze the effects of one or a combination of variables on a given behavior, thus establishing relationships for the factors which determine target markets.

2.6.6 Awareness, Attitude, and Usage Studies

Awareness, attitude, and usage studies are conducted through telephone or personal interviews, and attempt to measure these variables. According to Roth (1978d) these studies can help apparel manufacturers in the areas of new product development, measuring responses to new campaigns, and responses to different media plans.

Dupont has used marketing research to identify consumer preferences for undergarments. Three interview-based studies were conducted, one specifically to study motivation, to find out consumer attitudes about these products. Dupont was able, through this research, to adjust product planning to better suit its target markets and also to identify new market niches (Talarzyk, 1979; Dupont, 1978).

2.6.7 Developments in the Use of Research

Reports from apparel manufacturers indicate a rising interest in the development of marketing research and information systems suited to these manufacturers' needs. Research on consumer lifestyles, attitudes, and interests has been especially valuable for segmenting markets, and establishing a base for marketing information systems. Published reports indicate

that formal research suited to the needs of apparel manufacturers can indeed reduce risk in a highly risky business. However, these reports are rare compared with similar reports from packaged goods companies. Since interest in formal research as applied to apparel manufacturing is comparatively new, it can be concluded that the development of special techniques for this area is in its infancy. Although fashion marketing has been a subject of interest to theoreticians for some time, their reports are often limited to explaining fashion cycles, with little emphasis on managerial applications.

Literature suggests that, though interest in the field is comparatively new, special techniques for researching apparel markets are becoming more plentiful. Increased focus on this area may foster the development of better techniques in the future, so that manufacturers can look to marketing research for the key to successful product planning.

CHAPTER III

RESEARCH DESIGN

3.1 INTRODUCTION

This chapter outlines hypothesis, sample design and the collection of primary and secondary data. Other topics discussed include the description of terms, the interview schedule, form of response, pre-testing and data analysis.

3.2 HYPOTHESES

Hypotheses were formulated through the examination of available literature and through the selection of variables which could affect the use of marketing research. The following conclusions influenced the formulation of hypotheses:

1) No reports on the use of marketing research or marketing information systems by Western Canadian firms were available.

2) Available reports came from multinational or other large firms.

3) Reports were most often from firms which produced such standard products as jeans, underwear and active sportswear, where short term fashion cycles had little influence on basic silhouettes.

4) Firms which produced several lines per year and were vulnerable to the influences of changing fashion trends could reduce risk using appropriate research techniques.

5) Family-owned and operated firms were less likely to employ marketing professionals than other firms, whether privately or publicly owned.

All hypotheses refer to Western Canadian apparel manufacturers, which

was the population under study. Hypotheses, stated in the null form, are as follows:

1) Apparel manufacturers do not use marketing research or marketing information systems to aid product mix decisions.

2) Characteristics of firms, such as size, geographic location, import/export activity, owner involvement in product planning, and product diversity, have no relationship to the extent (number of methods) and type (area) of marketing research used.

3) The extent and type of marketing research used has no relationship to the firm's growth.

4) Intuitive decision-making has no role in the product planning processes of apparel firms.

3.3 THE RESEARCH DESIGN - OVERVIEW

The research design was governed by the objectives of the study and the hypotheses to be tested. Data from both primary and secondary sources were collected for analysis in light of the variables under study. Primary data were collected from a sample of the population of Western Canadian apparel manufacturers, with geographic location as the criterion for the division of the sample into subgroups. Random sampling was used to choose sample elements from each subgroup, where the population of manufacturers was large enough to warrant this procedure. Respondents were chosen from management to represent each sample element.

Primary data were collected through a survey of manufacturers who participated in personal interviews. The interviewer used a semi-structured interview schedule to guide the respondent through a series of predominantly open-ended questions about marketing research techniques and marketing information systems. Questions were also included for the purpose of classifying

sample elements according to the variables under study.

3.4 SECONDARY DATA

Secondary sources offered descriptive information about the geographical distribution and size of various Western Canadian apparel firms, as well as the types of products they made. These sources included Statistics Canada catalogues, trade directories, lists available from both Provincial and Federal governments, and Trade Association membership lists. Telephone directories and newspaper articles supplied supplementary information about the population. Secondary reference material on marketing research and information systems was used to classify the types of research which related to the problem under study, and this classification served as a base for the formulation of the instrument used to collect primary data (Appendix I).

3.5 PRIMARY DATA

3.5.1 Sample Design

The population from which the sample was drawn was a finite population of apparel manufacturers in Western Canada, or those firms located in British Columbia, Alberta, Saskatchewan and Manitoba. The study focused on companies which produced men's, women's and children's apparel ranging from fashion goods to work clothes, and including leathers and knits. Criteria used to limit the population included products made, size, location and type of operation. Those firms which produced accessories, furs or non-apparel products, those with production staffs of 10 or fewer people and those located in rural areas were excluded. Branch plants where no product planning took place were also excluded.

In each province, only those firms located in metropolitan areas with more than three apparel plants were included. Firms in Vancouver, Calgary, Edmonton,

Saskatoon and Winnipeg which met study criteria numbered 130, according to secondary sources. The actual number of firms in operation was reduced to 121 because of mergers and bankruptcies. A sample of 37 firms, or about thirty percent of the population of each city was obtained. Respondents were usually presidents of firms.

Several considerations were influential in the decision to limit the population from which the sample was drawn. Budgetary constraints necessitated the exclusion of some companies from the population. Companies outside of metropolitan areas (areas with 100,000 or more residents) were excluded because of the cost of surveying them.

Firms located in the metropolitan areas of Winnipeg, Saskatoon, Calgary, Edmonton, Vancouver and the fringes of these areas were included since firms in these areas were expected to provide a variety of orientations indicative of Western Canadian apparel manufacturing activity.

Metropolitan locations such as Regina and Victoria, which had populations of less than three firms were eliminated because of time and budget constraints. However, the metropolitan areas which were included contained close to ninety percent of the population of Western Canadian manufacturers (see Appendix II).

Other companies were excluded on the basis of products made. Although listed in secondary sources as apparel manufacturers, these companies placed primary emphasis on the manufacture of accessories, such as hats, gloves, boots, belts, hosiery, handbags and shoes. These firms were excluded because the marketing of accessories was expected to be different from that of other wearing apparel. In general, accessory firms can be more responsive to short-term cycles than can apparel firms, since lower prices for most accessories make these items more risk-free to consumers. Fur manufacturers were also

excluded because demand for furs is much more dependent on economic conditions than demand for most apparel goods. Fur manufacturing expands and contracts along with the economy, and is directed at a select target market (Jarnow and Judelle, 1974). Marketers of accessories and furs were expected to place emphasis on different areas of research from the mainstream of apparel firms.

Other firms were excluded on an individual basis, because their emphasis appeared to be on products other than apparel. Companies which primarily manufactured sporting goods, tents, sleeping bags or other goods not usually thought of as apparel (such as diving suits or survival gear) were not included. These firms were assumed to have different information needs from the majority of apparel companies in Western Canada, and were outside the realm of this study. Many of the smallest firms were engaged in the manufacture of products which could not strictly be called apparel. These and other small companies were excluded on the assumption that firms with less than 10 employees engaged in production had limited resources for research, in either staff or funds.

For this study, the most common sample elements were head offices, or locations where primary managerial and administrative decisions were made. The assumption was that information provided at these locations would be representative of associated branch plants, subsidiaries or divisions where production was the primary function. Most surveyed firms had head offices located in Western Canada. A few firms had connections with Eastern Canadian companies or multinationals. The major criterion for including such firms in the population was whether product planning was taking place in Western Canada. Thus, sample elements were head offices of Western Canadian-based firms, or autonomous planning units of firms with connections outside Western Canada. Ancillary units were not included in the population from which the sample was drawn. Similarly, firms which maintained only branch plants with no managerial

functions in Western Canada were excluded from the population.

The previously delineated population provided elements from which the sample was drawn. The population of firms in designated metropolitan areas was first divided into subgroups, using provincial boundaries as a guide. This division resulted in four groups of firms, located respectively in British Columbia, Alberta, Saskatchewan and Manitoba.

The area sample was chosen because of its potential for highlighting certain economic, geographic and historical factors which differed from province to province. For example, many Winnipeg manufacturers were historically family-owned (Dennyson, 1982), while divisions of multinationals, such as White Stag and Koret, were generally located in Alberta or British Columbia. During the nineteen seventies, Alberta's economic boom encouraged the establishment of aggressive young companies like Sun Ice in that province. The proximity of Vancouver companies to the West Coast market of the United States may have influenced their marketing techniques, while Saskatoon's isolation from some major markets may have influenced the functioning of firms located there.

The population of firms located in Vancouver and Winnipeg was large enough to warrant a random sample approach. A table of random numbers was used to choose samples from these areas which constituted sixty percent of their populations. Contact letters were sent to these randomly selected firms, and in each case about thirty percent of the total population consented for interviews.

Contact letters were also sent to firms in Saskatoon, Calgary and Edmonton. Since the population of apparel manufacturers in these centres was comparatively small, letters were sent to all appropriate firms. Thirty percent of these firms also participated in the survey.

3.6 OPERATIONAL DEFINITIONS AND DESCRIPTIONS OF TERMS

Operational definitions and descriptions of terms have been divided into three categories: those concerned with the geography of the sample, those concerned with manufacturing, and those which describe products.

Geographical definitions and descriptions of terms were based on definitions in the Dictionary of the 1971 Census Terms (1972) and are as follows:

Fringe includes those areas within a twenty-mile radius of the urbanized core.

Metropolitan Area refers to an area having a population of 100,000 or more.

Rural includes areas with a population of less than 1,000 per square mile or a village, town, or city with a population of less than 1,000.

Urban refers to incorporated cities, towns, or villages, or unincorporated areas with a population of 1,000 or more, and with a population density of 1,000 or more per square mile, including the urban fringe of these areas.

Urbanized Core is urban according to the above criteria, but refers to the metropolitan area, plus surrounding municipalities completely or partly located in a built-up area.

The following definitions were based on the Concepts and Definitions of the Census of Manufacturers (1979) and were developed specifically for purposes of this study.

Apparel manufacturer refers to any business engaged in the production of apparel goods as described in the Census of Manufacturers.

Companies, Firms, and Establishments are additional terms used to describe apparel manufacturers.

Enterprises refers to a group of companies, which as a result of common interests, are controlled or managed by a single entity.

Employees refers to all staff regardless of employment status, excluding owner-managers and partners unless otherwise stated.

Ancillary units includes warehouses, sales offices, factory outlets, and any facility which functions outside of manufacturing or administration.

Branch plants refers to those plants which are located separate from head offices and have no executive functions.

Plant refers to the facility where actual production takes place; administration or management may take place at the same location.

Clothing categories were used as defined by the Textile and Clothing Board in conjunction with Statistics Canada (Textile and Clothing Inquiry, 1980).

3.7 COLLECTION OF PRIMARY DATA

Since the aim of the study was to gather descriptive data about a varied and geographically dispersed population, the survey offered the most economical method of primary data collection, in terms of both time and money.

3.7.1 The Interview

Although telephone, mail, or personally administered questionnaires might have been more economical or easier to code, the personal interview was chosen as a survey method which offered some advantages. The interview format gave the researcher a chance to probe for information which might otherwise have been difficult to obtain. The interview also afforded the researcher opportunities to offer or request definitions of the large variety of terms which manufacturers used to describe their businesses. The interview technique may have improved the level of response, as well, since mailed questionnaires are more easily dismissed.

3.7.2 The Interview Schedule

A semi-structured interview schedule was used for this study because respondents holding senior managerial positions do not respond favorably to a highly structured interview (McFarlane Smith, 1972). The semi-structured interview also gave the researcher opportunities to probe for appropriate responses, redirect questions, and clear up any misunderstandings about terms. This approach also gave the researcher an opportunity to explore those facets of business which differentiated some firms from others, or influenced marketing decisions. For example, some manufacturers also had their own retail outlets, or were exclusively in the custom order business, which gave them a different relationship to the ultimate consumer than manufacturers who sold only to other retailers. The semi-structured approach was also helpful for the inexperienced interviewer, since an unstructured schedule or interview guide would have offered little guidance.

The schedule consisted of six sections and a consent form. Information identifying the sample element, the respondent, the location of the firm, and other background information was kept separately, as was a contact record. An introductory statement was included which served to explain the study, put the respondent at ease and encourage questions.

Requests for interviews were made by mail with confirming telephone contact as a follow-up. Interviews were requested on the basis of the sampling procedure previously outlined. Contact letters were sent to the individuals listed as company presidents in secondary sources. In most cases, these individuals participated in the study. Occasionally the interviewer was directed to another of the firm's management team. The decision to accept an alternate respondent was made in cases where the company president was and would be unavailable because of travel commitments or in cases

where the president had little or no input into product mix decisions. This approach was especially necessary for interviews conducted outside of Winnipeg, where time was limited. Company presidents accounted for about 65% of respondents, with managers who were partners accounting for 25% of respondents. The remaining 10% were merchandise or sales managers.

3.7.3 Schedule Outline and Form of Response

The variety of question areas in this study suggested many response forms, but since the researcher's aim was to maintain a conversational tone during the interview, open-ended questions predominated. To facilitate analysis, questions which lent themselves to the formation of response categories were pre-coded, but because of the great variety of possible answers to most questions about research techniques, pre-coding was not practical in many instances (see Appendix III - Interview Schedule). Open-ended responses were analyzed for content after data were collected.

Section I of the schedule provided an introductory statement and a chance to put the respondent at ease, while Section II was designed to collect data about the firm with a view to classifying it in terms of product type, product planning processes, and independence from retailers. Firms were expected to fall into several categories based on the diversification of products and number of lines and seasons produced. The contracting practices of firms were also investigated in this section, to discover whether manufacturers who primarily produced goods under their own brand names had to rely more heavily on research than firms which had retailers' specifications to guide product planning.

Section III of the schedule contained specific questions about a number of areas of research, usually thought of as product, sales, and market research (see Appendix I - Classification of Research Areas). These areas

included concept testing, tests of product characteristics, package testing, monitoring competition and promotion, market segmentation, market share and potential, sales forecasting, test marketing, and other areas of specific interest to product planners. This section also dealt with the areas of computer use, marketing information systems, and other areas of general interest to the firm as a whole.

Section IV dealt with changes in business practices in recent years, an evaluation of how these changes affected company performance, and firms' future plans. The schedule ended with a section intended to check previous answers and provide a summary of research use. This section was treated as

3.7.4 Question Formation

Technical language which might have intimidated respondents was avoided whenever possible in question formation. The structure of the interview afforded the researcher opportunities to clarify terms which were unfamiliar to respondents and to ask for explanations of terms they used. Questions were presented to all respondents in the same order.

3.7.5 Probes

Nonjudgmental probes were used, when necessary, to obtain information or clarify meaning. While interview style was kept as consistent as possible, probes varied according to the respondents' business practices. For example, a respondent might not have understood the meaning of a question about "the market in general" or "monitoring competitors' activities". In such cases, respondents were given examples of marketing decisions they had previously mentioned and asked how they had arrived at these decisions. Where no pertinent examples were available, general examples based on pre-test information were used. Respondents were encouraged to answer at length any questions about which they had additional information. Leading probes were

avoided except when misunderstanding led respondents off-topic, in which case attempts were made to lead the respondents back to the original topic. To avoid disruption of the conversational tone, while maintaining as much accuracy as possible, responses were recorded on paper and reviewed immediately after the conclusion of each interview.

3.7.6 The Pre-Test

A pre-test of the interview schedule was required to test the instrument for reliability, clarity, and comprehensiveness. Companies were included which met the requirements of the sampling design for variety in size, product mix, and form of ownership. Nine firms were used for pre-testing, including five firms from the actual population. The remaining four were manufacturers of related products such as accessories and furs. These firms were included to avoid depleting the number of firms available for the survey, in light of the limited population size.

The pre-test highlighted certain problem areas in the interview schedule. The most significant modification which resulted was a reduction in overall length. This was achieved through the exclusion of questions which were less than directly related to the study objectives. Final interview length was, on average, forty-five minutes.

3.8 DATA ANALYSIS

3.8.1 Content Analysis of Open Responses

Responses to all open-ended questions were analyzed for content. Content units, usually words or themes, were chosen for each question as indicators of research practices. Pre-test results helped in formulating convenient units which were then categorized. The content units were small for easy handling, and were considered within the context of the response.

Context units such as whole answers were always examined to make the respondent's meaning clear.

Response categories were pre-coded where possible, but since most questions were open-ended, pre-coding was difficult. Responses to open-ended questions were analyzed for content upon completion of the survey, and then categorized and coded.

3.8.2 Response Categories

The development of response categories was central to understanding and delineating the activities of apparel firms as they related to the marketing concept. While information sources and research methods were emphasized, response categories also helped in formulating a description of apparel firm characteristics. These categories are outlined in the Tables describing results located in Chapters 4 and 5.

3.8.3 Treatment of Variables

The purpose of the research was, in part, to describe the influence of independent variables (characteristics of the firm) on dependent variables (extent and type of research used). Data about each of these variables were categorized and described for analysis. Pre-test results facilitated the outlining of categories for each variable which were mutually exclusive, exhaustive, and suited the objectives of the study (see Appendix IV - Response Categories).

The influence of independent variables such as size, geographic location, form of ownership, and product diversification was analyzed in light of the firms' use of marketing research and information systems. The firms' long and short-term growth was also analyzed in terms of marketing research practices.

3.8.4 Independent Variables

Firms were categorized by the number of worker hours per day used in December of 1982, based on answers to general questions about the average number of employees engaged in production during that period and the average number of hours they worked. Categories were ranked and divided into two groups for analysis at the nominal level.

Geographic location was a second independent variable which characterized firms, which were classified in terms of coast or prairie locale. Location of markets and suppliers was also examined, through nominal classification of firms' export and import activities.

Surveyed firms were characterized by several types of ownership, including private ownership, partnerships, incorporated firms owned by select shareholders, subsidiaries of national or multinational enterprises, or publicly owned firms. The original intent of the researcher was to categorize firms as family-owned or not, since the literature indicated that family owned and operated firms were less likely to employ marketing professionals than other firms. However, since public ownership of Canadian apparel firms is a rarity, most firms were "family-owned" in some sense. Form of ownership was categorized at the nominal level, while a more interesting categorization was formed from information about the degree to which the owner participated in product mix decisions. Responses in this area ranged from the owner being the sole product planner to complete reliance on hired managers. This information was also scaled at the nominal level.

Data about the firms' products encompassed several factors including the types of products made, the diversity of product mixes, the number of lines produced, the number of seasons produced, and the type of branding

used. Data about import and export practices were also collected. These factors combined to form general pictures of the product planning processes of the firms. Categories for each area were developed and formed nominal or ordinal scales (see Chapter 4 Tables for more information).

3.8.5 Dependent Variables

The extent of research used was judged by the number of areas in which firms employed research, and the number of different techniques they employed in each area.

Open-ended questions were designed to obtain descriptive data about a wide variety of actual business practices. Each question elicited many different responses about the research practices of firms sampled. The original intention of the research was to categorize research methods as formal or informal, using the criteria outlined in Chapter II. Responses in all areas, however, indicated an overwhelming predisposition to informal methods. The orientation of firms toward formal planning was better judged by responses outlining short- and long-range plans, changes in management approach, and managers' perceptions of the importance of such factors as "feel for the market" or "experience".

While the underlying measurement of extent of use of research could be called interval, in that answers ranged from none to several, these responses were categorized nominally.

Description and Analysis of Findings

Since classification of responses resulted most commonly in nominally scaled variables, modes, medians, and ranges were chosen as appropriate measures of central tendency and dispersion.

Data were described by frequency tables and cross-tabulated to delineate possible relationships between variables. The SAS Procedure Frequency (SAS

Institute Inc., 1982) was used to produce the two-way tables, and to generate Chi-square values. Continuity adjusted Chi-square values were chosen as appropriate for the small sample size. When expected values were less than five, Fisher's Exact Test values were chosen, as recommended by Siegel (1956).

CHAPTER IV

RESULTS: DESCRIPTION OF APPAREL FIRMS

4.1 INTRODUCTION

General data about firms and their operations, classified within the framework of the marketing concept, are presented in this chapter. These data provide descriptions of participating firms, their product planning methods, their managerial orientations, and their performance under diverse economic conditions.

Thirty-seven executives of apparel manufacturing firms participated in personal interviews conducted by the researcher. These respondents represented firms constituting a thirty-percent sample of Western Canadian apparel manufacturers in metropolitan areas. Firms were located in Winnipeg, Saskatoon, Calgary, Edmonton, and Vancouver. The survey was conducted over a three and a half month period, from December 20, 1982 to March 31, 1983.

Interviews consisted of forty-three questions about the firms' activities (Appendix III). Percentage frequencies were generated to describe most responses. In most cases, frequencies were based on percentages of firms; in some, especially questions with multiple responses, frequencies were based on percentages of total responses.

4.2 CHARACTERISTICS OF FIRMS

4.2.1 Size and Employment

Managers were asked how many workers they employed in December of 1982 and how many hours per week, on average, employees worked. Using these

figures, the number of worker hours per day was calculated for each firm. Since the surveyed firms' hours of employment per week ranged from thirty to fifty, these figures provided more precise measures of size than straightforward employment figures (Appendix V).

Table 4.1 shows the percentages of firms in five categories of worker hours per day, assuming a five-day week.

TABLE 4.1

DISTRIBUTION OF FIRM SIZES IN WORKER HOURS PER DAY

n = 37

Worker/Hours Per Day	Percentage of Firms
1-500	48.7
501-1000	21.6
1001-3000	21.6
3001-7000	2.7
7001 or more	5.4
	100.0

Almost half of the surveyed firms used five hundred or less worker hours per day.

4.2.2 Form of Ownership

Table 4.2 illustrates the percentages of firms with different forms of ownership. About 38% of surveyed firms were owned privately by one individual, another 32% were owned by partners.

TABLE 4.2

DISTRIBUTION OF OWNERSHIP FORMS

n = 37

Form of Ownership	Percentage of Firms
Private (Single Owner)	37.9
Private (Shareholders)	16.2
Partnership	32.4
Wholly Owned Subsidiary	10.8
Cooperatively Owned Plant	2.7
	100.0

4.2.3 Owner's Role in Decision-Making

Table 4.3 shows the percentages of firms where owners participated to different degrees in decision-making about products. The largest percentage is the category of owners making all product mix decisions accounting for 35%.

TABLE 4.3

OWNER PARTICIPATION IN PRODUCT PLANNING

n = 37

Owner's Role in Product Decisions	Percentage of Firms
Owner Only	35.1
Owner Approves Line Only	18.9
No Owner Participation	18.9
*Joint Owner(s) and Manager(s)	27.1
	100.0

*Includes firms with both active and silent partners.

4.3 PRODUCT MIX

A wide variety of products was manufactured by surveyed firms. While some firms specialized in one type of product, most had diversified to some extent. Product diversification included some products which did not fit the definition of apparel presented in Chapter III. About 14% of firms surveyed made goods such as linens, slippers, headwear and furs. These goods supplemented the principal products of the firms, and were classified as miscellaneous goods (see Appendix IV).

4.3.1 Product Classification

Principal products were grouped according to common characteristics and classified as men's and boys', ladies' and girls', or children's wear. Table 4.4 shows the percentage distribution of products manufactured by surveyed firms, while Table 4.5 shows the percentage distribution of product types for each of three categories.

Almost one-third of surveyed firms manufactured outerwear, most frequently for the men's and boys' market. While outerwear was the most frequently made product type for both men and women, producers of children's wear emphasized shirts and sweaters.

4.4 THE PRODUCT PLANNING PROCESS

4.4.1 Advance Planning

Manufacturers usually showed their lines to major retailers a few months before products for a given season appeared in stores. Manufacturers often referred to the periods when sales representatives travelled to markets to show samples and obtain orders as "booking seasons". To be ready for these booking seasons, manufacturers began planning their lines far in

TABLE 4.4

PERCENTAGE DISTRIBUTION OF PRODUCTS MANUFACTURED BY SAMPLE FIRMS

n = 37

Product Group*	Men's and Boys'	Ladies' and Girls'	Children's	Totals
Outerwear	14.2	15.9	.8	30.9
Sportswear	7.5	10.0	.8	18.3
Active Sportswear	5.0	3.3		8.3
Suits	5.0	1.7		6.7
Uniforms	7.5	2.5		10.0
Shirts and Sweaters	5.8	4.2	2.5	12.5
Casual Pants	5.0	5.0	.8	10.8
Workwear	1.7			1.7
Lingerie		.8		.8
	51.7	43.4	4.9	100.0

*For further information about product classification see Appendix IV.

TABLE 4.5

PERCENTAGE DISTRIBUTIONS OF PRODUCT GROUPS IN EACH OF THREE CATEGORIES

Product Group	Men's and Boys' n = 37	Ladies' and Girls' n = 37	Children's n = 37
Outerwear	27.4	36.7	16.7
Sportswear	14.5	23.0	16.7
Active Sportswear	9.7	7.7	
Suits	9.7	3.8	
Uniforms	14.5	5.8	
Shirts and Sweaters	11.3	9.6	49.9
Casual Pants	9.7	11.5	16.7
Workwear	3.2		
Lingerie		1.9	
	100.0	100.0	100.0

advance of actual production.

Most surveyed firms began planning their lines from nine months to a year in advance of actual production. Some notable exceptions were custom-order houses, which manufactured such goods as uniforms and made-to-measure suits. Customer specifications played an important role in determining the

goods produced by these firms. Other exceptions included firms manufacturing such goods as workwear and some types of outerwear, which required minimal style changes from season to season.

Figure 4.1 shows the distribution of firms involved in seasonal planning, in terms of the number of months of advance planning time they used before production began. About eight percent of firms were excluded from Figure 4.1 because their planning processes were order-oriented rather than seasonal.

4.4.2 Seasons

Apparel firms generally produce new lines, or new collections of styles, in patterns which reflect the desire of retailers to stock various goods according to seasonal demand. These patterns are based on the traditional shopping habits of consumers, and are known as "seasons". Most apparel firms time the planning of new lines around the structure of seasons. Surveyed firms produced from one to six seasons per year. Firms producing a number of seasons were constantly involved in planning lines, while firms producing only one season limited the time devoted to planning.

Seasons included spring, summer, fall, winter, holiday, and cruise. In some cases, summer, winter, or cruise were viewed as "transition" seasons, with a less varied offering than "major" seasons. Many manufacturers repeated best sellers, based on past sales, in "transition" seasons, but they did not view "transition" seasons as opportunities for testing new products. While 14% of firms did not produce seasons, about 57% of firms produced two seasons per year, for spring and fall bookings. About 8% of firms produced only one season, with a similar percentage producing four seasons. The remaining 13% of firms produced three, five, or six seasons per year.

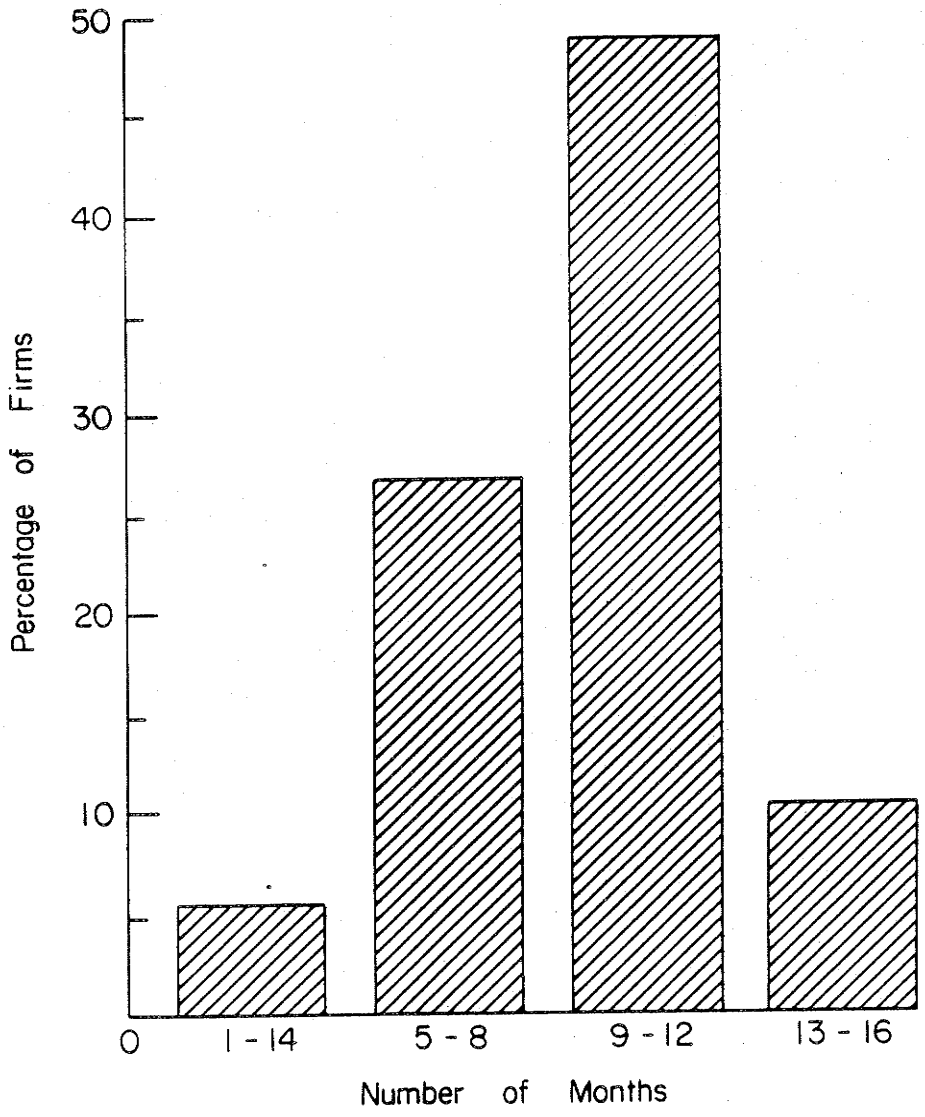


Figure 4.1 Percentage distribution of firms for amount of planning time in number of months prior to production.

4.4.3 Speculation and Product Planning

Table 4.6 shows the percentage frequency of firms producing goods in varying amounts for confirmed orders. The majority of goods which sample firms produced in 1982 were for confirmed orders. Over 50% of firms produced only goods for which orders were confirmed.

TABLE 4.6

DISTRIBUTION OF FIRMS PRODUCING GOODS TO CONFIRMED ORDERS

n = 37

Percentage of Confirmed Orders	Percentage of Firms
100% of goods	51.4
80-99% of goods	27.0
60-79% of goods	13.5
59% or less	8.1
Total	100.0

Almost 49% of firms produced some goods on speculation, either in addition to confirmed orders as overcuts, or before orders were confirmed. Additional cuts, or overcuts, were produced by 16% of firms, with about 13% of firms producing from one to twenty percent in overcuts. About 3% of firms produced from twenty-one to forty percent of goods in overcuts. Some firms which regularly speculated with overcuts admitted that this procedure was not really a gamble, in that decisions were based on established patterns of additional orders for some product groups. These historical patterns of retail demand led some firms to establish policies of producing overcuts of

items they considered basic.

More risk was involved in producing goods before orders were t. About one-third of firms produced some goods without confirmed orders. producing from one to twenty percent of goods on speculation accounted for about 13% of firms, while almost 11% of firms produced from twenty-one to forty percent of goods in this manner. Only 8% of firms produced more than forty percent of goods without confirmed orders.

Although no data were collected on speculation in previous years, comments from some executives indicated that speculation had decreased in 1982. A number of managers cited changing market conditions, especially the unwillingness of retailers to carry inventory, as responsible for reduced speculation. Some managers also indicated that they would continue producing only to confirmed orders through 1983. Retail buyer approval was a major criterion for product mix decisions in cases where speculation was reduced. Reduced speculation by manufacturers helped reduce risk in an unsteady economy, but it also increased retail power while restricting innovations by manufacturers.

4.4.4 Product Modification

During the planning stage and "booking" seasons, when retailers viewed lines, product modification was continuous for most manufacturers. However, since many manufacturers were producing most of their goods for confirmed orders only, product modification after booking was minimal. Some managers of sample firms indicated that, in their views, product acceptance became the retailers' responsibility after production began. About 38% of manufacturers did no product modification after production began.

Retail buyer response governed the reactions of about 43% of firms. These firms responded by substituting, adding, or dropping some items after

orders were booked, according to retailers' reactions. In a few cases, recutting was an option, as when size or fitting problems marred sales of an otherwise acceptable item. Less than 3% of firms modified products according to the flow of production. In such cases, styling decisions were sometimes made in light of such considerations as plant engineering or capacity, the goal being to produce goods with optimum efficiency.

About 16% of firms had monitoring or test marketing systems which their managers felt gave a constant flow of reliable information for modification purposes. These firms relied on computerized sales information or regular test marketing when making modification decisions. Firms which used test marketing were able to monitor new product acceptance and, to some degree, reduce risk when introducing new lines or items. However, since many firms used past sales information to plan new seasons, monitoring a product's life-cycle and especially its decline was also important for planning. Firms using sales information systems to generate reports on a regular basis were best able to determine the stage of life-cycle of an item, including decline. Most firms, however, were oriented more toward seasonal planning than to monitoring product life-cycles.

4.4.5 New Product Acceptance

Many manufacturers stressed that judging which products were especially successful was more important than re-evaluating unsuccessful products. Managers also claimed that they could not afford the time to examine why a product was not accepted. While evaluating failures was not viewed as necessary, there was some indication that new product acceptance was important, as best sellers from one season often formed the basis of the next season's lines.

About 41% of firms were able to judge the success of a product within

one to four weeks of delivery to retailers, while about 14% were able to appraise their successes within five to eight weeks. About 5% of firms reserved judgment on the success of an item until a full season had passed.

Almost 25% of firms would not specify how quickly their successes or failures became apparent. Some managers explained that products which, in the short run, appeared unsuccessful may have been introduced a few weeks too early in a season. External influences such as the weather or economic conditions may have influenced the sale rates of some products. For example, a mild winter or reduced disposable income could affect sales of cruisewear items. Also, retailers' unwillingness to carry inventory during recessionary periods has been reflected in delayed introduction of each season's goods, making early appraisal of successful items more difficult. For example, cruisewear items usually introduced before Christmas might not appear in stores until February, reducing the exposure time for new styles and the reaction time for manufacturers. Apparel firms no longer had the luxury of obtaining customer reaction before the season was fully under way.

About 16% of firms were in businesses based on custom-ordering or contract work, where response time was less important than individual customer response.

4.4.6 Manufacturers' Brands and Private Labels

About 5% of sample firms preferred not to brand their product, although these firms occasionally produced some items for private labels. The remaining 95% produced their own brands or some combination of their own brands and private labels. Figure 4.2 shows the distribution of these firms according to the percentage of goods sold under manufacturers' brands.

Most firms concentrated on manufacturing goods under their own labels, with 43% doing no private label work. About 51% of firms produced some pri-

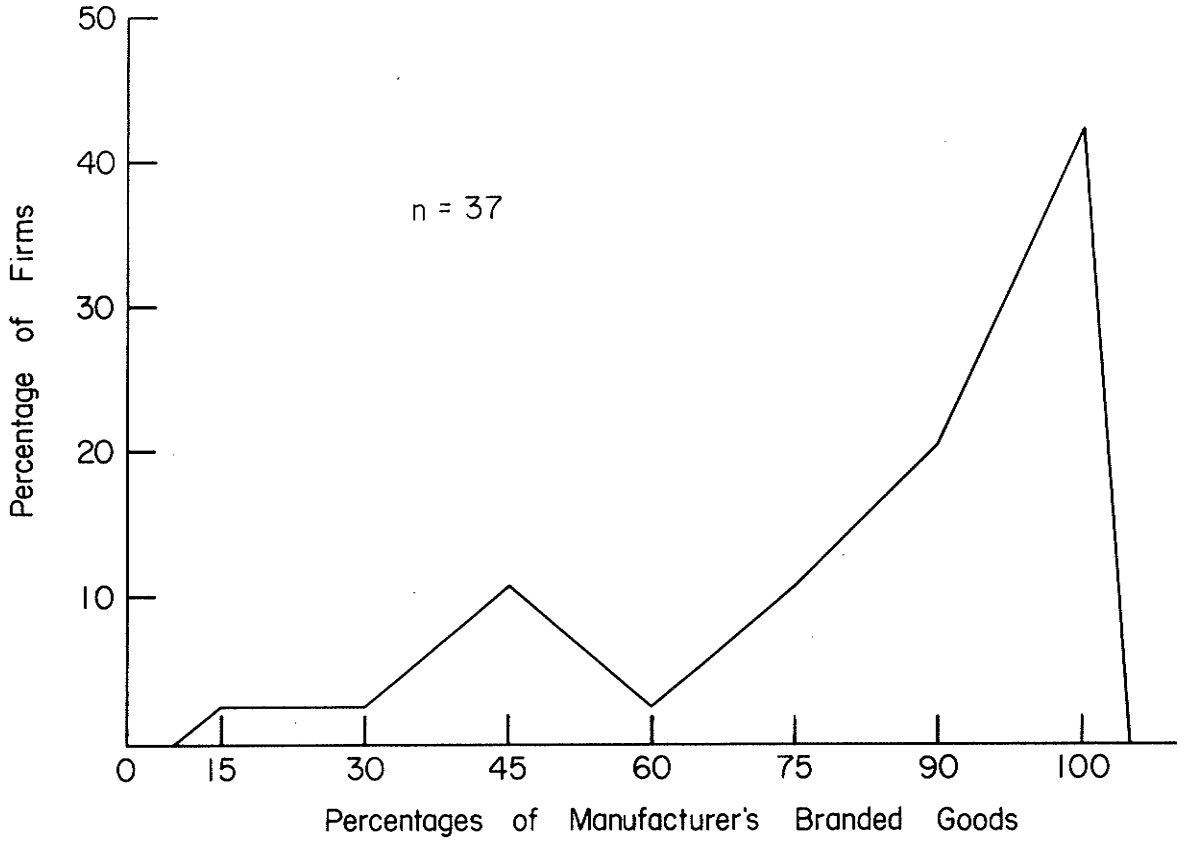


Figure 4.2 Frequency polygon showing percentages of manufacturers brands produced by surveyed firms.

vate label goods, ranging from five to eighty percent of total production.

4.4.7 Contracting for Private Labels

Product plans for private labels can be classified as jointly planned between manufacturer and retailer, left up to the manufacturer, or specified by the retailer. Respondents were asked to indicate the frequency of occurrence of each planning method. These responses were then classified in general terms for frequency of use, resulting in the four categories of "often", "sometimes", "seldom" and "never". Table 4.7 illustrates the percentage of firms and their frequency of use of each of the three product planning methods.

TABLE 4.7

PERCENTAGE FREQUENCY OF FIRMS USING EACH OF THREE PRODUCT PLANNING METHODS

Product Planning Method	Percentage Frequency of Occurrence			
	Often	Sometimes	Seldom	Never
Joint product planning n = 37	24.3	21.6	2.7	51.4
Planning left to manufacturer n = 37	24.3	13.5	0.0	62.1
Product specified by retailer n = 37	18.9	5.4	8.1	67.6

Joint product planning and planning by the manufacturer were mentioned by an equal percentage of firms as occurring "often", while planning by retailers was mentioned as occurring "often" by fewer firms.

Specification of products by retailers was mentioned by the least number of firms. Manufacturers may have, in some cases, borrowed retailers' ideas

for new products and reinterpreted them in their own lines. Responses to this question, however, indicated a more symbiotic relationship between retailers and manufacturers in the area of product planning. Retailers' influence may have been more strongly felt in the "booking" season, when their feedback was very important in determining the product mix. Manufacturers often dropped those items which were not well received producing only orders of optimum size.

4.4.8 Imports

About 30% of surveyed manufacturers imported some goods for sale under their own brand names. Almost 19% of firms imported from one to fifteen percent of total goods, while 11% imported from sixteen to thirty-five percent of total goods.

Table 4.8 shows the percentage of firms which have been importing for different periods of time.

Over half of importing firms have been buying foreign goods for more than five years. Although no data were collected on the age of firms, several firms indicated that importing was a regular function of business from the date of the firms' establishment. Many of these firms regularly imported goods to complement domestic lines, and not as a reaction to the economy or government policy. These firms imported certain goods which they could not practically produce at home. About 14% of firms have imported the same percentage of goods each year since they began importing, with small fluctuations governed by fashion cycles. For example, a firm might have imported sweaters as an integral part of its lines, with slight increases in volume imported in years when sweaters were more fashionable than other items.

There was some indication during interview-schedule pretesting that some firms were increasing imports as a reaction to a lack of clear-cut

TABLE 4.8

DISTRIBUTION OF FIRMS IMPORTING FOR DIFFERENT TIME PERIODS

n = 37

Time Importing	Percentage of Firms
1 Year or Less	5.4
2-5 Years	8.1
6-10 Years	5.4
11-15 Years	2.7
16-20 Years	2.7
21 Years or More	5.4
	29.7
Do not import	70.3
	100.0

government policy about industry protection. Although none of the surveyed firms mentioned this, about 8% of firms had increased the amount of imported goods over the last five years. Another 8% indicated that imports would increase in the future. Some managers suggested that government had not been responsive to requests made by the industry for tightened control on competing imports, despite periodic policy reviews conducted since 1977. This lack of a firm commitment to protection of domestic firms in the future had led some firms to diffuse risk by increasing or making plans to increase their own imports.

4.4.9 Exports

Figure 4.3 shows the amounts of goods exported by firms pursuing export markets. Almost 25% of firms exported less than 9% of their goods.

About half of sampled firms exported some goods, while about 10% had plans to export in the future.

4.4.10 Planning Apparel Products - Summary

Surveyed firms were predominantly small and privately owned with the owner/manager alone responsible for decisions about products. They produced from one to seven product groups, the most frequent type being men's and boy's wear. The most common category was outerwear for both men's and ladies'. Manufacturers usually limited their seasons to two per year.

In general, managers failed to exploit product life cycle theory or develop brand awareness strategies. They preferred to lay blame or praise for product planning on retailers and took a casual approach to promoting their goods.

4.5 CHANGES IN OPERATIONS OVER TIME

Data outlining changes in operations over time provided measures for evaluating firm success. Combined with data on research practices, this information also helped profile firms' orientations toward systematic and intuitive decision-making.

Areas examined included employment dollar value of shipments, management approach, and long-term planning.

4.5.1 Changes in Employment Over Time

Figure 4.4 shows the percentage change in employment between 1981 and 1982, using 1981 as a base. While most firms registered no change, indicating no growth, almost 40% of firms lost some employees or reduced working hours

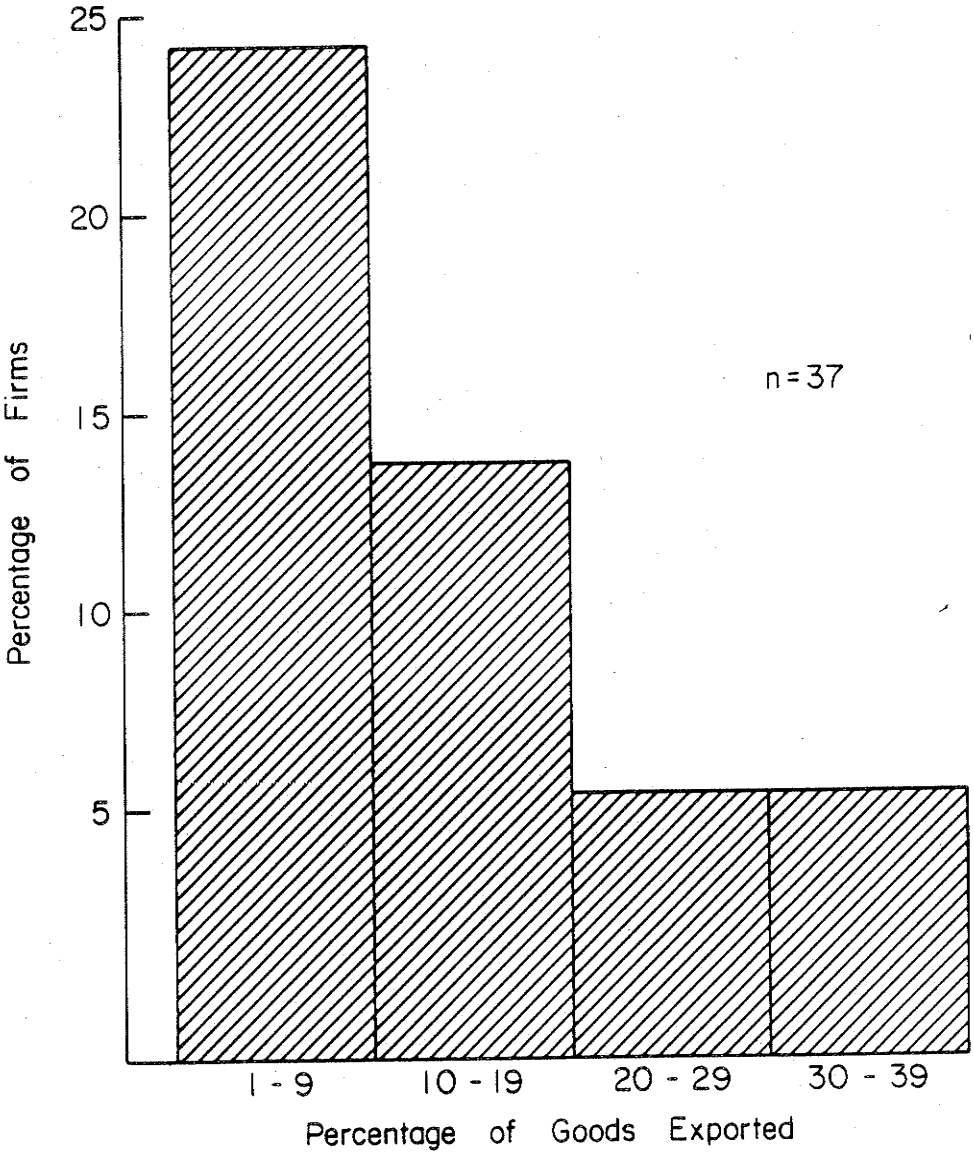


Figure 4.3 Histogram showing percentage of exporting firms by volume exported.

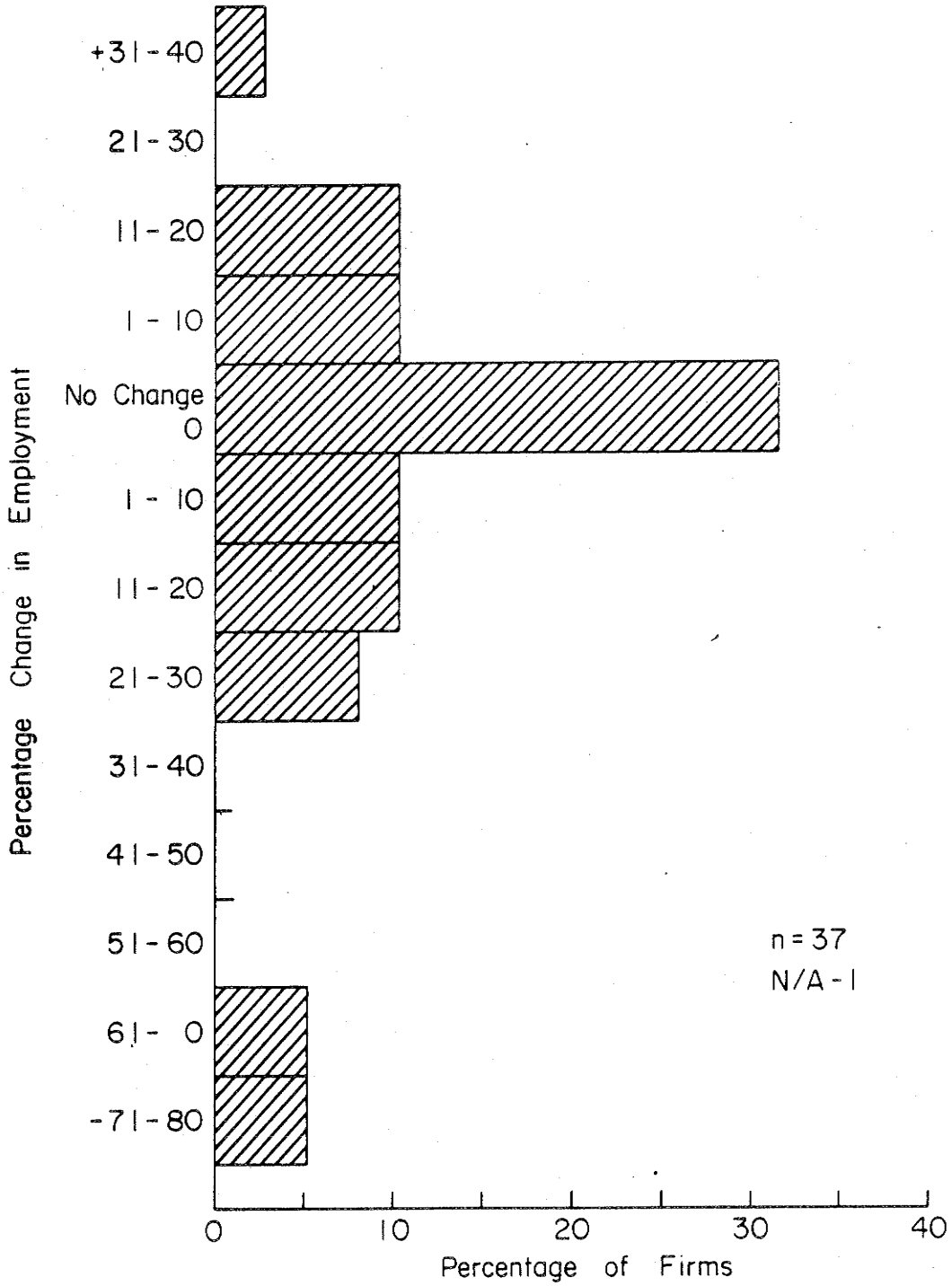


Figure 4.4 Histogram showing positive and negative percentage change in employment from 1981 to 1982.

in this period. Only about 25% of firms registered an increase in employment.

Figure 4.5 shows the percentage change in employment over the five-year period from 1977 to 1982, using 1977 as a base. While most firms registered increases of from one to fifty percent, a few firms more than doubled their numbers of employees. Over 60% of firms showed employment growth, while about 25% of firms decreased in size. About 20% of surveyed firms did not respond in specific terms to this question, but most firms indicated that there was growth in number of employees from 1977 until about 1981, when economic changes forced shutdowns, layoffs, or the introduction of work sharing. Employees who participated in work-sharing programs worked part-time, their salaries subsidized by government. Work-sharing programs were often adopted in preference to layoffs.

Some firms which registered no change over the five-year period had actually regressed to 1977 levels, after a period of steady growth in employment in the late seventies.

4.5.2 Changes Over Time in Dollar Value of Shipments

While available jobs may have been reduced, in part, through automation or attrition, the percentage change in real dollar value shipped over time showed a similar pattern to changes in employment over the same period.

Percentage changes in dollar value of shipments over the five-year period were recorded, and figures were adjusted, where necessary, to real dollars, using Consumer Price Index figures for the period. This method allowed for the effects of inflation on the value of the dollar (see Appendix V).

Figure 4.6 shows the percentage change in dollar value of shipments from 1981 to 1982, using 1981 as a base. Almost 50% of firms showed percentage

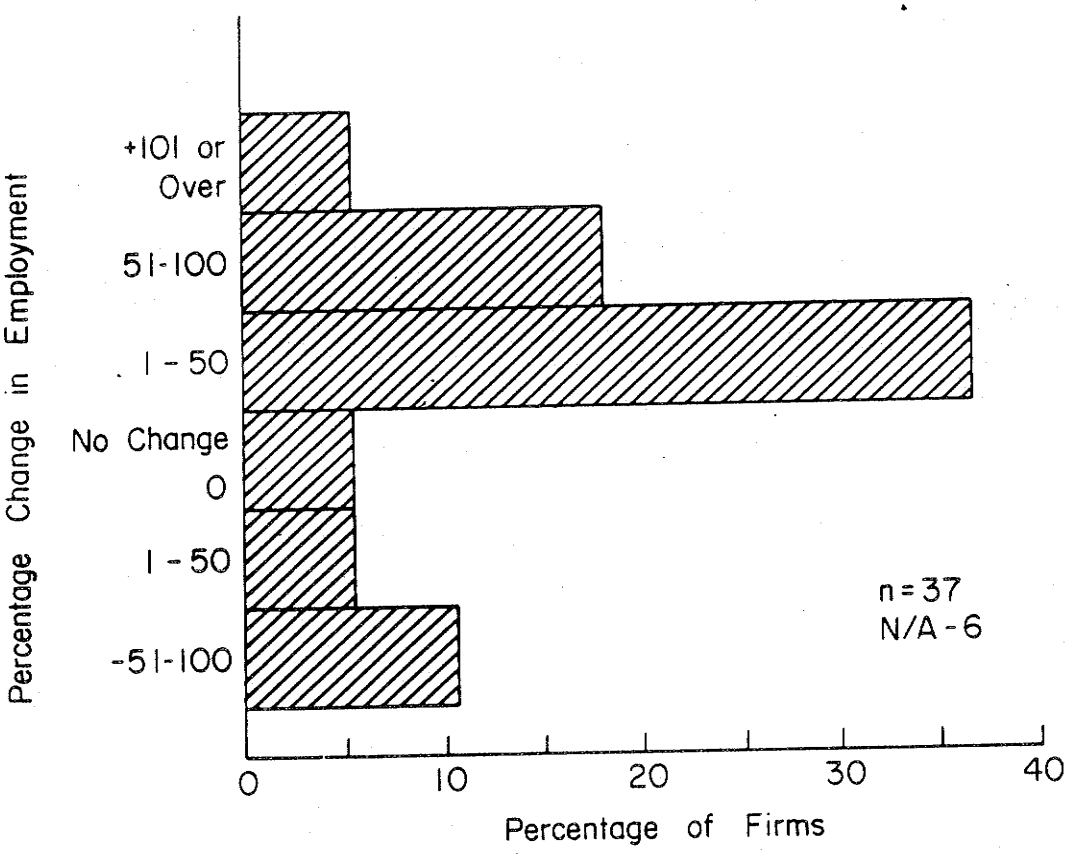


Figure 4.5 Histogram showing positive and negative percentage change in employment from 1977 to 1982.

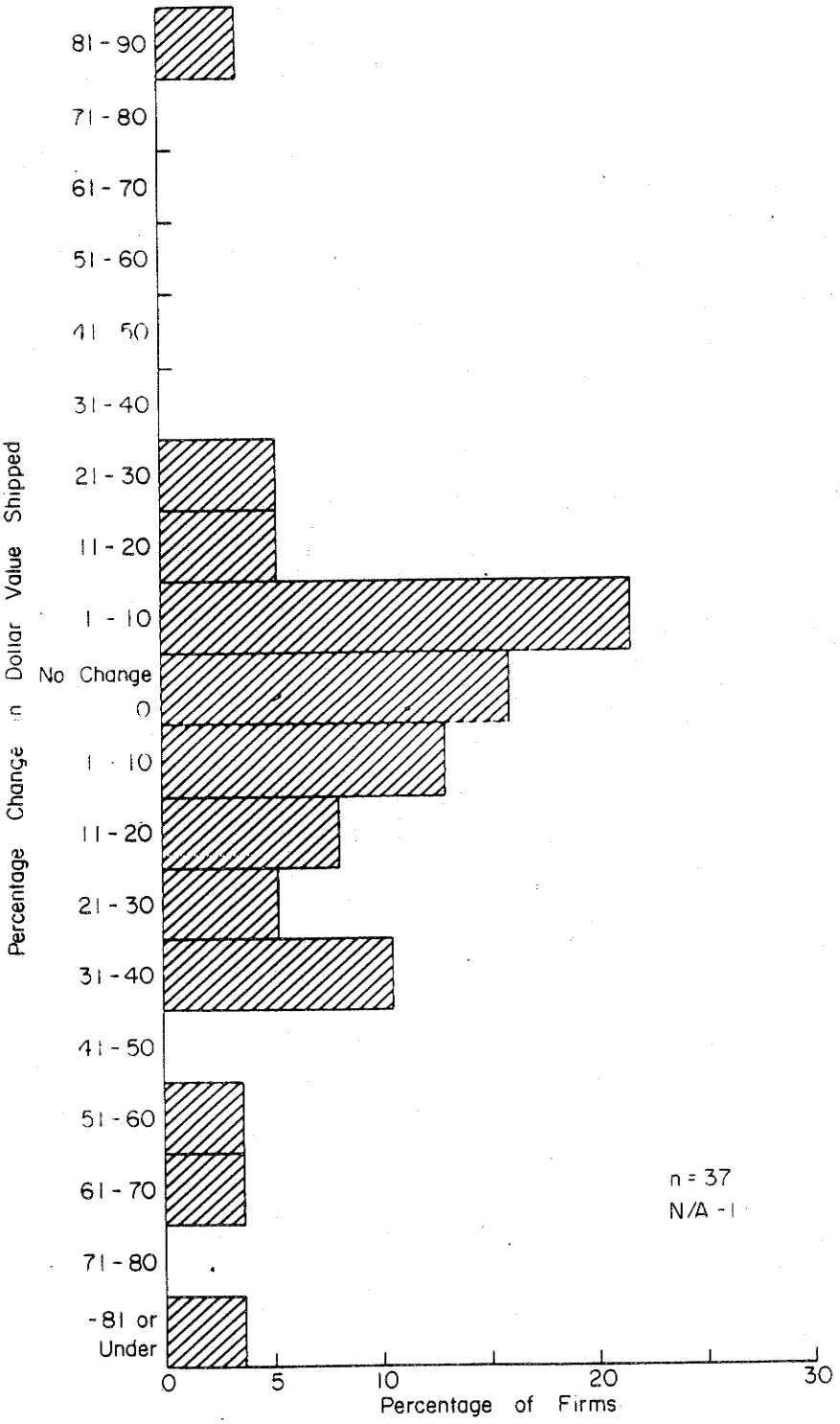


Figure 4.6 Percentage change in value shipped (real dollars) from 1981 to 1982.

changes of between plus and minus ten percent. While about 13% of firms registered real growth in dollar value of shipments, about 37% showed a decrease of more than ten percent in real dollars. Taken in combination with employment changes, these changes reflected a poor year in terms of growth for most surveyed firms.

A few firms exhibited unusual growth during this period. These firms had little in common in terms of size, products made, location or structure. They did, however, have several other characteristics in common. These included the use of detailed computerized sales information systems and consulting services. Managers also expressed their internal information in terms of dollars rather than units. These firms also produced more than two seasons per year and monitored product rather than seasonal life cycles.

Figure 4.7 shows the percentage change in real dollar value of shipments over the five-year period from 1977 to 1982, using 1977 as a base. Just under 40% of firms showed a decrease in dollar value shipped, while about 50% showed an increase or no change.

These changes do not reflect growth which may have occurred between 1978 and 1981. However, they are similar to employment changes over the same time period in that several firms showed decreases in both employment and real dollar terms.

Reasons for Change in Value of Shipments

Since respondents were, in many cases, accounting for both growth and decline in shipments over a five-year period, they cited positive and negative influences as responsible for these changes. Positive and negative factors were cited with almost equal frequency.

In Figure 4.8, responses have been divided into positive and negative, as well as internal and external factors. This figure shows that firms clearly

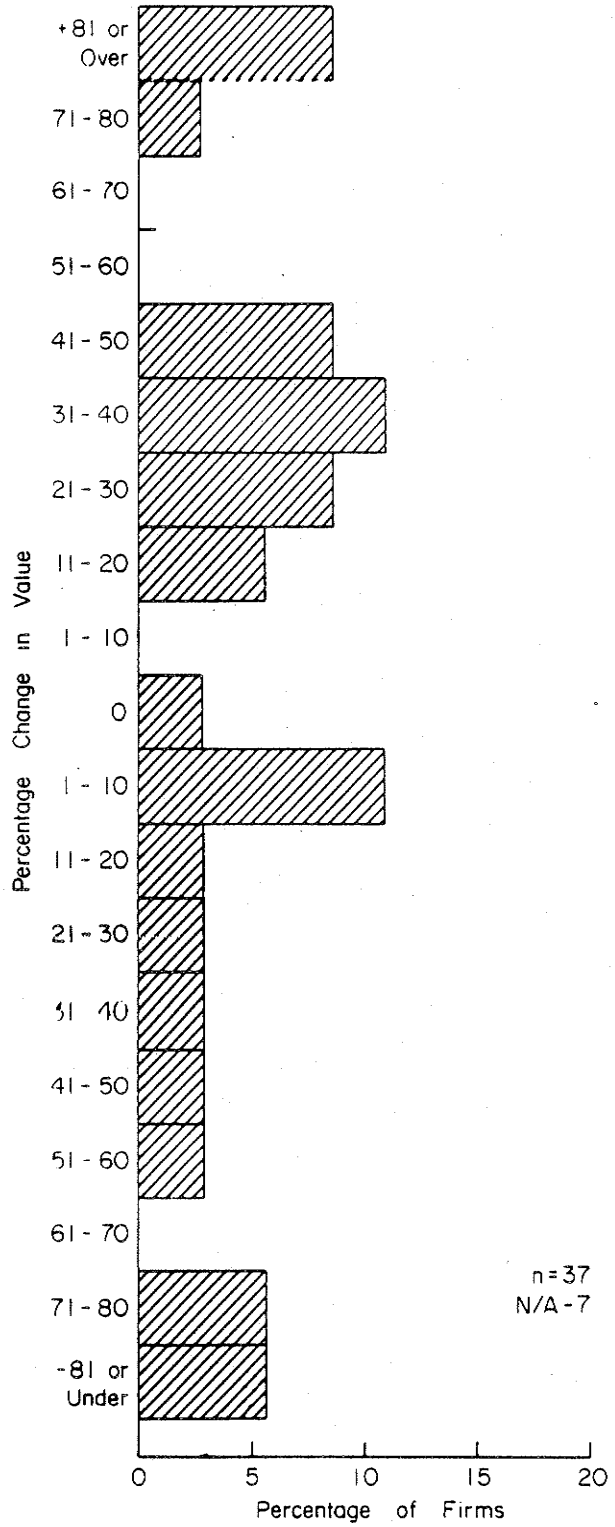


Figure 4.7 Percentage change in value shipped (real dollars) from 1977 to 1982

FIGURE 4.8

PERCENTAGE FREQUENCY OF RESPONSES:
FACTORS INFLUENCING VALUE SHIPPED

N = 73

	INTERNAL	EXTERNAL
POSITIVE	52.1%	1.3%
NEGATIVE		46.6%

refused to acknowledge the possibility of negative internal factors as responsible for declines in business. Firms were willing to take credit for positive growth, but blamed external factors almost entirely for negative trends. The exception to this was an acknowledgement that, because of external economies, competition had dropped out in some areas, resulting in increased business for remaining firms.

Factors Responsible for Negative Trends

Table 4.9 shows the categories of external or environmental factors which firms cited as responsible for decreases in value of shipments.

TABLE 4.9

EXTERNAL FACTORS CONTRIBUTING TO NEGATIVE CHANGES IN VALUE SHIPPED

n = 34

External Environment	Percentage of Responses
Legal/Political Environment	14.7
Economic Environment	73.6
Social Environment	2.9
Competitive Environment	5.9
Other Environmental Factors	2.9
	100.0

Firms attributed responsibility for declines in value shipped to economic factors in 74% of responses. The most common response in this area was simply "the economy" followed by retail buyers' refusal to carry inventory in 1981 and 1982.

A shrinking market for apparel products was the result of chain and specialty store policies of reducing inventories in the early 1980's. High interest rates and increased inflation led to rising costs for carrying large inventories, and retailers responded by reducing order size. Stores reduced costs by ordering smaller amounts of goods, later in each season, so manufacturers could not count on the large orders they had previously received, or early committments from large chains. Some managers of smaller firms mentioned that the ability of their firms to be flexible, or to produce "hot" items on short notice, was an important factor in their survival during this period. These firms were better able to respond to

retailers' modified buying patterns.

About 15% of responses cited government policy, or lack of governmental commitment to the apparel industry, as an important negative influence. While some manufacturers felt that federal policy favored Quebec apparel firms in particular, most managers mentioned federal policy on imports as their greatest concern in this area. Some Western manufacturers felt that federal policy makers were unaware of the numbers and concerns of Western apparel firms.

Others were afraid of committing extra resources to their firms because of their dependence on continued protection from competing imports which they felt had not been guaranteed.

Factors Responsible for Positive Trends

Since factors cited as positive influences on dollar value of shipments were overwhelmingly internal, these factors were classified in terms of corporate and marketing changes. The percentage distribution of responses about positive changes, both internal and external, is shown in Table 4.10.

Table 4.10 shows that corporate changes accounted for over 40% of responses about factors which increased value shipped. Changes in organization and management included new, more aggressive managers, and new approaches to overall strategies, such as increased goal orientation or management by objectives. These changes indicated a shift on the part of some firms to more systematic management. This shift, however, was not necessarily reflected in their approach to product modification, the most frequently mentioned change in the marketing area.

Some firms, while doing fairly steady business in their staple products, monitored and researched changes in demand through their sales forces, and began to explore new but related market niches. For example, a few firms introduced the same product types at price points more in keeping with

TABLE 4.10

EXTERNAL AND INTERNAL FACTORS CONTRIBUTING TO POSITIVE CHANGES IN VALUE SHIPPED

N = 39

Categories	Percentage of Responses	
External		
Industry Changes		2.6
Internal		
Corporate Changes		
Organizational and Management Changes	15.4	41.0
Technological and Production Changes	25.6	
Marketing Changes		
Approach to Markets	12.8	56.4
Product Mix	25.6	
Channels of Distribution	2.6	
Sales Organization	7.7	
Pricing Policy	5.1	
Promotion Strategy	2.6	
		100.0

economic trends. However, managers also described situations where product mix alterations were forced upon them by declining sales of staple items. These managers tended to maintain the status quo without regard to researching market trends, and their belated responses resulted in substantial losses in sales. For example, firms producing casual pants suffered lost sales with the rise in popularity of designer jeans around 1980. These

firms also lost sales to active wear producers when demand for these items for casual wear increased. While these managers may have perceived their "wait-and-see" approach as a risk reduction tactic, their failure to monitor trends efficiently resulted in declining sales, lost opportunities for exploiting new market niches, and additional expenses incurred in changing product groups.

The market approach sub-category encompassed about 13% of responses, and included changing markets, building loyal followings in new market niches, and increasing firms' market contact.

Technological changes were more frequently mentioned, accounting for over 25% of responses. Changes included increased automation, refined engineering, increased plant capacity and plant re-organization.

Expectations for 1981 and 1982

Respondents were asked if their expectations for dollar value of shipments for 1981 and 1982 were met, and if not, by what percentages their values were above or below forecast levels.

Figure 4.9 shows the distribution of firms in relation to the degree to which their expectations were met. About 32% more firms met their expectations in 1981 than 1982. While 40% of firms failed to meet expectations in 1982, only 8% were below forecasts in 1981. In 1981, 22% of firms did better than expected, but only half that percentage exceeded expectations in 1982.

Some firms were not included in Figure 4.9 because their responses were not precise. However, while 17% of managers could not remember precise percentages for 1981, 11% of firms did not forecast at all for 1982, in contrast to their 1981 practices. Many firms which did not forecast in 1982 saw business declining and were more concerned with their survival in a bad year than with forecasting. Retailers' changing inventory policies made it hard for

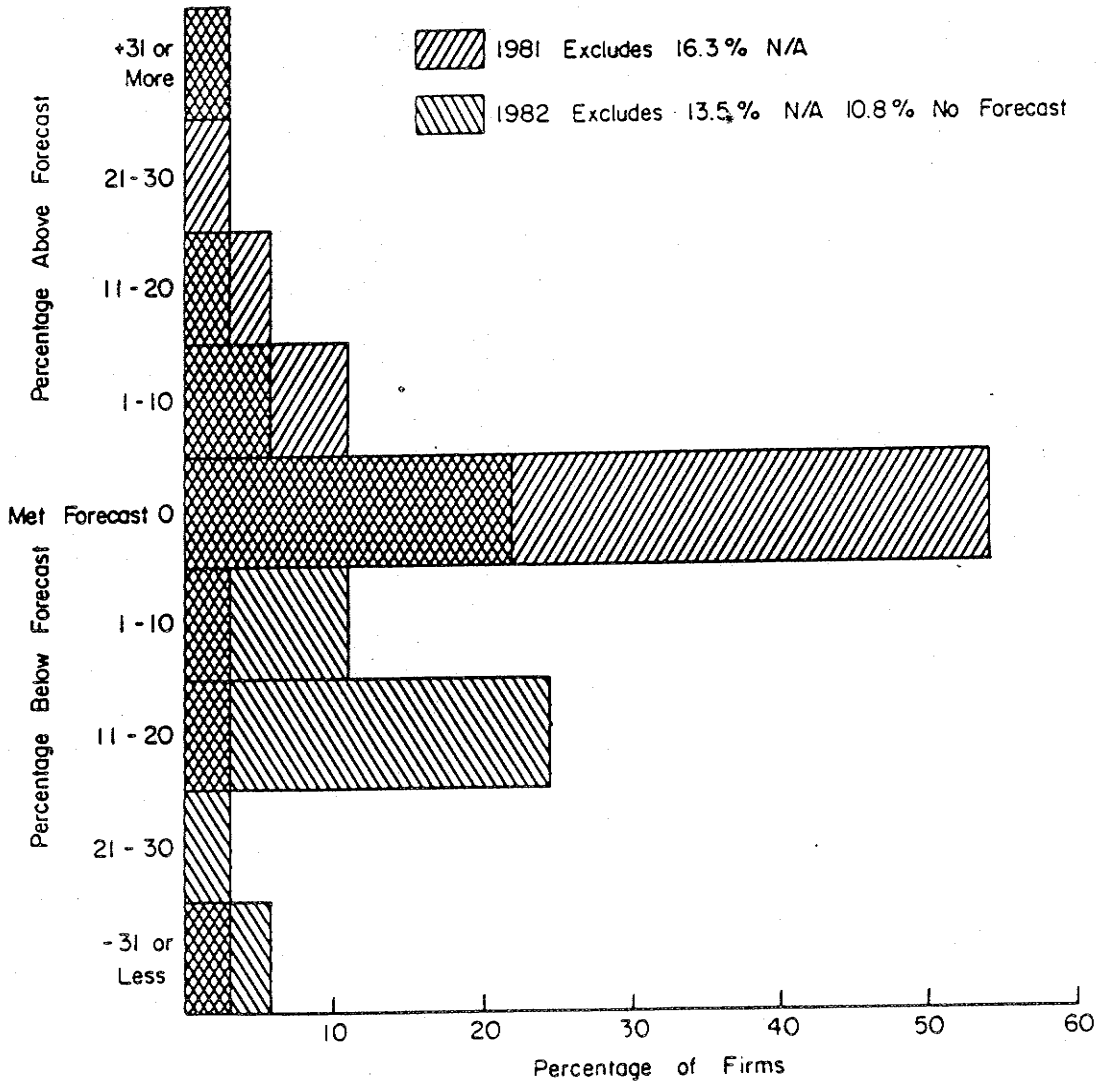


Figure 4.9 Expectations for 1981 and 1982 (Dollar value of shipment forecasts).

these firms to predict business, based on past sales, with any accuracy.

Firms were also asked about expectations in 1977, but almost 80% could not remember or felt the comparison with 1982 would be unfair.

4.5.3 Changes in Management Approach

Table 4.11 illustrates the types of changes which managers had introduced from 1977 to 1982. The two most common types of changes were in the area of organizational strategy.

TABLE 4.11

CHANGES IN MANAGEMENT APPROACH OVER THE LAST FIVE YEARS

N = 45

Changes		Percentage of Response
Organizational Strategy		
Management Changes	17.8	
Organizational Changes	22.2	44.4
Periodic Reassessment	4.4	
Marketing Strategy		
Overall Strategy	8.9	
Product Strategy	15.6	28.9
Distribution Strategy	2.2	
Sales Organization	2.2	
No Change		26.7
		100.0

Management Changes

In a few family-owned firms, management changes took place as a matter of course, with management in transition from one generation to the next. Young owner/managers had hired other new managers, and were combining old approaches with new ones. In some cases, firms were represented by older managers, while in others, younger managers were interviewed. There was a general consensus that younger managers brought increased energy and aggressiveness, as well as new ideas, to these firms. Typical statements were "We are not afraid to try new ideas now" and "The firm is more in touch with the marketplace and more efficient because of new managers". However, no concrete examples were offered to support this premise. For firms in transition, necessity may have forced older and younger managers to take similar approaches to problem solving, and younger managers groomed for takeover may have absorbed many techniques from their mentors.

There was no particular trend in changes in structure of management teams for surveyed firms. Some firms, perhaps in response to economic trends, had reduced staff, while others, with a view to increasing professionalism, had expanded their management teams.

Organizational Changes

Organizational changes refer to changes in the structure or functions of the firm, as opposed to changes in personnel. These changes included the centralization of decision-making powers and increased emphasis on managerial goals and objectives. Some managers had, partly as a consequence of growth, delegated authority with increasing frequency, so the decision-making power became gradually less centralized. Changes in labour's organization, such as the introduction of work sharing, was also included in this category.

Changes in Marketing Strategy

Marketing strategy changes accounted for about 9% of responses and included increased attention to the marketing function, and movement into new markets, including export markets. Other changes in the areas of product mix, distribution and sales were usually made as specific reactions to changing market conditions or special problems within the firm. Product strategy changes, which accounted for about 16% of responses, often resulted from extreme shifts in consumer demand, or personnel changes within the firm.

About 27% of firms indicated no change at all in management approach. While most of these firms seemed satisfied with the status quo, a few indicated that lack of a clear-cut government policy on future protection of domestic firms inhibited plans for change.

Only 4% of firms indicated that short- and long-term goals were periodically re-assessed as a matter of course.

4.6 LONG- AND SHORT-RANGE PLANNING

4.6.1 Short-Range Plans

Table 4.12 shows the areas in which firms had short-range plans for change. About 42% of responses involved no specific plans other than consolidation or growth. Some firms indicated that all future plans had been put "on hold" because of economic conditions. While 19% of responses involved specific plans for the marketing function, only 9% involved one-to-five year marketing plans.

The most common type of plan, under the heading of organizational strategy, was that of changing plant operations or equipment.

TABLE 4.12

SHORT-RANGE PLANS

N = 46

Plans	Percentage of Responses	
Organizational Strategy		
Management Changes	6.5	
Organizational Changes		
Managerial	4.3	39.1
Labour-Related	2.2	
Operations		
Plant	15.2	
Information Management	2.2	
Financial	8.7	
Marketing Strategy		
Marketing Plans	8.7	
Entering New Markets	2.2	
Product Strategy	2.2	19.6
Distribution	2.2	
Sales Organization and Promotion	4.3	
No Plans		41.3
		100.0

4.6.2 Long-Range Plans

Table 4.13 shows the types of long-range plans mentioned by surveyed firms. Over half of responses indicated no long-range plans, while about 36% indicated plans for organizational changes. Of these, 19% were long-range corporate plans.

TABLE 4.13

LONG-RANGE PLANS

N = 42

Plans	Percentage of Response	
Organizational Strategy		
Corporate Plans (3-10 yr.)	19.0	
Acquisition	2.4	35.7
Reassessment	4.8	
Technological Changes	9.5	
Marketing Strategy		
Product Strategy	9.5	11.9
New Markets	2.4	
No Plans	52.4	52.4
		100.0

4.6.3 Management - Summary

Surveyed firms blamed economic factors for decreases in sales, refusing to acknowledge any weakness in their own management approach. Generally, their approach was unsystematic, and very few had future plans. Most preferred to maintain the status quo rather than exploit new markets, and their

attempts at rationalization most often centred on physical production or corporate goals. They responded to recession by reducing rather than increasing formal or systematic planning.

CHAPTER V

RESULTS: MARKETING RESEARCH AND INFORMATION

5.1 INTRODUCTION

The central aim of this study is to explore the research activities of apparel firms and to relate these activities to other aspects of their operations. Descriptive statistics profiling research activities are presented in this chapter, along with results of the testing of null hypotheses.

5.2 MARKETING INFORMATION

5.2.1 Information for Planning and Evaluating Products

More than twenty information sources were mentioned by managers as aids in planning and evaluating products. Some of these sources were cited repeatedly in response to other questions about information for marketing decisions. Information sources have been classified as internal or external to the firm, and further categorized in light of contemporary marketing theory (Segal, 1980). Table 5.1 shows the classification developed for sources used by surveyed firms to gather marketing information.

Table 5.2 shows the percentage distribution of responses about sources used for planning and evaluating products, as classified above.

Research for planning products was often done through other channel members, most notably retailers. The second most common information source in this category was sales agents, who in turn conveyed information from retailers to manufacturers.

Mentioned with equal frequency was the category of auxilliary fashion

TABLE 5.1

CLASSIFICATION OF INFORMATION SOURCES

Classification	Information Sources
I Internal Information	
1. Sales and Pricing Information	Rate of Sale systems Monitoring of Best Sellers Firm pricing policies
2. Gut Reaction	"Feel" or "Know" information which managers described as guiding decisions
II External Information	
1. Other Channel Members	Raw material suppliers Sales Agents Retailers
2. Auxilliary Fashion Enterprises	Fashion agencies, Colour services, Consulting firms, Trade shows, Fashion shows, Trade journals, Magazines, Advertising agencies, Sales agencies, Merchandise Marts
3. Competition	Casual Observation, Comparison Shopping, Other Manufacturers, Competitors' Best Sellers and Promotional Material
4. Market Contact	Test Marketing Market Surveys Travel to Markets Travel to Fashion Centres Trade Missions Information from Parent Companies or Licensing Agencies Direct Contact with Ultimate Consumers
5. Government Sources	Information from Foreign or Domestic Governments

TABLE 5.2

DISTRIBUTION OF RESPONSES FOR SIX INFORMATION CATEGORIES USED IN PLANNING THE PRODUCT MIX

N = 117

Information Category	Percentage of Responses
I Internal Information	
1. Sales and Pricing Information *Price Points (5.9 %)	12.0
2. Gut Reaction	5.1
II External Information	
1. Other Channel Members *Retailers (10.2 %)	23.9
2. Auxilliary Fashion Enterprises *Trade Journals and Magazines (10.2 %)	23.9
3. Competition *Promotional Material (2.5 %)	8.5
4. Market Contact *Travel to Fashion Centres (17.0 %)	26.6
	100.0

*Most frequently mentioned source in each category expressed in percentage of total responses.

enterprises, especially trade journals and magazines. Many manufacturers subscribed to European magazines and used them to predict what would be in vogue in local markets. Several firms mentioned that European styles were often adapted for local markets, but that the Canadian market was from one to two years behind Europe in adopting trends. Other important sources in this category were information from colour services or fashion agencies, usually foreign. These services and agencies provided periodic reports on major trends in colours and styles for coming seasons, by monitoring market activity, as well as social, artistic, and economic developments. Visits to trade and fashion shows, often in the United States, were also important in this category.

Reliance on foreign sources of information was also evident in the most commonly mentioned category of market contact, where travel to fashion centres was the most frequent response. Many manufacturers travelled to Europe and Hong Kong, while others scouted American markets for ideas.

Many manufacturers readily admitted that originality was not important to them, describing their styling as "historical" or "cyclical". Innovative European styles were often modified for the "conservative" local market, on the assumption that conservative styling reduced risk. This philosophy made it less attractive for manufacturers to explore new market niches. Some manufacturers were hesitant to try new colours or styles on the assumption that market acceptance was unchanged over time. They viewed domestic market research as less important than exploring foreign trends, because they "knew" what would be accepted locally, or had "defined markets".

5.2.2 General Market Information

Table 5.3 shows the responses for information categories used in monitoring general market trends. The most frequently mentioned category of

TABLE 5.3

DISTRIBUTION OF RESPONSES FOR SEVEN INFORMATION CATEGORIES USED IN MONITORING THE MARKET

N = 72

Information Category	Percentage of Responses
I Internal Information	
1. Sales and Pricing Information *Sales Information (4.2%)	4.2
2. Gut Reaction	6.9
II External Information	
1. Other Channel Members *Retailers (18.0%)	32.0
2. Auxilliary Fashion Enterprises *Trade and Fashion Shows (5.5%)	11.1
3. Competition *Comparison Shopping (1.4%) Other Manufacturers (1.4%)	2.8
4. Market Contact *Direct Contact with Consumers (6.9%)	26.4
5. Government Sources *Census Data (5.5%)	6.9
6. Not Interested	9.7
	100.0

*Most frequently mentioned source in each category, expressed in percentage of total responses.

response was other channel members, especially retailers, followed by market contact, most often direct contact with consumers. Because several firms had their own retail outlets or factory outlets, consumer contact was important in this category. Travel to fashion centres and trade and fashion shows accounted for about 15% of responses, with market surveys accounting for only 3% of responses.

Probes for information about researching new market potential revealed that the usual approach of manufacturers was to focus on geographical-expansion strategies. Expanding the total market was usually perceived as a process of physically opening up new territories, rather than using market-penetration or new market approaches. Very few managers employed these strategies to attract new users.

5.2.3 Information about Consumers

Manufacturers relied heavily on other channel members, most often retailers, for information about the ultimate consumer. Table 5.4 shows the responses for categories of information about the ultimate consumer, with other channel members accounting for 50% of responses. While about 25% of responses indicated that market contact was important, less than 5% of information was obtained through market surveys. Some manufacturers explained that the Canadian market was too small to warrant expensive market surveys which some American companies conduct. Only one manufacturer suggested that retail buyers might be fallible as information sources about consumer wants and needs.

Figure 5.1 shows information sources about consumers classified as primary or secondary, and direct or indirect. Over half of responses were in the primary but indirect category. These responses reflected the power of retailers in the marketing channel for firms which had no opportunity for

TABLE 5.4

DISTRIBUTION OF RESPONSES FOR SIX INFORMATION CATEGORIES FOR DATA ABOUT ULTIMATE CONSUMERS

N = 48

Information Category	Percentage of Responses
I Internal Information	
1. Sales and Pricing Information *Sales Information (2.1%) *Price Points (2.1%)	4.2
2. Gut Reaction	8.3
II External Information	
1. Other Channel Members *Retailers (35.4%)	50.0
2. Auxilliary Fashion Enterprises *Fashion Agency Information (4.2%) *Trade Journals and Magazines (4.2%)	10.4
3. Competition *Comparison Shopping (2.1%)	2.1
4. Market Contact *Direct Contact with Consumers (16.6%)	25.0
	100.0

*Most frequently mentioned source in each category, in percentage of total responses.

N/A = 1

direct consumer contact through their own retail outlets.

FIGURE 5.1

INFORMATION SOURCES ABOUT CONSUMERS

N = 48

	DIRECT	INDIRECT
PRIMARY	(4.2) Test Marketing (4.2) Market Surveys (16.6) Direct Consumer Contact 25.0%	(35.3) Retailers (12.5) Sales Agents (2.1) Raw Goods Suppliers (2.1) Comparison Shopping 52.0%
SECONDARY	4.2% (2.1) Sales Information	10.5% (4.2) Trade Journals Magazines (4.2) Fashion Agencies (2.1) Trade Association Shows

Gut Reaction

8.3%

N/A = 1

5.2.4 Sales Information

Surveyed firms monitored sales information in several ways. These ranged from estimates based on intrinsic knowledge of the firm's production, to sophisticated computer data bases which relayed detailed retail sales information to manufacturers on a regular basis. Sales information was categorized by product characteristics such as style, fabric, colour, size, or commodity, or by sales division such as territory or store type. Some firms kept track of sales in terms of corporate or production goals, that is by

units, dollar value, or the type of production used.

For some manufacturers, sales information was viewed only as a reflection of inventory or production processes. For example, a manufacturer might monitor fabric used and sizes cut for physical inventory control and ordering needs, rather than as product planning information. Order processing or inventory control information was also used by managers who estimated sales from their general knowledge of plant operations. Figure 5.2 shows the percentage of total responses for each sales information category.

5.2.5 Forecasting Sales

About 14% of firms did not forecast sales, but most firms used some form of forecasting. The type of forecasting ranged from general forecasts of total sales to very detailed forecasts based on computerized retail sales tracking.

The most common type of forecast was a general forecast of total sales, which was used by just under 46% of firms. The remaining 40% of firms did some forecasting in specific areas.

Table 5.5 shows the categories used by the 40% of firms which employed specific forecasts.

Table 5.5 excludes firms using no forecasts (14% of total) and firms using general forecasts of total sales (46% of total).

Some firms indicated that 1982 was an unusual year in that sales goals were secondary to concern about survival. However, these firms have been classified by their usual forecasting policies.

5.2.6 Information about Competitors' Activities

Information about competition was most often obtained through other channel members, primarily retailers and manufacturers' agents. Many respondents indicated that this type of information was obtained casually or

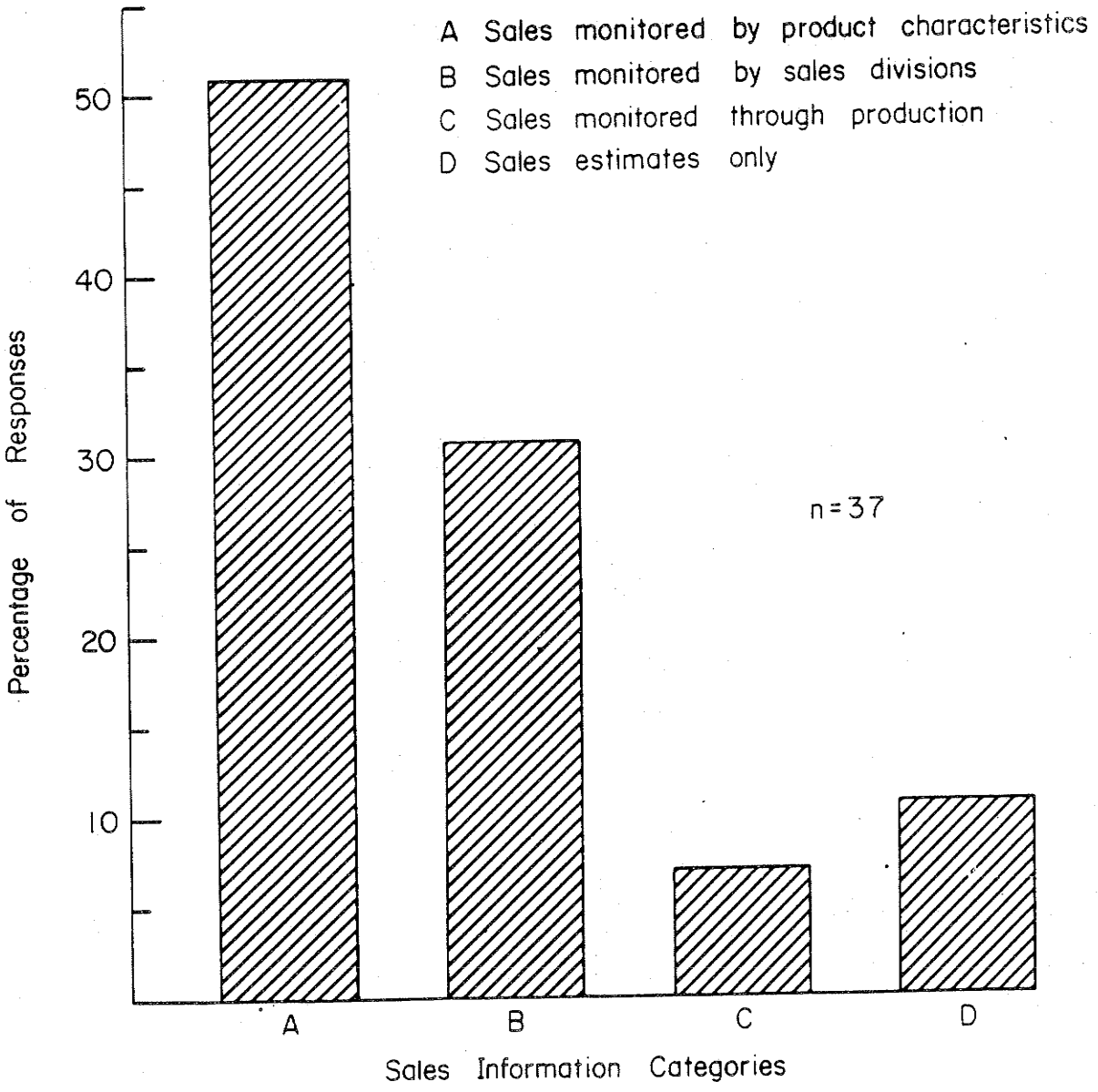


Figure 5.2 Bar chart showing distribution of responses for four categories of sales information.

TABLE 5.5

DISTRIBUTION OF CATEGORIES USED BY FIRMS FOR SPECIFIC FORECASTING OF SALES

N = 15

	Forecasting Categories	Percentage of Firms*	
A	Division of firm	25.0)	
	Territory	20.0)	60.0
	Store	15.0)	
B	Order Processing or Inventory		15.0
C	Price Range	5.0)	10.0
	Sales Potential (Best Sellers)	5.0)	
D	Rolling Data Base (Detailed Forecasts)		15.0
			100.0

*Percentage of those firms using specific forecasts (40% of total).

that they knew through past experience, what competitors' policies were. Figure 5.3 shows the information sources and methods used by surveyed firms.

5.2.7 Promotion and Promotion Information

Table 5.6 shows the types of promotion used by manufacturers. Almost 30% of responses concerned promotion of the physical product, such as branding, hang tags, packaging, and logos. Close to 40% of responses centred on some form of advertising, with print accounting for over half this category. Although managers were not specifically asked about promoting sales to retailers, about 8% of responses concerned cooperative advertising with retailers, while about 2% cited volume discounts.

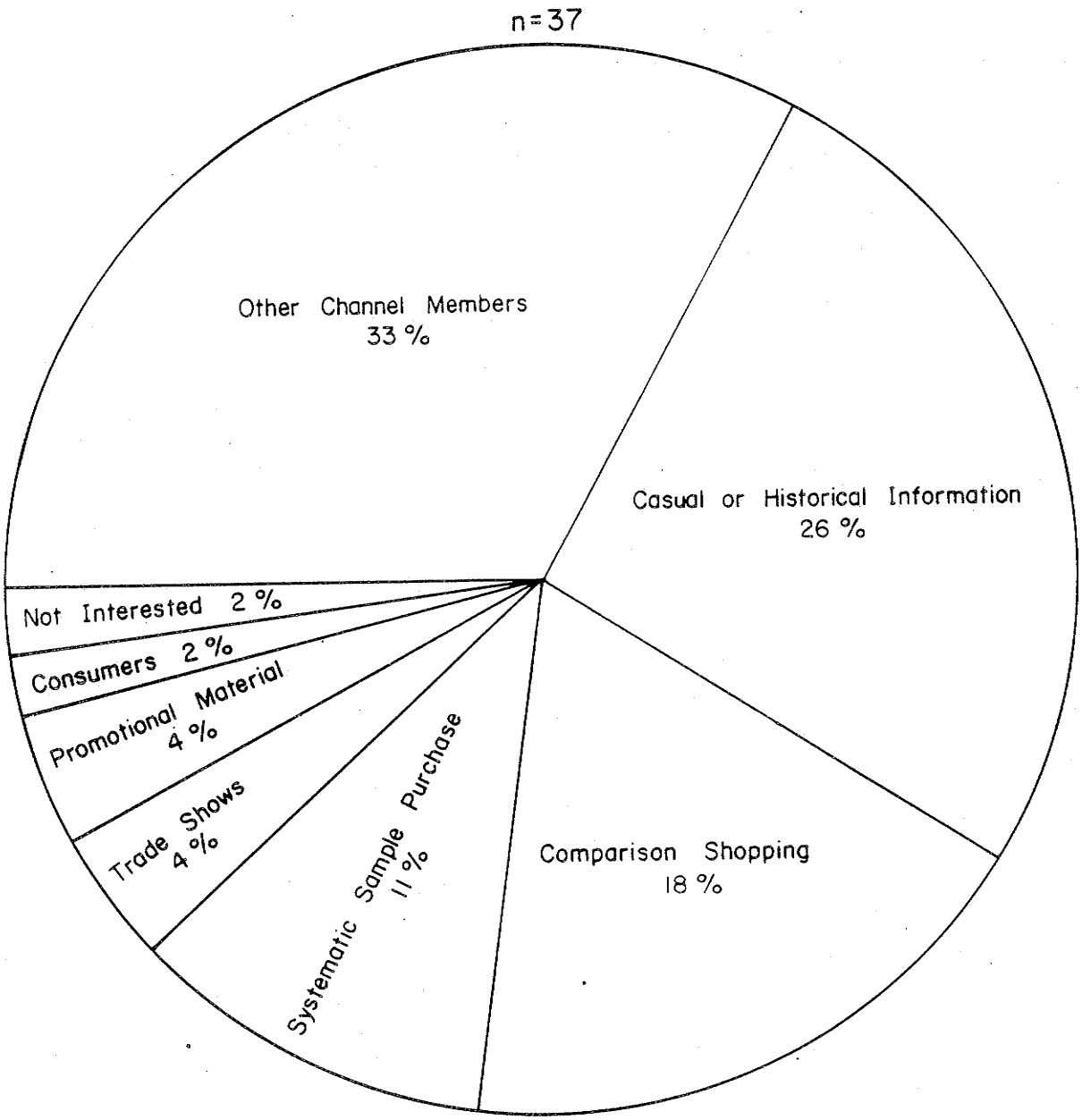


Figure 5.3 Pie graph showing distribution of responses for information about competition.

TABLE 5.6

PROMOTION CATEGORIES

N = 151

Categories	Percentage of Responses
Product/Image:	
Hang Tags (11.2%)	
Labels and Logos (14.6%)	29.7
Packaging (3.9%)	
Promotion:	
Display (11.9%)	
Special Promotions (5.9%)	22.3
Publicity (3.9%)	
Personal Selling (.6%)	
Advertising:	
Electronic (9.2%)	
Print (20.5%)	38.2
Outdoor (1.3%)	
Direct Mail (7.2%)	
Place:	
Cooperative Advertising	7.9
Price:	
Volume Discounts	1.9
	100.0

Over half of the managers of firms using the various types of promotion relied on their own staff and resources in planning promotional strategies. The media mix for these firms was often established through trial and error. Figure 5.4 shows the types of resources managers used in planning promotions.

Firms which relied on retailers, licensing agencies, or parent companies for promotional decisions usually had corporate or contractual obligations to these sources. Under these conditions, firms had little input into promotion planning.

Motivation for Advertising

While about 30% of surveyed firms did no advertising, those firms which advertised had definite target audiences in mind. Of firms using advertising, about 40% hoped to attract ultimate consumers, while 19% advertised solely to attract retailers' attention. Another 27% of advertisers hoped to attract both retailers and consumers to varying degrees. Only about 8% of these firms saw their advertising as institutional as well as consumer- or retailer-oriented.

Since many firms did not have well defined promotion plans or advertising budgets, these responses reflect only the manufacturers' perceptions of their advertising.

Many managers felt that determining the success of any advertising strategy in reaching the perceived audience was a difficult task. Some managers felt that audience response to advertising could be measured only in cases where cooperative advertising of specific items at reduced cost was used. In these cases, the sales of specific items at specific costs for finite periods of time could be compared to usual sale rates.

5.2.8 Information about Regional Differences Within Canada

Within Canada, regional differences were monitored most often through

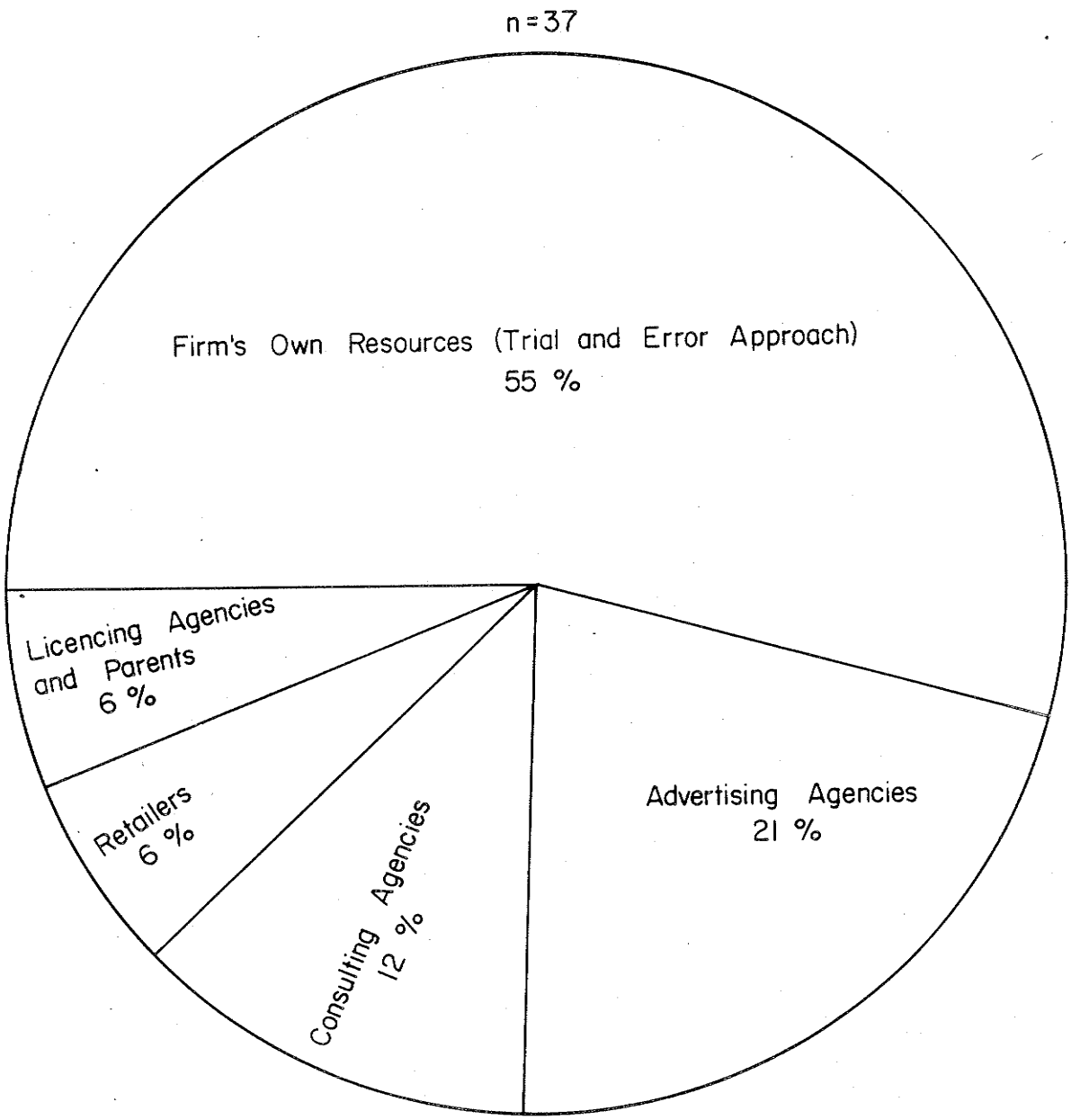


Figure 5.4 Pie graphs showing distribution of responses for promotion information sources.

other channel members, primarily retailers. This accounted for 32% of responses. About 24% of responses indicated that firms had "defined" markets and were not interested in monitoring changes in regional acceptance. Another 24% distributed their products locally and were not concerned with regional acceptance. About 10% of responses indicated market contact as an information source.

5.2.9 Information About Export Markets

Exporting firms obtained market information in much the same manner as they did for domestic markets. Figure 5.5 shows the types of information sources which firms used for export markets. About one-third of exporting firms relied on retailers and salespeople familiar with markets they wished to pursue. They often chose personal selling to retailers as their first step to entry, building a clientele gradually through local salespeople.

5.3 MARKETING INFORMATION SYSTEMS

5.3.1 Information Systems

Responses about how firms obtain information for daily decisions were varied. About 43% of managers mentioned that information was computerized. About 19% of managers mentioned manual reports of unspecified content, while about 14% specified manually prepared production and inventory reports. About 8% of managers said they "knew" or were in touch with daily operations and did not request information in a routine way. References were also made to reports from accountants or sales personnel and a few managers indicated that computerization of some aspects of their firms' operations was planned for the near future.

5.3.2 Computerization

Close to 70% of firms had some aspect of office operations computerized. While about 43% used computers for "housekeeping", only 16% mentioned the

existence of an "information system". Some firms used computers for order

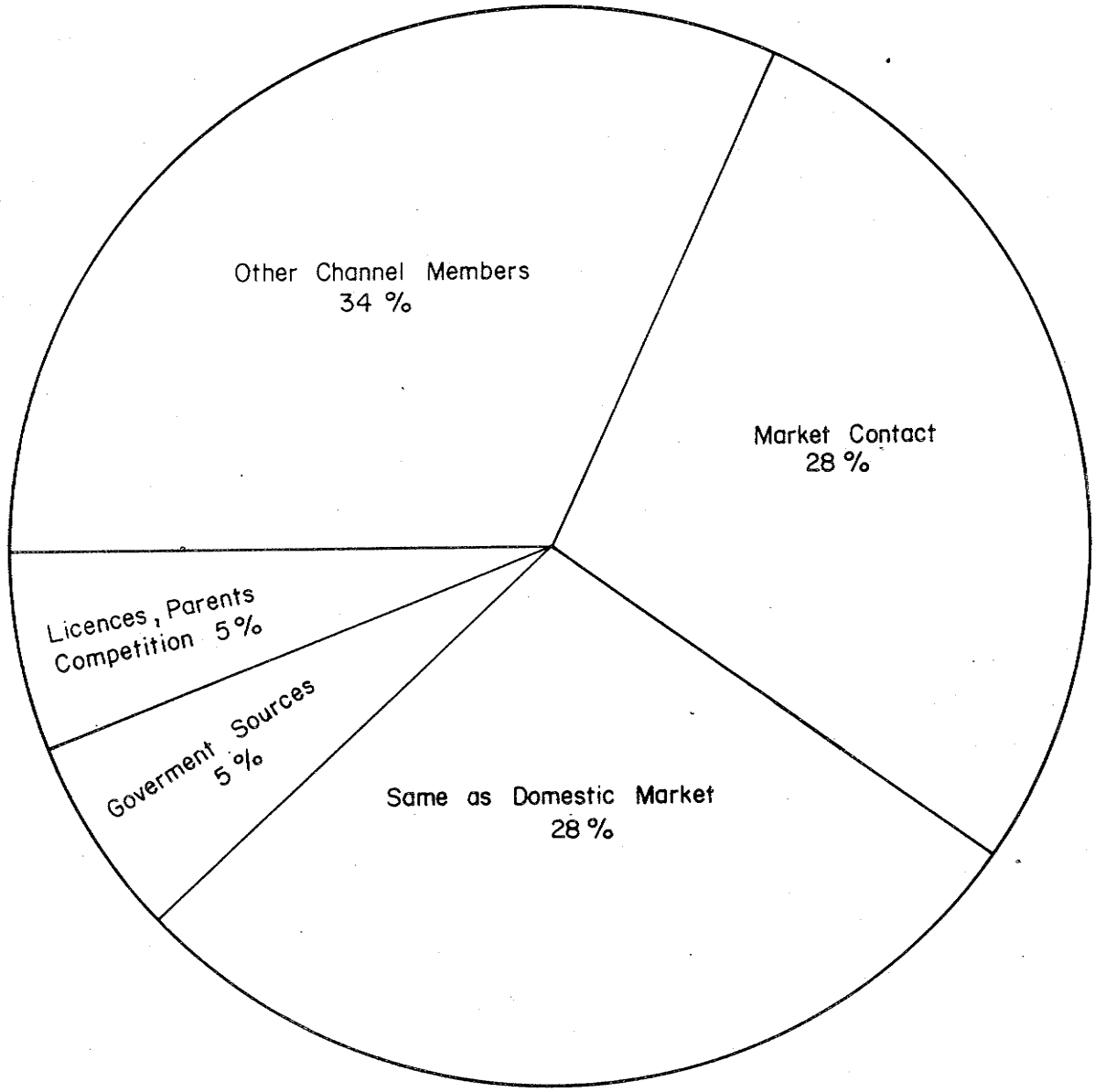


Figure 5.5 Pie graph showing distribution of information sources for export markets.*

*Exporting firms only.

processing and inventory purposes only.

Many managers indicated that "everything" about the operations of their firms was computerized. More in-depth exploration revealed that most of these managers were referring only to financial operations, chiefly accounts receivable and payable. Responses indicated that economic necessity had made scrutinizing accounts of paramount importance for many firms. Some managers stressed the importance of Creditel, a computer system which gave member firms instant access to the credit ratings of potential customers.

The economic slump of 1982 may have had the effect of shifting managers' attention to financial operations at the expense of other functions. Managers mentioned with some frequency that priorities in 1982 were centred on "survival". However, managers who were more circumspect or less concerned about financial status also held fairly limited views on their firms, priorities and their priorities as managers. The organization of information for controlling financial operations generally took precedence over the systematization of marketing information for product planning.

5.3.3 Marketing Information - Summary

Information for product planning was usually collected casually and habitually, and firms placed emphasis on financial rather than marketing information. This orientation was reflected in firms' handling of sales and production information. Managers often perceived the uses of routinely collected information as circumscribed, in that externally generated data were not translated into terms useful for marketing decisions. Most firms relied heavily on retailers for information, and had limited access to information from ultimate consumers. Few managers expressed interest in collecting more or better information about consumers, viewing both target markets and product acceptance as constant over time. Narrow attitudes toward information use limited exploration of new markets or alternate strategies for product mix development.

5.4 HYPOTHESES TESTING

A 0.05 level of significance was set for the testing of null hypotheses. The sample size and the predominantly qualitative nature of the data suggested the division of variable values into two categories. Two by two contingency tables were generated for each pair of variables to be tested. The SAS Procedure Frequency was used to produce the two-way tables, as well as continuity adjusted chi-square values and values for Fisher's Exact Test (SAS Basic, 1982). The latter were generated in cases where expected cell frequencies were less than 5 (Siegel, 1956).

5.5 VARIABLES USED IN TESTING HYPOTHESES

5.5.1 Success Criteria

Data were collected about firms' long- and short-range growth, in both dollar value of shipments and employment. Variables developed from these data were tested for association with facets of marketing research use. These growth or "success" variables were defined as follows:

1) Percentage increase or decrease in dollar value of shipments over the one year period from December, 1981 to December, 1982.

2) Percentage increase or decrease in dollar value of shipments over the five year period prior to December, 1982 from base year 1977.

3) Percentage increase or decrease in number of employees engaged in production over the one year period from December, 1981 to December, 1982.

4) Percentage increase or decrease in number of employees engaged in production over the five year period prior to December, 1982 from base year 1977.

5.5.2 Marketing Research Use

Interviews provided data, through both closed and open-ended questions, which were indicative of the nature of marketing research used by surveyed firms. Several aspects of this use were examined, including formality of approach, extent of use, and type of source used. Variable values were generally grouped to contrast "more" use with "little" or no use. These divisions were also appropriate in that they yielded optimum expected cell values for most data.

Management Approach to Research

Data were evaluated for factors which reflected a systematic approach to the research function. Three variables were developed for the purpose of defining the formality of research use, as follows:

A. Data from Open-Ended Questions - Responses to open-ended questions about research for planning and evaluating products, monitoring market trends, developing objectives, and delineating consumer characteristics were combined, and those methods which could not be employed without systematic planning were separated from more casual methods. Systematic methods of gathering and using information included such approaches as computerized rate of sale systems, consumer surveys, information systems, and the use of well defined or long-term marketing plans and corporate goals. Firms which employed from one to five "formal" methods formed one group, while firms using no systematic methods formed another.

B. Data from Checklist Question - A similar approach was used in classifying responses to a closed question with a checklist format, which was completed by the managers themselves (see Appendix III). Again, those methods or sources which required systematic planning were separated from those which could be accomplished casually. Two categories were formed,

dividing those firms which indicated use of from two to twelve systematic methods from those using one or none.

C. Data from Closed Rating Question - Responses to another closed question formed the basis of the third variable used to classify management approaches to research. Respondents evaluated five factors for importance in planning and evaluating product mix. These factors were creativity, experience, use of secondary market information, feel for the market and special purpose market studies. While this question solicited opinions about the firms' activities rather than factual information, managers were requested to focus on their firms' actual practices when responding. Rating of special purpose market studies as highly important (1 or 2) resulted in the inclusion of firms in one group, while ratings of less importance (3, 4 or 5) led to the formation of a second group. (For additional information on treatment of data from this question, see Section 5.6, Hypothesis 6.)

Table 5.7 provides a summary of the divisions used in analyzing management approach to research. These divisions were chosen to highlight the differences between firms engaging in little or no formal research activity and other more sophisticated firms.

Extent of Use of Marketing Research

Extent of use was defined, for purposes of hypotheses testing, as the number of methods or sources used to gather information for product planning. Extent of use was explored in five areas relating to product mix decisions. Five variables representing these areas were formed from responses to open-ended questions about product planning, market trends, consumers, sales information and sales projections. For each area the number of methods used was divided into two groups, representing "more" or "less" extensive use.

These divisions, presented in Table 5.8, are based on marketing research classifications as well as actual activities of firms.

TABLE 5.7

DIVISIONS FOR MANAGEMENT APPROACH VARIABLES

Variable	Number of Methods	
	'Less Formal'	'More Formal'
A. Data from Open-Ended Questions	0	1-5
B. Data from Checklist	0-1	2-12
	Low Rating	High Rating
C. Data from Rating Question	3-5	1-2

*For further information see Appendix III
A. Data from Q 5, 6, and 7.
B. Data from Q L1.
C. Data from Q 12, item (e).

Types of Research

Several types of research activities were categorized, in light of common

TABLE 5.8

DIVISIONS FOR EXTENT OF RESEARCH VARIABLES

Variable	Number of Methods	
	Less Extensive	More Extensive
A. Product Planning	1-4	5-8
B. Market Trends	0-2	3-6
C. Consumers	0-1	2-4
D. Sales Information	0-1	2-6
E. Sales Projections	1-2	3-4

characteristics, from responses to open-ended questions. Firms indicating no use of a particular research type were distinguished from those indicating use of that type in one or more instances. The exception in this area was the method "market contact", which, to obtain more adequate cell values, was divided into those using less than two and those using two or more methods. (For information on these variables, see Table 4.1.)

5.5.3 Characteristics of Firms

Several characteristics of firms were defined for hypotheses testing, including degree of owner involvement in product mix decisions, product mix diversity, size, and location factors. These variables were defined and classified as follows:

A. Owner Role - Owner responsible firms were those in which the owner was the sole product planner or made decisions jointly with staff. Manager responsible firms were those in which hired managers planned products or where owner involvement extended only to line approval.

B. Product Diversity - Surveyed firms diversified by producing up to seven product types. Firms producing from one to three distinct product types were classified as "less" diversified, while those making from four to seven products were classified as "more" diversified.

C. Firm Size - Size of firm was determined using "worker hours per day" calculated from employment data. "Smaller" firms used 3000 or less worker hours per day, with "large" firms using more than 3000 hours (see Appendix V).

D. Market and Plant Location - Divisions of "coast" and "prairie" were chosen to discern possible variations which could have arisen from differing economic climates, business practices, or provincial restrictions on plants.

Most firms, however, claimed national rather than local markets, so the

influence of plant location was not pronounced. To explore market location, firms which exported to or imported from foreign markets were tested for evidence of differences in growth from firms dealing only in Canada.

5.6 NULL HYPOTHESES TESTS

Null Hypothesis 1: There is no significant association between success of firms and

a. a systematic approach to researching markets,

b. the extent of research used,

c. the type of research used.

Table 5.9 shows the results of chi-square testing of null hypothesis 1a. Where expected cell values were smaller than 5, Fisher's exact two-tailed test was used.

The multi-trait, multi-method approach to data presentation is used to illustrate patterns which emerge when a construct is measured by at least two traits and two methods. Table 5.9 is a method-trait matrix of four "success" traits measured by percentage changes, tabulated with three methods of measuring "systematic" approaches to research. Dollar value and employment change figures offer a reflection of long- and short-term growth traits, while three independent methods of measuring the presence of systematic management activity delineate research approach.

Table 5.9 shows that for the two dollar value variables, contingency table distributions consistently exhibit the highest column percentages for increases in dollar value of shipments where a systematic approach is employed. The pattern of cell values for the monetary variables also demonstrates convergent validity, suggesting that a positive relationship between systematic research methods and improved performance in dollar terms may exist (Payne

and McMorris, 1967). However, the chi-square values for these variables are not high enough for rejection of null hypothesis 1a.

Table 5.9 also illustrates the pattern of cell values for the three methods of measuring approach to managing information with changes in employment. Changes in employment over one year are not demonstrably different than expected by chance, and no significant values for chi-square were found. However, changes in long-term employment relate significantly to how managers perceive the importance of specialized, or "systematic" market studies (χ^2 = 3.60, p = 0.02). Therefore, hypothesis 1a is rejected for managers' perceptions about systematic market research and employment changes over five years.

Changes in employment do not demonstrate the same type of consistent pattern as dollar value changes. One explanation for this phenomenon is that a given percentage change in employment does not have the same effect for all firm sizes. Accepted economic theory indicates that, while growth rates have no relationship to firm size in terms of employment, variability of growth rates is smaller for larger firms and they tend to experience more stable growth. Managers of growing firms may have perceived an increased need to systematize operation for increased control as firms grew. Checklist responses may have shown a reverse trend because some of the systematic methods listed were used very little even by the largest firms surveyed. Techniques such as show and wear tests, attitude studies, and brand awareness studies were very rare in Western Canada, primarily because managers felt the market was too small to make such activities practical.

Table 5.10 shows the results of chi-square tests of null hypothesis 1b.

TABLE 5.9

CONTINGENCY TABLES SHOWING
ASSOCIATION BETWEEN MARKETING SUCCESS FACTORS AND USE OF SYSTEMATIC
MANAGEMENT OF INFORMATION

SUCCESS FACTORS	SYSTEMATIC APPROACH CRITERIA					
	Responses to Open Ended Questions (n = 37)		Checklist Responses (n = 37)		Rating Responses (n = 35)	
Change in Dollar Value Over 1 Year (n = 37)	Not Systematic	Systematic	Not Systematic	Systematic	Not Systematic	Systematic
Increase	11 (50.0)	8 (53.3)	9 (50.0)	10 (52.6)	10 (40.0)	8 (80.0)
Decrease	11 (50.0)	7 (46.7)	9 (50.0)	9 (47.4)	15 (60.0)	2 (20.0)
	$\chi^2 = 0.01$ $p = 0.89$		$\chi^2 = 0.02$ $p = 0.86$		$\chi^2 = 3.11$ $p = 0.06$	
Change in Dollar Value Over 5 Years (n = 30)						
Increase	7 (41.2)	10 (71.4)	6 (42.9)	11 (68.7)	11 (50.0)	6 (75.0)
Decrease	10 (58.8)	4 (28.6)	8 (57.1)	5 (31.3)	11 (50.0)	2 (25.0)
	$\chi^2 = 2.51$ $p = 0.11$		$\chi^2 = 1.12$ $p = 0.28$		$\chi^2 = 0.64$ $p = 0.40$	
Change in Employment Over 1 Year (n = 36)						
Increase	13 (59.1)	8 (57.2)	10 (58.8)	11 (57.9)	15 (62.5)	6 (60.0)
Decrease	9 (40.9)	6 (42.8)	7 (41.2)	8 (42.1)	9 (37.5)	4 (40.0)
	$\chi^2 = 0.05$ $p = 0.81$		$\chi^2 = 0.08$ $p = 0.77$		$\chi^2 = 0.06$ $p = 1.00$	
Change in Employment Over 5 Years (n = 32)						
Increase	15 (75.0)	9 (75.0)	12 (85.7)	12 (66.7)	12 (60.0)	10 (100.0)
Decrease	5 (25.0)	3 (25.0)	2 (14.3)	6 (33.3)	8 (40.0)	0 (0.0)
	$\chi^2 = 0.17$ $p = 1.00$		$\chi^2 = 0.67$ $p = 0.41$		$\chi^2 = 5.60$ $p = 0.02$	

TABLE 5.10

CONTINGENCY TABLES SHOWING
ASSOCIATION BETWEEN FIRM SUCCESS AND
EXTENT OF RESEARCH USE IN FIVE AREAS

SUCCESS FACTORS	EXTENT OF RESEARCH (Number of Methods/Sources)									
	Planning and Evaluating Product Mix (n = 37)		General Market Trends Research (n = 37)		Information About Consumer Characteristics (n = 37)		Sales Information and Organization (n = 37)		Sales Projections (n = 37)	
Change in Dollar Value Over 1 Year (n = 37)	Less	More	Less	More	Less	More	Less	More	Less	More
Increase	15 (55.5)	4 (40.0)	13 (50.0)	6 (54.5)	8 (42.1)	11 (61.1)	5 (45.5)	14 (53.8)	12 (52.2)	7 (50.0)
Decrease	12 (45.5)	6 (60.0)	13 (50.0)	5 (45.5)	11 (57.9)	7 (38.9)	6 (54.5)	12 (46.2)	11 (47.8)	7 (50.0)
	$\chi^2 = 0.22$ p = 0.47		$\chi^2 = 0.01$ p = 0.91		$\chi^2 = 0.68$ p = 0.40		$\chi^2 = 0.01$ p = 0.91		$\chi^2 = 0.04$ p = 0.83	
Change in Dollar Value Over 5 Years (n = 30)										
Increase	11 (52.4)	6 (66.7)	13 (65.0)	4 (40.0)	7 (43.7)	10 (60.0)	4 (50.0)	13 (59.1)	9 (50.0)	8 (66.7)
Decrease	10 (47.6)	3 (33.3)	7 (35.0)	6 (60.0)	9 (56.2)	4 (40.0)	4 (50.0)	9 (40.9)	9 (50.0)	4 (33.3)
	$\chi^2 = 0.10$ p = 0.69		$\chi^2 = 0.83$ p = 0.25		$\chi^2 = 1.33$ p = 0.24		$\chi^2 = 0.00$ p = 0.69		$\chi^2 = 0.27$ p = 0.59	
Change in Employment over 1 Year (n = 36)										
Increase	15 (57.6)	6 (60.0)	16 (61.5)	5 (50.0)	10 (55.6)	11 (61.2)	3 (27.3)	18 (72.0)	12 (55.5)	9 (64.3)
Decrease	11 (42.3)	4 (40.0)	10 (38.5)	5 (50.0)	8 (44.4)	7 (38.8)	8 (72.7)	7 (28.0)	10 (45.5)	5 (35.7)
	$\chi^2 = 0.06$ p = 1.00		$\chi^2 = 0.06$ p = 0.70		$\chi^2 = 0.00$ p = 1.00		$\chi^2 = 4.58$ p = 0.02		$\chi^2 = 0.05$ p = 0.81	
Change in Employment over 5 Years (n = 32)										
Increase	18 (81.8)	6 (60.0)	20 (86.9)	4 (44.5)	11 (73.4)	13 (76.5)	8 (88.9)	16 (69.6)	14 (77.8)	10 (71.4)
Decrease	4 (18.2)	4 (40.0)	3 (13.1)	5 (55.5)	4 (26.6)	4 (23.5)	1 (11.1)	7 (30.4)	4 (22.2)	4 (28.6)
	$\chi^2 = 0.77$ p = 0.21		$\chi^2 = 4.17$ p = 0.02		$\chi^2 = 0.04$ p = 1.00		$\chi^2 = 0.46$ p = 0.38		$\chi^2 = 0.00$ p = 0.70	

Column Percentages shown in brackets.

The table is a variation of the multi-trait multi-method matrix used for Table 5.9 but rather than showing values for one aspect of firm activity measured in several ways, the table shows values for several activities measured in a similar manner. While Table 5.10 is not intended to show convergent validity, it is interesting to note that the area of consumer information is the single area where firms consistently experienced better growth with the use of "more" information sources or methods.

Two significant associations can be noted in Table 5.10. They are positive changes in short-term employment related to use of more types of sales information ($\chi^2 = 4.58$, $p = 0.02$) and long-term employment increases related to less general market trends research ($\chi^2 = 4.17$, $p = 0.02$). For these two associations only, null hypothesis 1b is rejected.

Table 5.11 shows the results of chi-square tests of hypothesis 1c. It shows a significant association between short-term employment changes and use of other marketing channel members for information, with increases in employment occurring most frequently with less use of channel members ($\chi^2 = 3.29$, $p = 0.03$).

Null Hypothesis 2: There is no significant association between owner involvement in product planning and

a. management approach to research,

b. extent of research used,

c. type of research used.

Table 5.12 shows the results of chi-square testing of hypotheses 2a, 2b, and 2c. No significant association was found. Therefore, null hypothesis 2 is not rejected.

Null Hypothesis 3: There is no significant association between firm size, in worker hours per day, and

a. management approach to research,

TABLE 5.11

CONTINGENCY TABLES SHOWING
ASSOCIATION BETWEEN FIRM SUCCESS AND TYPE OF RESEARCH
(Information Source)

SUCCESS FACTORS	INFORMATION SOURCES									
	Marketing Channel Members (n = 37)		Auxilliary Enterprises (n = 37)		Market Contact (n = 37)		Competing Firms (n = 37)		Government Sources (n = 37)	
Change in Dollar Value over 1 Year (n = 37)	Not Used	Used	Not Used	Used	Less	More	Not Used	Used	Not Used	Used
Increase	5 (83.3)	14 (45.2)	4 (40.0)	15 (55.5)	9 (60.0)	10 (45.5)	12 (50.0)	7 (53.8)	15 (48.4)	4 (66.7)
Decrease	1 (16.7)	17 (54.8)	6 (60.0)	12 (45.5)	6 (40.0)	12 (54.5)	12 (50.0)	6 (46.2)	16 (51.6)	2 (33.3)
	$\chi^2 = 1.60$ $p = 1.17$		$\chi^2 = 0.22$ $p = 0.63$		$\chi^2 = 0.28$ $p = 0.59$		$\chi^2 = 0.15$ $p = 0.90$		$\chi^2 = 0.14$ $p = 0.65$	
Change in Dollar Value over 5 Years (n = 30)										
Increase	2 (50.0)	15 (57.7)	2 (28.6)	15 (65.2)	5 (50.0)	12 (60.0)	10 (52.6)	7 (63.6)	13 (54.2)	4 (66.7)
Decrease	2 (50.0)	11 (42.3)	5 (71.4)	8 (34.8)	5 (50.0)	8 (40.0)	9 (47.4)	4 (36.4)	11 (45.8)	2 (33.3)
	$\chi^2 = 0.06$ $p = 1.00$		$\chi^2 = 1.63$ $p = 0.18$		$\chi^2 = 0.01$ $p = 0.70$		$\chi^2 = 0.04$ $p = 0.70$		$\chi^2 = 0.01$ $p = 0.67$	
Change in Employment over 1 Year (n = 36)										
Increase	6 (100.0)	15 (50.0)	3 (33.3)	18 (66.7)	9 (60.0)	12 (57.1)	13 (54.2)	8 (66.7)	18 (60.0)	3 (50.0)
Decrease	0 (00.0)	15 (50.0)	6 (66.7)	9 (33.3)	6 (40.0)	9 (42.9)	11 (45.8)	4 (33.4)	12 (40.0)	3 (50.0)
	$\chi^2 = 3.29$ $p = 0.03$		$\chi^2 = 1.86$ $p = 0.12$		$\chi^2 = 0.02$ $p = 0.86$		$\chi^2 = 0.12$ $p = 0.71$		$\chi^2 = 0.00$ $p = 0.67$	
Change in Employment over 5 Years (n = 32)										
Increase	5 (100.0)	19 (70.4)	7 (87.5)	17 (70.8)	11 (78.6)	13 (72.2)	18 (78.3)	6 (66.7)	21 (77.8)	3 (60.0)
Decrease	0 (00.0)	8 (29.6)	1 (12.5)	7 (29.2)	3 (21.4)	5 (27.8)	5 (21.7)	3 (33.3)	6 (22.2)	2 (40.0)
	$\chi^2 = 0.71$ $p = 0.29$		$\chi^2 = 0.22$ $p = 0.64$		$\chi^2 = 0.00$ $p = 1.00$		$\chi^2 = 0.05$ $p = 0.64$		$\chi^2 = 0.07$ $p = 0.57$	

Column Percentages shown in brackets.

TABLE 5.12

CONTINGENCY TABLES SHOWING ASSOCIATION BETWEEN OWNER INVOLVEMENT AND THREE ASPECTS OF RESEARCH USE

SYSTEMATIC INFORMATION MANAGEMENT

Owner Involvement in Product Planning (n = 37)	Responses to Open Questions (n = 37)		Checklist Responses (n = 37)		Rating Responses (n = 35)	
	Not Systematic	Systematic	Not Systematic	Systematic	Not Systematic	Systematic
Hired	11 (40.8)	5 (50.0)	6 (33.3)	10 (52.6)	10 (40.0)	5 (50.0)
Owner	16 (59.3)	5 (50.0)	12 (66.7)	9 (47.4)	15 (60.0)	5 (50.0)
	$\chi^2 = 0.00$ $p = 0.99$		$\chi^2 = 0.22$ $p = 0.63$		$\chi^2 = 0.02$ $p = 0.71$	

EXTENT OF RESEARCH

Owner Involvement in Product Planning (n = 37)	Planning and Evaluating Product Mix (n = 37)		General Market Trend Research (n = 37)		Information about Consumer Characteristics (n = 37)		Sales Information and Organization (n = 37)		Sales Projections (n = 37)	
	Less	More	Less	More	Less	More	Less	More	Less	More
Hired	11 (40.8)	5 (50.0)	10 38.5	6 (54.5)	10 (52.6)	6 (33.3)	2 (13.2)	14 (53.8)	8 (34.8)	8 (57.2)
Owner	16 (59.3)	5 (50.0)	16 (61.5)	5 (45.5)	9 (47.3)	12 (66.7)	9 (81.9)	12 (66.2)	15 (65.2)	6 (42.8)
	$\chi^2 = 0.01$ $p = 0.71$		$\chi^2 = 0.81$ $p = 0.36$		$\chi^2 = 0.72$ $p = 0.39$		$\chi^2 = 2.68$ $p = 0.07$		$\chi^2 = 0.97$ $p = 0.32$	

TYPE OF RESEARCH

Owner Involvement in Product Planning (n = 37)	Marketing Channel Members (n = 37)		Auxilliary Enterprises (n = 37)		Market Contact (n = 37)		Competing Firms (n = 37)		Government Sources (n = 37)	
	Not Used	Used	Not Used	Used	Less	More	Not Used	Used	Not Used	Used
Hired	I (16.6)	15 (48.4)	5 (50.0)	11 (40.8)	8 (53.3)	8 (36.4)	4 (45.9)	5 (38.5)	14 (45.2)	2 (33.3)
Owner	5 (83.8)	16 (51.6)	5 (50.0)	16 (59.2)	7 (46.7)	14 (63.6)	13 (54.1)	8 (61.5)	17 (54.8)	4 (66.7)
	$\chi^2 = 0.97$ $p = 0.20$		$\chi^2 = 0.01$ $p = 0.71$		$\chi^2 = 0.46$ $p = 0.49$		$\chi^2 = 0.00$ $p = 0.93$		$\chi^2 = 0.00$ $p = 0.67$	

Column Percentages shown in brackets.

b. extent of research used,

c. type of research used.

Table 5.13 shows the results of chi-square testing of hypotheses 3a, 3b, and 3c. The results indicate a relationship between high perceived importance of systematic market studies and increased firm size ($\chi^2 = 4.82$, $p = 0.01$). Therefore, for this case only, null hypothesis 3a is rejected.

Null Hypothesis 4: There is no significant association between product mix diversity and

a. management approach to research,

b. extent of research activities,

c. type of research used.

Table 5.14 shows the results of chi-square tests of hypotheses 4a, 4b, and 4c. No significant associations were found through chi-square testing. Therefore, null hypothesis 4 is not rejected.

Null Hypothesis 5: There is no significant association between geographic location and

a. management approach to research,

b. extent of research activities,

c. type of research used.

Table 5.15 shows results of chi-square testing of null hypotheses 5a, 5b, and 5c. No significant associations were found, so null hypothesis 5 is not rejected.

Null Hypothesis 6: There is no significant association between firm success and

a. casual information use,

b. use of intuition in product planning.

Table 5.16 shows results of chi-square testing of null hypotheses 6a and

TABLE 5.13

CONTINGENCY TABLES SHOWING ASSOCIATION BETWEEN FIRM SIZE AND THREE ASPECTS OF RESEARCH

SYSTEMATIC INFORMATION MANAGEMENT

Firm Size (Worker Hours Per Day) (n = 37)	Response Open Questions (n = 37)		Checklist Responses (n = 37)		Rating Responses (n = 35)	
	Not Systematic	Systematic	Not Systematic	Systematic	Not Systematic	Systematic
Small	22 (100.0)	12 (80.0)	18 (100.0)	16 (84.2)	25 (100.0)	7 (70.0)
Big	0 (00.0)	3 (20.0)	0 (00.0)	3 (15.8)	0 (00.0)	3 (30.0)
	$\chi^2 = 2.48$ $p = 0.05$		$\chi^2 = 1.33$ $p = 0.22$		$\chi^2 = 4.82$ $p = 0.01$	

EXTENT OF RESEARCH

Firm Size (Worker Hours Per Day) (n = 37)	Planning and Evaluating Product Mix (n = 37)		General Market Trend Research (n = 37)		Information about Consumer Characteristics (n = 37)		Sales Information and Organization (n = 37)		Sales Projections (n = 37)	
	Less	More	Less	More	Less	More	Less	More	Less	More
Small	24 (88.9)	10 (100.0)	25 (96.2)	9 (81.8)	19 (100.0)	15 (83.3)	11 (100.0)	23 (88.5)	22 (95.7)	12 (85.7)
Big	3 (11.1)	0 (00.0)	1 (3.8)	2 (18.2)	0 (00.0)	3 (16.7)	0 (00.0)	3 (11.5)	1 (4.3)	2 (14.3)
	$\chi^2 = 0.17$ $p = 0.54$		$\chi^2 = 0.64$ $p = 0.20$		$\chi^2 = 1.57$ $p = 0.10$		$\chi^2 = 0.26$ $p = 0.53$		$\chi^2 = 0.20$ $p = 0.54$	

TYPE OF RESEARCH

Firm Size (Worker Hours Per Day) (n = 37)	Marketing Channel Members (n = 37)		Auxilliary Enterprises (n = 37)		Market Contact (n = 37)		Competing Firms (n = 37)		Government Sources (n = 37)	
	Not Used	Used	Not Used	Used	Less	More	Not Used	Used	Not Used	Used
Small	6 (100.0)	28 (90.3)	10 (100.0)	24 (88.9)	15 (100.0)	19 (86.4)	21 (87.5)	13 (100.0)	29 (93.5)	5 (83.3)
Big	0 (00.0)	3 (9.7)	0 (00.0)	3 (11.1)	0 (00.0)	3 (13.6)	3 (12.5)	0 (00.0)	2 (6.5)	1 (16.7)
	$\chi^2 = 0.00$ $p = 1.00$		$\chi^2 = 0.17$ $p = 0.54$		$\chi^2 = 0.77$ $p = 0.25$		$\chi^2 = 0.48$ $p = 0.53$		$\chi^2 = 0.00$ $p = 0.42$	

Column Percentages shown in brackets.

TABLE 5.14

CONTINGENCY TABLES SHOWING ASSOCIATION BETWEEN PRODUCT MIX DIVERSITY AND THREE ASPECTS OF RESEARCH USE

SYSTEMATIC INFORMATION MANAGEMENT

Product Mix Diversity (n = 37)	Responses to Open Questions (n = 37)		Checklist Responses (n = 37)		Rating Responses (n = 35)	
	Not Systematic	Systematic	Not Systematic	Systematic	Not Systematic	Systematic
More	9 (40.9)	10 (66.7)	7 (38.9)	12 (63.2)	14 (56.0)	5 (50.0)
Less	13 (59.1)	5 (33.3)	11 (36.8)	7 (36.8)	11 (44.0)	5 (50.0)
	$\chi^2 = 1.45$ $p = 0.22$		$\chi^2 = 1.31$ $p = 0.25$		$\chi^2 = 0.00$ $p = 1.00$	

EXTENT OF RESEARCH

Product Mix Diversity (n = 37)	Planning and Evaluating Product Mix (n = 37)		General Market Trend Research (n = 37)		Information about Consumer Characteristics (n = 37)		Sales Information and Organization (n = 37)		Sales Projections (n = 37)	
	Less	More	Less	More	Less	More	Less	More	Less	More
More	14 (51.8)	5 (50.0)	13 (50.0)	6 (54.5)	8 (42.2)	11 (61.1)	4 (36.4)	15 (57.7)	10 (43.5)	9 (64.3)
Less	13 (48.2)	5 (50.0)	13 (50.0)	5 (45.5)	11 (57.9)	7 (38.9)	7 (63.6)	11 (42.3)	13 (56.5)	5 (35.7)
	$\chi^2 = 0.07$ $p = 1.00$		$\chi^2 = 0.01$ $p = 1.00$		$\chi^2 = 0.68$ $p = 0.40$		$\chi^2 = 0.79$ $p = 0.37$		$\chi^2 = 0.68$ $p = 0.40$	

TYPE OF RESEARCH

Product Mix Diversity (n = 37)	Marketing Channel Members (n = 37)		Auxilliary Enterprises (n = 37)		Market Contact (n = 37)		Competing Firms (n = 37)		Government Sources (n = 37)	
	Not Used	Used	Not Used	Used	Less	More	Not Used	Used	Not Used	Used
More	4 (66.7)	15 (48.4)	3 (30.0)	16 (59.3)	6 (40.0)	13 (59.1)	11 (45.8)	8 (61.5)	15 (48.4)	4 (66.7)
Less	2 (33.3)	16 (51.6)	7 (70.0)	11 (40.7)	9 (60.0)	9 (40.9)	13 (54.2)	5 (38.5)	16 (51.6)	2 (33.3)
	$\chi^2 = 0.14$ $p = 0.65$		$\chi^2 = 1.46$ $p = 0.22$		$\chi^2 = 0.64$ $p = 0.42$		$\chi^2 = 0.32$ $p = 0.57$		$\chi^2 = 0.14$ $p = 0.65$	

Column Percentages shown in brackets.

TABLE 5.15

CONTINGENCY TABLES SHOWING ASSOCIATION BETWEEN GEOGRAPHIC LOCATION AND THREE ASPECTS OF RESEARCH USE

SYSTEMATIC INFORMATION MANAGEMENT

Geographic Location (n = 37)	Responses to Open Questions (n = 37)		Checklist Responses (n = 37)		Rating Responses (n = 35)	
	Not Systematic	Systematic	Not Systematic	Systematic	Not Systematic	Systematic
Coast	8 (36.4)	4 (26.7)	5 (27.8)	7 (36.8)	9 (36.0)	2 (20.0)
Prairie	14 (63.6)	11 (73.3)	13 (72.2)	12 (63.2)	16 (64.0)	8 (80.0)
	$\chi^2 = 0.06$ $p = 0.72$		$\chi^2 = 0.05$ $p = 0.81$		$\chi^2 = 0.26$ $p = 0.44$	

EXTENT OF RESEARCH

Geographic Location (n = 37)	Planning and Evaluating Product Mix (n = 37)		General Market Trend Research (n = 37)		Information about Consumer Characteristics (n = 37)		Sales Information and Organization (n = 37)		Sales Projections (n = 37)	
	Less	More	Less	More	Less	More	Less	More	Less	More
Coast	8 (29.6)	4 (40.0)	9 (34.6)	3 (27.3)	4 (21.1)	8 (44.4)	2 (18.2)	10 (38.5)	6 (26.1)	6 (42.9)
Prairie	19 (76.4)	6 (60.0)	17 (65.4)	8 (72.7)	15 (78.9)	10 (55.6)	9 (81.8)	16 (61.5)	17 (73.9)	8 (57.1)
	$\chi^2 = 0.04$ $p = 0.69$		$\chi^2 = 0.00$ $p = 1.00$		$\chi^2 = 1.36$ $p = 0.24$		$\chi^2 = 0.67$ $p = 0.27$		$\chi^2 = 0.48$ $p = 0.47$	

TYPE OF RESEARCH

Geographic Location (n = 37)	Marketing Channel Members (n = 37)		Auxilliary Enterprises (n = 37)		Market Contact (n = 37)		Competing Firms (n = 37)		Government Sources (n = 37)	
	Not Used	Used	Not Used	Used	Less	More	Not Used	Used	Not Used	Used
Coast	2 (33.3)	10 (32.3)	3 (30.0)	9 (33.3)	7 (31.8)	5 (33.3)	10 (41.7)	2 (15.4)	10 (32.3)	2 (33.3)
Prairie	4 (66.7)	21 (67.7)	7 (70.0)	18 (66.7)	15 (68.2)	10 (66.7)	14 (58.3)	11 (84.6)	21 (67.7)	4 (66.7)
	$\chi^2 = 0.18$ $p = 1.00$		$\chi^2 = 0.04$ $p = 1.00$		$\chi^2 = 0.06$ $p = 1.00$		$\chi^2 = 1.59$ $p = 0.14$		$\chi^2 = 0.18$ $p = 1.00$	

Column Percentages shown in brackets.

TABLE 5.16

CONTINGENCY TABLES SHOWING ASSOCIATION BETWEEN CASUAL INFORMATION USE AND FIRM SUCCESS

SUCCESS FACTORS	CASUAL INFORMATION CATEGORIES (Number Mentioned)									
	Sales Estimates and Pricing Policies (n = 37)		Casual Research Methods (n = 37)		Rating of Secondary Information (n = 37)		Rating of Intuitive Factors (n = 37)		Gut Feeling (n = 37)	
Change in Dollar Value over 1 Year (n = 37)	Less	More	Less	More	Less	More	Less	More	Less	More
Increase	12 (57.2)	7 (43.8)	9 (47.4)	10 (52.6)	10 (43.5)	8 (66.7)	7 (63.7)	12 (46.2)	7 (33.3)	12 (75.0)
Decrease	9 (42.8)	9 (56.3)	10 (55.6)	8 (44.4)	13 (56.5)	4 (33.3)	4 (36.3)	14 (53.8)	14 (66.7)	4 (25.0)
	$\chi^2 = 0.22$ $p = 0.63$		$\chi^2 = 0.02$ $p = 0.86$		$\chi^2 = 0.89$ $p = 0.34$		$\chi^2 = 0.37$ $p = 0.54$		$\chi^2 = 4.75$ $p = 0.02$	
Change in Dollar Value over 5 Years (n = 30)										
Increase	10 (62.5)	7 (50.0)	6 (53.9)	11 (64.7)	12 (57.2)	5 (55.6)	4 (57.2)	13 (56.5)	11 (61.1)	6 (50.0)
Decrease	6 (37.5)	7 (50.0)	7 (46.1)	6 (35.3)	9 (42.8)	4 (44.4)	3 (42.8)	10 (43.5)	7 (38.9)	6 (50.0)
	$\chi^2 = 0.10$ $p = 0.74$		$\chi^2 = 0.415$ $p = 0.519$		$\chi^2 = 0.10$ $p = 1.00$		$\chi^2 = 0.16$ $p = 1.00$		$\chi^2 = 1.44$ $p = 0.23$	
Change in Employment Over 1 Year (n = 36)										
Increase	15 (75.0)	6 (37.5)	12 (66.7)	9 (50.0)	14 (60.8)	7 (63.7)	7 (63.7)	14 (56.0)	10 (47.6)	11 (73.3)
Decrease	5 (25.0)	10 (62.5)	6 (33.3)	9 (50.0)	9 (39.2)	4 (36.3)	4 (36.3)	11 (40.0)	11 (52.4)	4 (26.7)
	$\chi^2 = 3.71$ $p = 0.05$		$\chi^2 = 0.45$ $p = 0.49$		$\chi^2 = 0.04$ $p = 1.00$		$\chi^2 = 0.00$ $p = 0.72$		$\chi^2 = 0.05$ $p = 0.71$	
Change in Employment Over 5 Years (n = 32)										
Increase	14 (77.8)	10 (71.5)	13 (81.3)	11 (68.7)	14 (70.0)	8 (80.0)	8 (80.0)	16 (72.7)	13 (72.3)	11 (78.6)
Decrease	4 (22.8)	4 (28.5)	3 (18.7)	5 (31.3)	2 (30.0)	2 (20.0)	2 (20.0)	6 (27.3)	5 (27.8)	3 (21.4)
	$\chi^2 = 0.00$ $p = 0.70$		$\chi^2 = 0.16$ $p = 0.68$		$\chi^2 = 0.02$ $p = 0.68$		$\chi^2 = 0.00$ $p = 1.00$		$\chi^2 = 0.00$ $p = 1.00$	

6b. The number of mentions of reliance on gut feeling was significantly associated with short-term dollar value ($\chi^2 = 4.75$, $p = 0.02$) with higher than expected values for use of gut feeling associated with increased dollar value.

5.7 ADDITIONAL OBSERVATIONS

To further explore specific questions which arose from examination of results, some additional hypotheses were developed. These hypotheses provide supplementary information about the firms' product planning activities and managerial orientations, as well as the relationship of characteristics to success. A summary of the results of chi-square testing of these hypotheses is presented here.

Null Hypothesis 7: There is no significant association between firm success and

a. export activity,

b. import activity.

Table 5.17 shows results of chi-square tests of hypotheses 7a and 7b. Significant associations were found between both export and import activity and short-term employment changes.

The association between increased export activity and increased short-term employment was significant ($\chi^2 = 3.42$, $p = 0.04$), suggesting that exporting firms were not affected as dramatically as firms with no export policy by the shrinking market of 1982. Lack of import activity was significantly associated with decreased short-term dollar value ($\chi^2 = 4.87$, $p = 0.02$), suggesting that importing activity diffused the effects of recessionary economic conditions. Perhaps some firms import goods which they cannot produce competitively at home, lowering overall costs. Resulting stability of profit margins may have fostered steadier growth than for firms with no import divisions.

TABLE 5.17

CONTINGENCY TABLES SHOWING ASSOCIATION
BETWEEN SUCCESS OF FIRMS AND IMPORT/EXPORT ACTIVITY

SUCCESS FACTORS

	Change In Dollar Value Over 1 Year (n = 37)		Change In Dollar Value Over 5 Years (n = 30)		Change In Employment Over 1 Year (n = 36)		Change In Employment Over 5 Years (n = 32)	
Export Activity (n = 37)	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase
Some	12 (66.7)	11 (57.9)	8 (61.5)	11 (64.7)	6 (40.0)	16 (76.2)	5 (62.5)	15 (62.5)
None	6 (33.3)	8 (42.1)	5 (38.5)	6 (35.3)	9 (60.0)	5 (23.8)	3 (37.5)	9 (37.5)
	$\chi^2 = 0.04$ $p = 0.83$		$\chi^2 = 0.04$ $p = 1.00$		$\chi^2 = 3.42$ $p = 0.04$		$\chi^2 = 0.17$ $p = 1.00$	
Import Activity (n = 37)								
Some	1 ((5.5)	8 (42.1)	2 (15.4)	6 (35.3)	3 (20.0)	6 (28.6)	0 (0.0)	8 (33.3)
None	17 (94.5)	11 (57.9)	11 (84.6)	11 (64.7)	12 (80.0)	5 (71.4)	8 (100.0)	16 (66.7)
	$\chi^2 = 4.87$ $p = 0.02$		$\chi^2 = 0.65$ $p = 0.41$		$\chi^2 = 0.03$ $p = 0.70$		$\chi^2 = 2.00$ $p = 0.08$	

Column percentages shown in brackets.

The following hypothesis was developed to aid in examining the associations between descriptive or "physical" characteristics and success.

Null Hypothesis 8: There is no significant association between firm success and

a. product mix diversity,

b. owner involvement in product planning,

c. firm size in worker hours per day,

d. geographic location.

Table 5.18 shows the results of chi-square testing of hypotheses 9a, 9b, 9c, and 9d. Chi-square tests for association between product mix diversity and short-term employment changes showed a significant result ($\chi^2 = 4.11$, $p = 0.04$). Further examination of data revealed that this association was high in terms of the relationship between increases in dollar value and 'more' diversity.

To further examine the relationship of formal or systematic planning to firms' success, the following hypothesis was tested:

Null Hypothesis 9: There is no significant association between firm success and

a. number of changes in management approach over a 5 year period,

b. number of short-range plans,

c. number of long-range plans.

Table 5.19 shows the results of chi-square testing of hypotheses 9a, 9b, and 9c. No significant associations were found, so null hypothesis 9 is not rejected.

TABLE 5.18

CONTINGENCY TABLES SHOWING ASSOCIATION BETWEEN FIRM SUCCESS AND FOUR FIRM CHARACTERISTICS

SUCCESS FACTORS	FIRM CHARACTERISTICS							
	Product Mix Diversity (n = 37)		Owner Involvement In Product Planning (n = 37)		Size in Worker Hours Per Day (n = 37)		Geographic Location (n = 37)	
Change in Dollar Value Over 1 Year (n = 37)	Less	More	Less	More	<3000 WHD	>3000 WHD	Prairie	Coast
Increase	9 (50.0)	10 (52.6)	8 (50.0)	11 (52.4)	17 (50.0)	2 (66.7)	13 (52.0)	6 (50.0)
Decrease	9 (50.0)	9 (47.4)	8 (50.0)	10 (47.6)	17 (50.0)	1 (33.3)	12 (48.0)	6 (50.0)
	$\chi^2 = 0.03$ $p = 0.86$		$\chi^2 = 0.03$ $p = 0.85$		$\chi^2 = 0.01$ $p = 1.00$		$\chi^2 = 0.06$ $p = 1.00$	
Change in Dollar Value Over 5 Years (n = 32)								
Increase	5 (35.7)	12 (75.0)	6 (46.2)	11 (64.7)	14 (51.9)	3 (100.0)	11 (52.4)	6 (66.7)
Decrease	9 (64.3)	4 (25.0)	7 (53.8)	6 (35.3)	13 (48.1)	0 (0.00)	10 (47.6)	3 (23.1)
	$\chi^2 = 3.23$ $p = 0.07$		$\chi^2 = 0.41$ $p = 0.52$		$\chi^2 = 0.96$ $p = 0.24$		$\chi^2 = 0.10$ $p = 0.69$	
Change in Employment Over 1 Year (n = 36)								
Increase	7 (38.9)	14 (77.8)	8 (53.3)	13 (61.9)	19 (57.6)	2 (66.7)	11 (52.4)	6 (66.7)
Decrease	11 (61.1)	4 (22.2)	7 (46.7)	8 (38.1)	14 (42.4)	1 (33.3)	10 (47.8)	3 (33.3)
	$\chi^2 = 4.11$ $p = 0.04$		$\chi^2 = 0.03$ $p = 0.86$		$\chi^2 = 0.09$ $p = 1.00$		$\chi^2 = 0.10$ $p = 0.69$	
Change in Employment Over 5 Years (n = 30)								
Increase	15 (88.3)	9 (60.0)	10 (71.4)	14 (77.8)	21 (72.4)	3 (100.0)	17 (85.0)	7 (58.3)
Decrease	2 (11.7)	6 (40.0)	4 (28.6)	4 (22.2)	8 (27.6)	0 (0.0)	3 (15.0)	5 (41.7)
	$\chi^2 = 2.05$ $p = 0.11$		$\chi^2 = 0.00$ $p = 0.70$		$\chi^2 = 0.12$ $p = 0.55$		$\chi^2 = 1.60$ $p = 0.12$	

Column percentages shown in brackets.

TABLE 5.19

CONTINGENCY TABLES SHOWING ASSOCIATION BETWEEN FIRM SUCCESS AND MANAGEMENT CHANGES/GOALS

SUCCESS FACTORS	MANAGEMENT CHANGES/PLANS					
	Number of Changes In Management Approach (1977-82) (n = 37)		Number of Concrete Short Term Goals (1-5 Years) (n = 37)		Number of Concrete Long-Term Goals (3-10 Years) (n = 37)	
Change in Dollar Value Over 1 Year (n = 37)	No Goals	1-2 Goals	No Goals	1-3 Goals	No Goals	1-3 Goals
Increase	6 (46.1)	13 (54.2)	9 (60.0)	10 (45.5)	9 (42.9)	10 (62.5)
Decrease	7 (53.9)	11 (45.8)	6 (40.0)	12 (54.5)	12 (57.1)	6 (37.5)
	$\chi^2 = 0.01$ $p = 0.90$		$\chi^2 = 0.28$ $p = 0.53$		$\chi^2 = 0.73$ $p = 0.39$	
Change in Dollar Value Over 5 Years (n = 30)						
Increase	5 (50.0)	12 (60.0)	4 (36.4)	13 (68.4)	7 (43.7)	10 (71.4)
Decrease	5 (50.0)	8 (40.0)	7 (63.6)	6 (31.6)	9 (56.3)	4 (28.6)
	$\chi^2 = 0.02$ $p = 0.70$		$\chi^2 = 1.76$ $p = 0.13$		$\chi^2 = 1.34$ $p = 0.25$	
Change in Employment Over 1 Year (n = 36)						
Increase	7 (53.8)	14 (60.0)	9 (60.0)	12 (57.1)	12 (57.1)	9 (60.0)
Decrease	6 (46.2)	9 (40.0)	6 (40.0)	9 (42.9)	9 (42.9)	6 (40.0)
	$\chi^2 = 0.03$ $p = 0.95$		$\chi^2 = 0.03$ $p = 0.86$		$\chi^2 = 0.03$ $p = 0.86$	
Change in Employment Over 5 Years (n = 32)						
Increase	12 (92.3)	12 (63.2)	11 (78.6)	13 (72.2)	14 (77.8)	10 (71.4)
Decrease	1 (7.7)	7 (36.8)	3 (21.4)	5 (27.8)	4 (22.2)	4 (28.6)
	$\chi^2 = 2.12$ $p = 0.10$		$\chi^2 = 0.00$ $p = 1.00$		$\chi^2 = 0.00$ $p = 0.70$	

Column percentages shown in brackets.

CHAPTER VI

DISCUSSION OF RESULTS

6.1 INTRODUCTION

In this chapter, research findings are reviewed with reference to study objectives and related literature.

6.2 MARKETING RESEARCH FOR APPAREL PRODUCT PLANNING

The first objective of the study was to determine the extent to which apparel manufacturers used marketing research and information systems for planning products.

This was measured by the number of methods or sources they used to gather information. Results showed little indication of systematic variations with firm performance or characteristics. However, significant associations were found between short-term employment and the extent of use of sales information, and long-term employment and the extent of use of general market information.

Larger than expected cell values indicated, in the first case, that those firms employing more types of sales information had grown in employment, while the second case indicated less use of market information associated with gains in employment. It was noted that those firms using more information sources about ultimate consumers consistently exhibited higher than expected frequencies for growth.

Results suggested that the importance of extent of research, defined

as the number of methods or sources used to research products and markets, varied with the area being researched. Just as strategies and priorities of firms vary with product, industry concentration, economic conditions, firm size and other factors (Buzzell et al. 1975), so may the importance or usefulness of different types of research. Results suggest:

1) An association between increased use of information about consumers and growth.

2) An association between increased use of sales information classification and growth.

3) General market information about such areas as new market niches, market share and market potential are of less importance to apparel firm growth than other types of research, such as monitoring product life cycles through sales information systems, or consumer-oriented new product acceptance research.

6.3 RESEARCH ACTIVITIES IN APPAREL MANUFACTURING

While survey results were inconclusive in defining the total effect of variations in extent of use, a profile of the general pattern of research activity by surveyed firms deserves review. It was useful to compare the original classification of research methods, used as a framework for instrument formulation, with actual research activities (see Appendix I). A profile of activities emerged with differentiated apparel firm activity from that of other industries and delineated those areas which manufacturers emphasized.

6.3.1 Research Activities Profiled

A. Product Research - the most common approach to delineating product characteristics in apparel firms was the "think tank" approach, where designers, sales staff, production staff, and management pooled expertise and information gathered in several ways. Procedures for gathering information included travel to fashion centres, consultations with retail buyers, and review of trade and fashion journals. These procedures were largely informal and habitual rather than systematic. While managers of large firms occasionally mentioned testing fabrics for performance characteristics, very few mentions were made of systematic concept testing, competitive product studies, new product testing, or packaging research.

B. Sales and Market Research - Retail buyers proved the most frequently used information source for monitoring general market trends, followed by market contact, including direct contact with consumers. The type of information obtained from retailers often reflected new product acceptance or competitors' activities. Very few mentions were made of market share analysis, sales forecasting, test marketing, or promotion tracking. A similar pattern of reliance on retailers emerged in response to inquiries about consumer characteristics, and mention of market segmentation was very rare.

Most firms dealt through retailers and had very little access to information gathered directly from consumers. The sample did include, however, a number of firms which operated retail or factory outlets. Examination of data proved that these firms were overwhelmingly responsible for the comparatively frequent mentions of market contact, since they had opportunities to meet with consumers. Other firms were, however, content with sales information and the estimates of new market potential which retail buyers supplied. Information also flowed from suppliers, who communicated fabrication trends and colour information directly, or through limited offerings of fabric types

or colours brought about by their needs for scale economies.

C. Corporate Research - While questions about corporate research were included in interviews with the intention of supplementing product research information only, some patterns did emerge. Corporate research activity tended to mirror other research activities in terms of approach. For example, exporting firms duplicated their approaches to researching domestic markets when investigating foreign trade. Location, diversification, distribution, and pricing information were researched in the same manner as other areas. In other words, the individual firm's approach to research was generally consistent through all research areas, whether the approach was formal or informal.

To summarize, surveyed firms were primarily concerned with new product acceptance and sales estimates when researching markets. Their approach was usually informal and they exhibited high dependence on retailers as information sources. Such areas as package testing, market share analysis, and international studies, often emphasized in marketing literature, were seldom mentioned.

6.4 SPECIAL PROBLEMS FOR APPAREL MARKETERS

Before further identifying the types of research used by apparel firms, examination of some special problems which arise when evaluating firms may be enlightening. As Sproles (1981) suggested, some apparel industry insiders tend to dismiss systematic product planning frameworks as inapplicable to fashion marketing. Special problems also arise in describing industry dynamics using marketing models not strictly suited to apparel products.

For instance, the inadequacy of fashion diffusion and fashion cycle theory when applied to product mix decisions is compounded because successful product planning seems to depend, in large part, on individual managers'

abilities to predict fashion trends. These managers, dependent on "feel" for the market, are hampered by long lead times. In addition, some manufacturers see their business as industrial, in that they are primarily concerned with satisfying retail customers rather than ultimate consumers. Industrial marketers supplying goods to customers for resale necessarily have different priorities regarding final consumers. However, the increased importance to consumers of apparel branding and the example of firms successfully exploiting this trend, suggest that valuable information can be gained through increased contact with consumers. Small and mid-size firms, however, are limited by their resources in the methods of research they employ, and their priorities are naturally to please retail customers first. Many feel their responsibilities end with confirmed orders, though they likely share blame with buyers for mark-downs occurring because of misread markets.

Though marketing literature recognizes that the dichotomy of industrial versus consumer marketing is inadequate in describing some products, available information on strategies for handling special products is scarce (Walters, 1974). It appears that many apparel manufacturers are industrial marketers who may reduce risk and ultimately improve performance by shifting emphasis to a consumer orientation. However, most Western Canadian apparel firms relinquished control over product planning to their retail customers because they had neither the resources nor the market power needed to generate their own information.

Related problems of classification for delineating strategies come from the inadequacy of common systems for describing apparel products. For instance, markets like that for pantyhose are characterized by fragmented buyer concentration, low cost and perceived low risk, high purchasing frequency,

and high industry concentration. Firms exploiting this type of market must necessarily employ different strategies from those marketing goods such as down coats, which are closer to consumer durables in cost, purchasing frequency, and buyer concentration. Apparel products which may be purchased in much the same manner as a bar of soap, or with as much deliberation and comparison as a major appliance, cannot logically be grouped together when considering appropriate marketing strategies. This problem is compounded by marketers' limited knowledge about fashion cycles and the process of fashion diffusion as it applies to business decisions.

Fashion cycle theory and applications of the product life cycle concept are, as described by Sproles (1981), limited in manufacturing. The inadequacy of fashion cycle theory in helping managers predict adoption, diffusion and rejection rates is partly responsible for this state. As Sproles suggests, managers bring past experience of fashion cycles to their product mix decisions, applying theory intuitively. Rare cases of monitoring sales within the framework of product life cycles emerged in the survey, and firms employing this technique were more aware of product life cycle stages, from adoption to decline. This risk reduction tactic was not adopted by most firms, confined as they were to an industrial approach, coupled with a seasonal planning routine.

Difficulty in classifying apparel firms and their products within traditional marketing parameters, coupled with limited knowledge about practical applications of fashion cycle theory, make judging the usefulness of different types of research to apparel firms difficult. The Western Canadian manufacturer may also have differing research needs from their Eastern counterparts because they are physically removed from the hub of Canadian retail

buying activity.

These considerations may make the decision of how to invest scarce research dollars difficult for firms wishing to adopt new techniques or shift marketing emphasis. The types of research with the most potential usefulness to apparel firms are not easily identified when manufacturers see many factors differentiating their industry from those industries usually discussed in marketing literature.

With these factors in mind, some comments about surveyed firms' characteristics and behavior follow.

6.4.1 Apparel Manufacturing and the Marketing Concept

Since William Lazer (1956) produced his in-depth analysis of marketing in Western Canadian apparel manufacture in the early 1950's, many changes have taken place. These changes are reflected both in the manufacturers' activities and in the climate in which apparel products are marketed.

Lazer found very little evidence of use of information for product planning. Most firms were production-oriented and reliant on past sales for planning products.

Many examples of what Lazer termed "marketing-motivated" companies can be found in the Western Canadian manufacturing sector of the eighties. Generally, surveyed apparel firms used many more information sources, albeit casually, than in the fifties. While the variety of information sources used by manufacturers has expanded substantially, survey data suggested that manufacturer orientation in the eighties lies somewhere between production and marketing priorities. More than one manufacturer described the consumer's role in determining market offerings as confined to acceptance or rejection of products. This orientation is similar to that described by Beckman (1982) as "product-oriented", in that the makers' responsibility was solely to produce

a quality product for which the selling process was incidental.

The majority of firms based their planning on some aspect of past sales, and a number of managers spoke of "defined markets". These factors indicated that firms were, like the British firms surveyed by Saddik and Wills (1973), "present-mix" oriented. However, several firms could be described as "innovation-oriented" in that they relied on imitation when planning products. These firms borrowed ideas from competition during trade shows or travel.

Generalizations about firm orientation are difficult to make, however, because of the wide variety of firm structures. Firms in Western Canada included those with retail outlets, custom order houses, divisions of multinationals, vertically integrated firms, firms with foreign production facilities, franchise operations, and contractors for private licences. This diversity, along with such factors as degree of import/export activity, affect firm orientation to the point where a common vocabulary and common priorities were difficult to pinpoint.

In defining orientation, other problems arose. In the late seventies, the Federal Government encouraged modernization in plants and equipment, and several Western firms had improved production capabilities. While this topic was not specifically covered in interviews, several managers mentioned this type of rationalization. As with financial operations, this aspect of change seemed to take priority with some managers, since it represented a significant cash outlay in firms' bids to be competitive. This emphasis made firms appear production-oriented, where in fact their management may have been marketing oriented to some degree. Managers were actively involved in processing information for marketing decisions in many areas, though their information was generally casual, and sparse in the area of consumer characteristics.

In summary, apparel firms have broadened information gathering activities over the last twenty years, and a marketing orientation is evident in some firms' activities. However, management's approach to marketing may have been overshadowed by concern with production modifications. Information about consumers, albeit informal and indirect, had some priority but was usually treated as an extension of retailer demand.

In general, well defined comprehensive strategies for marketing apparel products were rare among surveyed firms, and managers often cited small market or firm size as limiting the affordability and usefulness of complex marketing research or promotion campaigns. Most firms did not have set advertising budgets or branding policies, and their volume precluded the employment of strategies like those described by Lippert (1981), where brand awareness of ready-to-wear lines was cultivated through massive advertising campaigns.

Another useful categorization of research activities outlined by Emory (1976) described business research as a means of solving recurrent or nonrecurrent problems, using primary or secondary data sources, involving internal or external information and employing survey, observation, experimentation, and simulation research designs. Research by surveyed firms was largely done to solve recurrent problems such as those arising with product planning for each new season. Most managers' research methods were habitual, and special purpose studies were comparatively rare and perceived as unimportant by the majority of managers. While these managers used both primary and secondary sources, and incorporated internal and external information, the method of choice was observation. Survey and simulation, whether formal or informal, were rarely employed. Both informal experimentation and casual observation were central to product planning, but these methods could not generally be described as systematic.

Further to the description of research outlined by Emory, occasional use of auxilliary agencies and consultants for research about non-recurrent problems occurred with larger firms. Other regularly purchased services provided such data as pooled sales information from a number of retail outlets. While special studies cannot be fairly evaluated without detailed descriptions of methodology, their use by some firms does suggest higher than usual employment of a systematic approach, in that these firms must weigh the costs of these services against their usefulness. It is therefore doubtful that decisions to employ these agencies would be made lightly, especially under shrinking market conditions.

6.4.2 The Canadian Market and Marketing Research

Generally, such techniques as lifestyle segmentation; attitude, awareness and usage studies; use of psychographic and demographic studies; show and wear tests; and the development of research based information systems, as described by Richards and Rachman (1978), were conspicuously absent from Western Canadian firms' research. Both large and small firms claimed that these techniques were inapplicable under Canadian market conditions. A number of manufacturers, especially those with American parents or foreign licences, were aware of these sophisticated techniques, but dismissed them summarily. The occasional manager mentioned using census data to estimate market shipments in the import market, but even these managers expressed skepticism about the value of these statistics.

6.5 TYPES OF RESEARCH

The second objective was to determine which types of research were used by apparel firms. Since research activities did not fit well into the framework of Drake and Millar's classification, research types were classified

according to common characteristics (see Table 4.1).

Channel Members and Channel Power

In general, the most commonly used information source was that of other channel members, primarily retailers. Manufacturers relied on retail buyers for many types of information. This dependence suggested that channel power rested heavily with retailers, especially those with central buying authority and capacity for large volume orders. During the 1982 recession, many manufacturers increased their reliance on retailers, who cut inventories dramatically in response to inflated costs. This led to shrinking markets for apparel firms. Many firms previously engaged in product speculation were limited to producing only those styles which retailers ordered in amounts large enough to meet manufacturers' requirements, in terms of economies of scale. Firms were no longer willing to produce small orders because production adjustments could be costly and firms were becoming cautious about extending credit to small retail outlets.

By the late seventies, central buying policies had become the rule rather than the exception for Canadian retailers, so major department stores and other chains tended to deal with those firms having the resources to produce large runs of standardized products for national sales. Some manufacturers, in response to this trend, slowly merged or consolidated, reducing the numbers of mid-size firms. While the Canadian apparel industry is still highly fragmented, with a large number of small producers, concentration inevitably increased as consumers became brand loyal to apparel products, and large firms developed the economies of scale needed to compete with lower cost imports. Small firms survived this trend primarily because their size allowed them the flexibility to produce "hot" items quickly. However, mid-size firms, with neither the production economies of scale of larger firms nor the quick

reaction time of smaller firms, inevitably dwindled in number or were absorbed (Woodside et al. 1978).

Retailers were identified as channel leaders for apparel goods because they held power in several ways, the most obvious of which was economic. Few, if any, independent Canadian apparel firms could match the buying power of a national department or specialty store.

Along with the shift to central buying, the trend in Canadian retailing was to concentration, an example of which was the Bay-Sears consolidation of 1981. These factors combined to give retail customers the economic power, in terms of order size, which enabled them to influence product mix. Just as a manufacturer might have forced modification of an order from an independent specialty store because its size was insignificant, so a major retail chain could dictate product modifications to a producer dependent on that chain for much of its business. This reliance on retailers may have evolved naturally out of the needs of channel members, but as concentration increased in the retail sector, so did retail power, in that their manufacturer's ability to find alternate sources or replacements for the channel leader was reduced (Woodside et al. 1978). Limited exploitation of market niches and fewer introductions of new product lines were the result.

Central to this discussion, and perhaps the most important source of power for the retailer in apparel distribution, was information. The retailer had the power to both divulge and withhold the information upon which apparel firms were so heavily dependent. Several managers mentioned, in the course of interviews, that if a favorable relationship with a buyer was established, information was forthcoming which might give the firm a leading edge over competition. Only one manager mentioned trying to push certain types of goods to retailers because the manufacturer's information about the consumer was more detailed than that of the retailer.

While Western Canadian firms had a disadvantage in that most head offices were located away from the eastern hub of buying activity, this was less a physical problem than a problem of information flows. Larger firms had sales offices in most major centres, leaving mid-size and smaller firms at a disadvantage. With the advantages of both financial and informational power, retailers were also able to exercise the option of importing cheaper goods labelled with house brands, in the right mix for consumers, bypassing domestic firms with limited resources and brand loyalty.

The channel power of retailers increased as manufacturers reduced speculation, and the manufacturer wishing to explore new market niches or introduce new lines did so only if the retailer wished to take that risk too.

6.5.1 Other Research Types

Other research methods classified in the channel member category were, in fact, information from retailers obtained in different ways. For example, sales people often brought information together from several retail buyers.

Examination of other types of research led to the conclusion that secondary information was extremely important to apparel firms. Travel to fashion centers involved, for many Western Canadian firms, a look at what was selling in Europe, Hong Kong, or the United States. Firms also relied on auxilliary agencies such as colour services or fashion agencies to interpret what was selling in other parts of the world. Competitive promotional material also supplied ideas for product planning.

To summarize, apparel firms used other channel members, auxilliary enterprises, competition and market contact, especially foreign travel, to gather information about products. Government sources were also used on occasion. The ability of retailers to supply other channel members' economic and information needs generally established these retailers as marketing

channel leaders.

The profile of research activities which emerge in the survey parallels that described by Fisher and Blass (Advertising Age, 1981), in its description of the roles of retailers and consumers. It does not agree with the model presented by Lefkowitz (1978) detailing continuous communication between manufacturer and final consumer.

Only one significant result was obtained from chi-square testing of type of research and success criteria. There was a significant association between short-term employment and use of channel members as sources with higher than expected values for increased employment with less channel member use. This association may be notable for what it indicates about firms which relied less on channel members. Presumably, these firms used other types of information which were less customary, cultivating alternatives to retail feedback.

One pattern emerged, showing higher than expected values for short-term dollar increases evident for "more" use of all research types. However, few conclusions can be drawn from this as the usefulness of the information cannot be judged. Increases may only indicate that firms increased their chances of collecting the right information by increasing the volume of information gathered.

6.6 MARKETING INFORMATION SYSTEMS

The third objective was to describe the characteristics of marketing information systems used by apparel firms.

A wide variety of product mixes, sizes and operating procedures were incorporated in the sample of firms. While the phrase "marketing information system" was not included in the interview schedule, several respondents described their organization of information for routine decisions in this

way. While the use of this phrase suggested a deliberate systematization of marketing information, surprisingly few managers described their information flow in terms of marketing objectives or decisions. A dichotomy appeared to exist in managers' minds between financial and marketing information. Sales information, inventory control figures, sales projections, and other "financial" information were collected primarily to ensure the smooth operation of the plant and the meeting of corporate goals. About seventy percent of manufacturers had some information on computers and more were planning the addition of computerized systems. In probing for information about the kinds of data incorporated in these systems, the researcher found very little emphasis on the types of information most useful to marketers for product planning. Financial aspects of the firms' operations were often set down in great detail, but relevant information was not usually organized for marketing purposes.

Some examples will illustrate this point more graphically. A manufacturer might have an expanding computerized system for financial planning, including every aspect of the firm's corporate finances, but be hesitant to enter sales information because, for accounting purposes, the information was kept efficiently enough by hand. Another manager might track inventory with a systematic computerized approach but use the figures only to supplement production flow information generated in the sewing room.

These managers perceive the uses of routinely collected information as finite. Emphasis is placed, in the first case, on financial operations and in the second on production control. Information which is directly related to product planning can be used by firms wishing to increase market power, lessen dependence on retailers, and reduce risk. The advent of computers is especially important to manufacturers wishing to strengthen the marketing function, because it enables firms to keep track of a large volume of detailed

purchase pattern information, and to have access to market trend information immediately.

The most common description of an information system was that of the financially detailed corporate system. However, a few firms did fulfill marketing objectives by re-organizing incoming information and periodically reconsidering how it was used.

Apparel firms must usually plan far in advance of actual production and managers often plan in terms of seasonal cycles. However, seasonal divisions have become blurred because of shifts in retailers' policies and increased travel. Many manufacturers used estimates or computations of past sales to project future sales, and while their lines for a season were often based on last season's best sellers, a slight re-organization of priorities in information organization could reduce guesswork in this procedure. Sales and inventory figures, computerized and updated regularly through communication with retailers, the sales force, and internal sources, then become valuable tools for product planning. Manufacturers with detailed sales information systems obtained updated information on sales of style, fabric, colours, and sizes, as well as composite figures for lines and divisions. Geographic differences could be monitored, as could differences in product acceptance in export markets. Taking into account regional climate differences, a given product could be monitored from its introduction through its peak and its decline. Since timing the introduction and withdrawal of given styles was so important to reducing risk, apparel firms adopting some variation of this system would, according to their sizes and product mixes, increase control over product planning.

Perhaps the most important gain to be made using the product life cycle, sales-monitoring approach would be the authority which comes from having reliable information. Product mix decisions supported by empirical information

would increase manufacturers' channel power and help firms identify unexploited market niches. Systematic test marketing might be a natural extension of the system, enabling firms to explore market potential with less dependence on retailers.

Most manufacturers did not appear to have integrated marketing functions with other business functions. Their information systems were not adapted for marketing use. This phenomenon helps to explain why managers who claimed faultless "marketing" techniques were troubled by corporate "over-extension" or "economic downtrends". The view of marketing information and research as something of a "luxury" item only distantly related to corporate goals or financing was reflected in the common view that in a recession, planning stops and priorities are shifted to financial operations, especially accounts receivable.

Very few surveyed firms used research to plan information systems as described by Richards and Rachman (1978) and the handling of information for daily decision making in a large majority of firms did not approach the system for handling marketing information described by Brien and Stafford (1968).

6.7 MANAGEMENT DECISIONS PROCESSES

The fourth objective was to determine what role, if any, intuitive decisions had in determining products. "Intuition" encompassed several types of decisions, including those based on experience, creativity, and feel for the market. "Intuition" also included the informal estimation of sales reliance on internal pricing policies or casual information, and references to gut feeling or "knowing" information in response to open-ended questions. Contingency tables indicated that several managers who integrated "gut feeling" into the product planning process experienced increases in dollar value to

shipments over a one year period.

Several of the marketing research use factors were measured through aggregate data from three questions; planning products, monitoring markets, and consumer information.

Responses rating secondary information as a source of information were included with intuitive factors because of the overwhelmingly casual approach most managers took to the collection of secondary information in general.

No significant results were obtained in Chi-square testing of importance ratings of secondary information, market feel, creativity or experience. The most interesting observation about the use of casual information was that those managers rating "gut feeling" as very important to product planning were, in many cases, also using several systematic methods of gaining information.

Research provides managers with the information they need to develop an "instinct" for business decision making, and while most marketing research literature emphasizes systematic methods, the role of intuition cannot be easily dismissed. As Buckley et al (1964) observed, research cannot hasten the process of intellectual growth and seasoning which increases decision making skill. A research orientation can, however, improve managers long term success in "playing hunches" by supporting each decision with a factual framework. Studies conducted by the Newark College of Engineering support the view that the best decision makers are highly intuitive. During extensive tests of managers as sole decision makers in small business, high correlations were discovered between "intuition" scores and high firm growth (Raudsepp, 1981).

Dr. J.S. Brener of Harvard University has described intuitive thinking as a process by which a manager,because of a thorough knowledge of a domain and

its structure, is able to perceive the whole problem without benefit of analytical steps. The intuitive decision maker is able to skip or reverse steps in the analytical process. The intuitive approach draws on comprehensive knowledge of the domain through research as well as experience and a creative component. This process, though difficult to describe, can result in superior decisions, though good intuitive thinking also involves subjective evaluation by the individual of its validity.

Rating special purpose market studies as important was significantly associated with positive changes in long-term employment. One explanation for the duality of approach of successful managers is that well informed managers who use systematic methods are better able to develop sensitivity to market trends, or market feel. While the components of feel for the market cannot be delineated from survey information, it is important to note that one approach does not preclude the other. Whether gut feeling in fashion marketing is more important than in other industries remains a question for further research.

The use of a systematic approach to research was significantly associated with large firm size in terms of employment. This was not surprising, since the effect of substantial growth on a firm is usually the decentralization of management, necessitating control through systematization. Where one manager may have collected and disseminated information when the firm was small, a large firm needed to co-ordinate its efforts and its information to optimize efficiency.

6.7.1 Causal Attribution in Management Decisions

Managers attributed responsibility for the success of their decisions to factors within their control, while blaming failures on environmental factors outside their control. Their unwillingness to take responsibility

for declines in growth is not surprising in light of psychological attribution research.

According to Brandstatter and Kelley (1982) individuals and groups often mistakenly attribute results of interactions to other situations or individuals, perceiving their own involvement as minimal. This is especially true in cases where a win/lose result exists. If managers are aware of this process they may be better able to evaluate and thus correct internal behavior which is detrimental to the firm.

6.8 CONCLUSION

The problems arising from classifying many aspects of apparel production in terms of classic marketing frameworks may have contributed to manufacturers slow adoption of the marketing concept. Results indicate, however, that apparel producers can use certain types of research to advantage, while integrating a sense of market dynamics or "feel for the market" into their product mix decisions.

CHAPTER VII

CONCLUSION

7.1 INTRODUCTION

Any evaluation of the survey results must take into consideration limitations imposed by the research design. However, several aspects of the survey results deserve further consideration in terms of suggestions for related research and recommendations to manufacturers. In this chapter, the limitations of the study are reviewed and the implications of the results for managers and researchers are discussed.

7.2 LIMITATIONS

The research design places limitations on interpreting the results of statistical analyses and must also be considered when evaluating topics for further research. Factors affecting analysis are:

A. The Sample Size - The response rate was, at thirty percent, adequate in terms of average response rates for surveys. However, the effects of small cell values, especially zeros, on significance must be considered when interpreting chi-square values, as well as the fact that refusal by individuals to participate interfered with sample randomness. It is also possible that the surveyed firms were not entirely representative of Western Canadian firms in general because a number of firms with their own retail outlets were participants. Verification of the proportion of retailing manufacturers to others is difficult because these firms are classified in various ways in secondary sources.

B. Statistical Tests - Chi-square test results must be viewed as proving association rather than causation.

C. Respondents and Firms - Accuracy of results depends heavily on how candid respondents were in answering questions. Their ability to recall and estimate past performance and their knowledge of firm dynamics also influences the accuracy of results.

7.3 IMPLICATIONS FOR FURTHER RESEARCH

The survey results indicate several aspects of marketing by apparel producers which deserve further examination. Suggestions for further research include the following:

A. An evaluation of apparel versus other manufacturers of similar size and character should determine real differences in usefulness of various research procedures for apparel product planning.

B. A comparison of profit levels or growth over time between firms employing highly developed marketing strategies or long-term planning and those which do not plan ahead would be useful. Case studies of the components of strategies and research used by high growth firms may help to further define important variables.

C. An examination of apparel firms using a less diversified sample in terms of firm characteristics may help to define practical applications of research techniques suitable for firms with specific resource levels. Comparisons between Eastern and Western Canadian firms, foreign and domestic firms, or firms with different markets may also reveal factors which influence the usefulness of research practices.

D. Comparative examination of components of "intuitive" decision processes and their importance to product planning in apparel and other manufacturing may help to highlight similarities or real differences between

apparel and other firms. This type of study could contribute to a better understanding of executive decision making processes in general, and help to determine whether apparel product planning is really different from planning for other types of products.

E. The survey results suggest several specific types of research which may have great potential usefulness for apparel firms. In-depth examination of the areas of sales information systems, consumer-oriented research, and marketing channel information flows may help delineate research areas which are especially important to apparel firms.

7.4 RECOMMENDATIONS FOR MANUFACTURERS

Manufacturers must examine their own needs and resources before determining where to spend research dollars. The findings of this study suggest that managers should reevaluate their procedures in the following areas:

A. Sales Information - Careful monitoring of sales through computerized rate of sale systems would help managers monitor trends, because information flows quickly and regularly through these systems. These data also reflect purchase behavior of ultimate consumers, giving managers the twofold benefit of access to consumer information and a way to track sales.

B. Planning - Managers should systematize planning by establishing long- and short-term marketing objectives, developing strategies and reevaluating their progress on a regular basis. A systematized approach to handling internal and external information would help managers avoid being unprepared for sudden shifts in demand. Conceptually, managers should replace seasonal product reviews with planning around product life cycles. Since most firms make "staple" products or classically styled goods and avoid extreme fads, classifying goods in terms of product life cycles would reduce the risk involved in timing entry into and withdrawal from the market of a given cycle. Better

classification systems for adoption and decline factors would follow.

C. Strategies - Managers should reevaluate their conceptions of their markets and explore alternative marketing strategies. Managers' assumptions about "defined markets" and stagnant demand puts limitations on their strategy options. Managers should consider alternatives to geographic expansion strategies to improve profitability or diffuse risk, by diversifying in terms of new markets as well as new product groups. The "status quo" approach prevents firms from anticipating economic and market trend shifts, and decreases opportunities for exploiting potentially profitable markets.

REFERENCES

REFERENCES

Aaker, D. and G. Day (1983), Marketing Research, New York, John Wiley & Sons.

Advertising Age (1981), "Fashion Marketing", (September 14), S-1; S-20.

Alsop, K. (1982), "There's Power in Positive Thinking", Style, (May 18), 4.

An Index of Manufacturers in Saskatchewan (1975), University of Regina Occasional Paper, Sample Survey and Data Bank Unit, Division of Social Sciences.

Bachman, G. (1978), "Marketing Information Systems for Apparel Manufacturers", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago: AMA, 5-9.

Beckman, M.D., L.E. Boone, and D.L. Kurtz (1979), Foundations of Marketing, Toronto, Holt, Rinehart and Winston of Canada, Ltd.

Blackwell, R. et al. (1977), Marketing Cases in Consumer Behavior, Hinsdale, IL: The Dryden Press, 333-349.

Brandstatter, H. and H. Kelley, eds. (1982), Social Psychology, Berlin, North Holland Publishers.

Brien, H. and J. Stafford (1968), "Marketing Information System: A New Dimension for Marketing Research", Journal of Marketing 32 (July), 19-23.

Buckley, J., M. Buckley, and H. Chiang (1976), Research Methodology and Business Decisions. National Association.

Buzzell, R.D., B.T. Gale, and G.M. Sultan (1975), "Market Share - A Key to Profitability", Harvard Business Review 53 (January-February), 97-106.

Concepts and Definitions of the Census of Manufacturers (1979), Statistics Canada, Catalogue 31-528, Ministry of Industry, Trade, and Commerce, (June).

De Kupsa, C. (1978), "A National Manufacturer Looks at Fashion Management", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago; AMA, 10-17.

Dennyson, W. (1982), "Garment Import Cutback Urged", Winnipeg Free Press, (August 30), 43.

Dictionary of the 1971 Census Terms (1972), Statistics Canada, Ministry of Industry, Trade, and Commerce (December).

Drake, J. and T. Miller (1969), Marketing Research Intelligence and Management, Stanton, PA: International Textbook Co.

Dupont (1978), Marketing Research Techniques for Lingerie and Swimwear Markets, Promotional Pamphlets.

Emory, C.W. (1976), Business Research Methods, Homewood, IL: Richard D. Irwin, Inc.

Fisher, K. and B. Blass (1981), "Designing the Right Images", Advertising Age, (September 14), S-4.

Gordon, R.L. (1975), Interviewing, Homewood, IL: The Dorsey Press.

Hill, L. (1978), "Estimates of Wholesale Market Shipments", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago: AMA, 59-62.

Jarnow, J.A. and B. Judelle (1974), Inside the Fashion Business, Toronto, John Wiley and Sons.

Kotler, P. (1980), Marketing Management - Analysis, Planning, and Control, Englewood Cliffs, New Jersey, Prentice-Hall, Inc.

Lazer, W. (1956), "An Analysis and Evaluation of the Marketing of Textile Clothing by Western Canadian Manufacturers". Ph.d. Dissertation, The Ohio State University, Ohio.

Lefkowitz, M. (1978), "Marketing and Research for Apparel Manufacturers and Retailers, an Overview", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago: AMA, 50-53.

Lippert, B. et al (1981), "It's A Question of Style", Advertising Age, (September 14), S-2.

MacFarlane Smith, J. (1972), Interviewing in Social and Market Research, London: Routledge and Kegan Paul.

Manitoba Fashion Institute Membership List (1982), Winnipeg: M.F.I., Inc.

Manitoba Trade Directory (1982), Winnipeg: Stanford-Evans Publishing Ltd.

Marcus, P. et al (1975), Modern Marketing, New York: Random House.

Matura, R. (1978), "A Manufacturer's View of Fashion Management", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago: AMA, 2-4.

Payne, D.A. and R.F. McMorris (1967), Educational and Psychological Measurement, Toronto, Blaisdell Publishing Company.

Pestieau, C. (1978), The Quebec Textile Industry in Canada, Montreal: C.D. Howe Research Institute.

Popielarz, D. (1978), "Logistic Response Analysis , A New Approach to Segmenting Markets", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago: AMA, 85-93.

Raudsepp, E. (1981),"Can you trust your hunches?", Administrative Management, XLII, 10, October.

Retail Week, (1980), "T.V. or Not T.V.", 15 (June 1), 34-37.

Reynolds, F. and W. Darden (1972), "Why the Midi Failed", Journal of Advertising Research, 12 (August), 39-44.

Richards, E. et al (1977), "Lifestyle Segmentation in Apparel Marketing", Journal of Marketing, 41 (October), 89-91.

Richards, E. (1978), "Lifestyle Segmentation for Product or Store Design and Market Planning", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago: AMA, 63-67.

Richards, E. and D. Rachman, eds. (1978), Market Information and Research in Fashion Management, Chicago: American Marketing Association.

Roth, S. (1978a), "Steps in the Implementation of a Lifestyle Segmentation Study", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago: AMA, 68-72.

Roth, S. (1978b), "Case Study in Application of Lifestyle Segmentation", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago: AMA, 73-84.

Roth, S. (1978c), "Consumer Show and Wear Tests", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago: AMA, 94-97.

Roth, S. (1978d), "Awareness, Attitude and Usage Research", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago; AMA, 98-101.

Saddik, S. and G. Wills (1973), "Product Strategy and Management in British Textile Industries", in G. Wills and D. Midgley, eds., Fashion Management, London: G. Allen and Unwin, Ltd., 485-500.

SAS Institute Inc., SAS Users' Guide: Basics, 1982 Edition. Cary, NC: SAS Institute, Inc., 1982.

Sherer, F.M. (1970), Industrial Market Structure and Economic Performance, Chicago, Rand McNally College Publishing Company.

Schewe, C.D., ed. (1976), Marketing Information Systems, Chicago: AMA.

Schiffman, L.G. and L.L. Kanuk (1978), Consumer Behavior, Englewood Cliffs, NJ: Prentice-Hall, Inc.

Scott's Industrial Directory of Western Manufacturers (1980), 5th Ed., Oakville, Ontario, 3-14; 3-18.

Segal, H.J., L.E. Boone, and D.L. Kurtz (1974), Contemporary Marketing in Canada, Toronto: The Dryden Press.

Siegel, S. (1956), Non Parametric Statistics for the Behavioral Sciences, New York: McGraw Hill.

Sproles, G.B. (1981), "Analyzing Fashion Cycles - Principles and Perspectives", Journal of Marketing, 45 (Fall), 116-124.

Sturman, S. (1978), "Information Systems and Warner's Slimwear", in E. Richards and D. Rachman, eds., Market Information and Research in Fashion Management, Chicago: AMA, 18-22.

Talarzyk, W.W. (1979), Contemporary Cases in Marketing, Hinsdale, IL: The Dryden Press, 142-149.

Textile and Clothing Inquiry (1980), Report to the Minister of Industry, Trade and Commerce, Ottawa, Vol. 1 (June 30).

Textile and Clothing Board Report (1981), Report to the Minister of Industry, Trade and Commerce, Ottawa, (June).

Troxel, M. and E. Stone (1981), Fashion Merchandising, New York: McGraw Hill Inc.

Walters, C.G. (1974), Marketing Channels, New York: The Ronald Press Company.

Woodside, A.G., J.T. Sims, D.M. Lewison, and I.F. Wilkinson (1978), Foundations of Marketing Channels, Austin: Austin Press.

APPENDICES

APPENDIX I

CLASSIFICATION OF RESEARCH AREAS AND TYPES

APPENDIX I

CLASSIFICATION OF RESEARCH AREAS
With Examples of Formal and Informal Methods

Product Research

Formal	Informal
New Product/Concept Testing - Tests for acceptance, awareness, etc.	
Consumer Panel Data	Sales Meeting
Competitive Product Studies - Surveillance of competition's products, pricing, promotions, etc.	
System to monitor competitor's activities	Casual periodic checks
Product Testing - Tests for actual product characteristics	
Show and wear tests	Casual information from retail buyers
Packaging/Design Research - Test for effectiveness of packaging, size, etc.	
Eyetracking, consumer panels	Casual information from sales people

Sales and Market Research

Formal	Informal
Market Share Analysis company sales in units/dollars industry sales	Estimates based on experience
Market Potential Studies of characteristics new markets	Competitor's apparent success
Market Segmentation Surveys of demographic socio-economic or psychographic characteristics of consumers	Casual information from retail buyers
Sales Analysis/Forecasting - long and short range	
By product, customer, territory, sales rep., geographic area using trend analysis techniques	Rough estimates of future sales from past sales
Test Marketing/Store Audits Professional audits and controlled test marketing	Standard test marketing (i.e.: testing with no control of variables)
Special Promotion Studies (premiums, coupons, samples)	
Quantification of resulting difference in sales	Estimate of difference in sales

Corporate Research

Formal	Informal
Location Studies Analysis of various sites	General economic indicators of prime sites, proximity
Diversification Studies Analysis of costs of mergers, expansion, new product development - benefits	Casual investigation of new potential
Export/International Studies Analysis of market potential in foreign markets using primary and secondary sources	Word of mouth from exporters, government personnel, etc.
Distribution Channel and Cost Studies Sales comparisons by channel - cost comparisons - profit analysis	Word of mouth about different channels

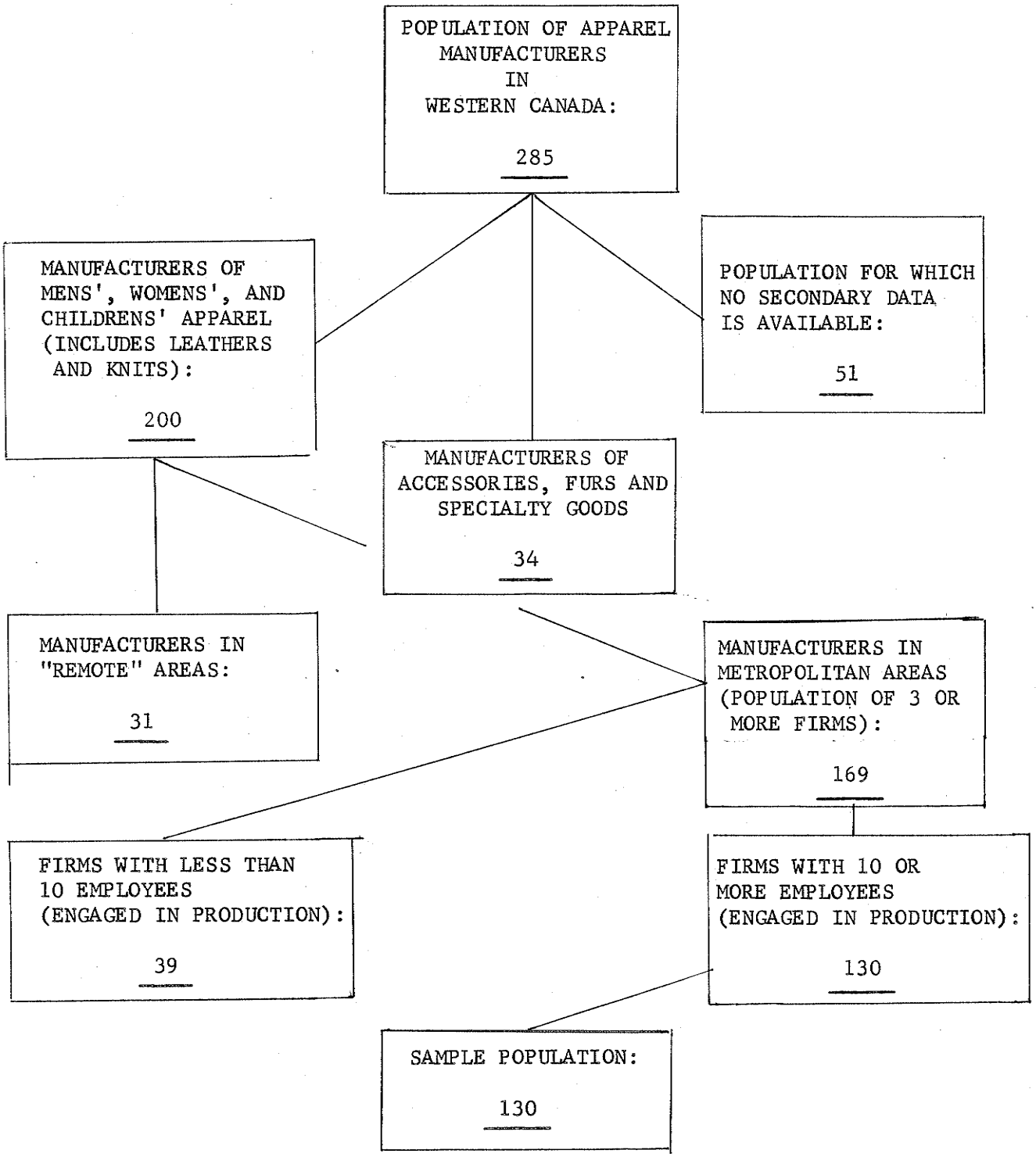
Computer Simulation
- of product characteristics, pricing, distribution, promotion, and strategies.

Linear Programming, PERT studies, CPM, operational studies may be part of an MIS, depending upon whether the studies are to solve specific problems or to provide information on an ongoing basis. They are marketing research techniques if they are part of a specific problem solving schedule. These types of studies cannot be duplicated in an informal way.

Adapted from "A Survey of Market Research"
AMA 1963
as shown in Drake & Miller, (1969)

APPENDIX II

THE POPULATION



SUBGROUPS OF BASE POPULATION OF APPAREL FIRMS IN WESTERN CANADA.

APPENDIX III

INTERVIEW SCHEDULE

The Interview Schedule

I. Introductory Statement (warm-up period)

The general purpose of this study is to gather information about the business practices and concerns of Western Canadian apparel manufacturers. I would like to ask you a series of questions about product planning, as well as some more general questions about your business. Please feel free to answer any question at length, as your cooperation will ensure an accurate portrayal of the concerns and practices of Western apparel manufacturers. Your answers will be used for statistical purposes only, since the aim of the study is to get a general picture of marketing practices, rather than to single out the practices of any one manufacturer. Company and individual identities will be held in strictest confidence.

Do you have any questions?

Explanation and Presentation of Consent Form

II. I would like to begin by getting some background information about your product.

1. a) Would you describe what you make?

   b) How far in advance of actual production do you start planning thinking about) new products?

   c) For which seasons do you produce major (basic) lines?

   d) Do you modify these lines throughout the year? How often?

   e) How long does it take, from delivery, to discover which products are unsuccessful? (How do you respond to this, in terms of product modification?)

2. Excluding sample production, what % of your goods do you produce

   _____1) before actual orders are taken
   _____2) to fill confirmed orders
   _____3) in addition to confirmed orders

3. What % of goods do you sell under

_____1) your own brand names
_____2) private labels
_____3) other, please specify_____

_____

IF 2) or 3)

What % of the time does the contracting agency

_____1) specify what to make
_____2) leave product planning up to you
_____3) participate in joint decision-making

4. What % of goods, if any, do you import for sale (under your own brand names)?

When did you begin importing?

(How has the amount your firm imports changed over the last 5 years?)

III. I would like to ask you a few questions about how your firm decides what to produce.

5. Would you explain how you go about planning (and evaluating) your product?

Probes: Concept Testing
Tests of Product Characteristics
Role of Price Points

6. How do you obtain information about the market in general?

Probes: Market Niches/New Market Potential
Market Share
Market Trends

7. How do you obtain information about the consumer?

Probes: Test Marketing
Market Segmentation/Consumer Profiles

8. How do you monitor sales?

9. How does sales information contribute to product decisions?

Probe for Sales Forecasting/Analysis

10. How do you monitor the activities of your competitors?

11. What types of promotion do you use?

Probes: Labelling, Hang Tags, Packaging, Hanger Appeal

Role in In-Store Display and Point-of-Sale Promotion
Advertising Media Used

How do you decide on the type of promotion? The details (of those used)?

If firm advertises,

What % of your advertising is directed at

_____1) retailers
_____2) consumers
_____3) both

12. Would you please rate the following factors for importance in contributing to successful product planning as applied to your firm. CHECK THE APPROPRIATE BOX, from 1 to 5, where 1 indicates very important, while 5 indicates no importance. (Response card)

	VERY IMPORTANT 1	2	3	4	NOT IMPORTANT 5
(a) CREATIVITY	☐	☐	☐	☐	☐
(b) EXPERIENCE	☐	☐	☐	☐	☐
(c) USE OF SECONDARY MARKET INFORMATION	☐	☐	☐	☐	☐
(d) FEEL FOR THE MARKET	☐	☐	☐	☐	☐
(e) SPECIAL PURPOSE MARKET STUDIES	☐	☐	☐	☐	☐

IV. I would like to ask you a few questions about the recent history of your firm.

13. a) As of December, 1982, how many employees were working here in production?

How many hours a week did they work?

b) How do these figures (# of employees/hours worked) compare to December of the previous year? (Can you elaborate, give % change?)

c) How do the 1982 figures compare to the same time 5 years ago (1977)? (Would you explain, give % change?)

14. a) By what % did your value of shipments change from 1981 to 1982?

How do 1982 figures compare with those of 5 years ago?

What internal or external factors were responsible for these changes?

b) How did actual value of shipments compare to your expectations in 1982 (in %)? 1981? 5 years ago (1977)?

15. When you need information for daily decisions, how do you go about obtaining it?

16. Do you use computers? IF SO, for what purpose?

17. Have you changed your approach to management in the last 5 years? Would you explain?

Are you planning any modifications in your management approach in the near future?

What about long-range plans? (Can you elaborate?)

18. What % of your goods, if any, do you export?

IF EXPORTING, how do you determine what will be accepted in an export market?

Within Canada, are there regional differences in product acceptance? How do you determine what will sell in different regions?

19. What is the form of ownership of this firm?

What is the owner's role in product decisions?

What role do hired managers play in produce decisions?

L1 The following is a list of alternative ways in which some firms go about gathering information to aid in decision making. Please CHECK those methods or sources which you have used in the last 5 years. (Verbal Instr.)

____ census data
____ consumer panels
____ trade journals, magazines
____ eyetracking
____ show tests
____ test marketing
____ motivation studies
____ business journals, newspapers
____ segmentation studies
____ information from retail buyers
____ travel to fashion centres
____ attitude studies
____ management summaries
____ government publications
____ information from fashion agencies
____ travel to potential markets
____ surveys
____ checking details of products in stores
____ information from sales staff
____ conferring with other manufacturers
____ simulation
____ street (observation)
____ estimating best sellers from past sales
____ promotion tracking
____ personal communication with government sources
____ competitors' best sellers
____ awareness studies
____ information from trade associations
____ trade shows, fashion shows
____ estimation of market shipments
____ information from retail sales people

Are there any other ways in which your company gathers information for decision making? _____

_____

_____

L2 The following items are areas about which firms may gather information to aid in decision making. Some items may not be applicable to your firm, and may be ignored. Please place applicable items in rank order, beginning with "1" to indicate the area on which most management time is spent. (Verbal Instr.)

____ Consumer acceptance of new lines, concepts
____ Competitors' activities
____ Consumer reaction to actual product characteristics
____ Market share
____ New market potential
____ Characteristics of consumers (including market segmentation)
____ Sales forecasting or analysis
____ Test marketing and store audits
____ Hanger appeal, packaging, labelling, hang tags
____ Special promotion, display, in-store location
____ Other, please specify _____

_____

____ Location of plants, warehousing
____ Diversification
____ International markets, exporting
____ Distribution channels, retail outlets
____ Costing
____ Computers, automation

APPENDIX IV

CLASSIFICATION OF APPAREL PRODUCTS

APPENDIX IV

CLASSIFICATION OF APPAREL PRODUCTS

Product Group	Product Type
Outerwear	Light Outerwear (woven) Winter Outerwear (knit, woven) Light or Winter Outerwear (leather, suede)
Sportswear	Coordinated Separates jackets, skirts, dress pants, dress uniforms, functional uniforms (woven)
Active Sportswear	Sports Apparel (knit, woven) Ski Wear, Swim Wear
Suits	Ready-to-Wear Suits Made-to-Measure Suits
Shirts and Sweaters	Sweaters (includes knit suits, light outerwear) Shirts (knit, woven) T-Shirts
Casual Pants	Jeans, Casual Pants (woven)
Workwear	Light and Winter
Lingerie	(women's wear only)
Miscellaneous Products	Slippers Mitts Dusters Linen Cloth Headwear Furs

APPENDIX V

CONVERSION FORMULAE

APPENDIX V

CONVERSION FORMULAE

A. Conversion of Dollar Percentage Change to Real Dollar Percentage Change (correction for inflation using Consumer Price Index):

I. Over one year (1981 to 1982):

Percentage change over 1 year in dollar value shipped

$$\frac{\text{CPI for 1981/82 (10.8)}}{}$$

II. Over five years (1977 to 1982):

*Average CPI for 1982	262.5	
*Average CPI for 1977	160.8	
	101.7	Conversion factor

$$\frac{\text{Conversion Factor}}{\pm}$$
$$\text{Percentage Change}$$

B. Conversion of Employment Data to Worker Hours per Day:

$$\frac{\text{Number of Employees in Production X Average Number of Hours Worked per Week}}{**5}$$

*Base year 1971 = 100

**Assumes a 5 day work week

Source: Statistics Canada, Winnipeg.

APPENDIX VI

ADDITIONAL DEFINITIONS

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ADDITIONAL DEFINITIONS

Chains - Stores which are centrally owned and managed and handle the same line of products. They may be department, discount, specialty stores, or supermarkets.

Independents - Stores which are owned and operated privately and managed independently.

Department Stores - Stores which carry a broad, deep assortment of goods, including clothing, linens and dry goods, home furnishings and appliances, in separate departments. These firms offer many services to customers. Major department stores are chains which have sales volumes placing them among the ten largest enterprises in Canadian retailing.

Specialty Stores - Stores which carry only a part of a single line of products, this narrow line being stocked in depth. These stores are often independent.

Beckman (1982)