

ENVIRONMENTAL SCANNING ACTIVITIES
OF SMALL APPAREL STORES

By

HYE-SHIN KIM

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OF SMALL APPAREL STORES

Thesis Approved:

Lana Stufflebean

Thesis Adviser

Laura D. Jolly

Margaret A. White

Thomas C. Collins

Dean of the Graduate College

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CHAPTER I

INTRODUCTION

The rapidly changing retail environment has put small business owners/managers in a position where effective planning and awareness is needed to survive and prosper. The lack of systematic consideration of present and future circumstances has been identified as a major cause of business failure (Robinson, 1979). In response to environmental changes, small businesses are beginning to sense the need to understand the environment. An increase in formal strategic planning systems and development of environmental scanning activities can be observed among small businesses (Pearce, Chapman, & David, 1982). Environmental scanning is a critical component of strategic planning in that the effectiveness of strategic planning is directly related to the capacity of environmental scanning (Godiwalla, Meinhart, & Warde, 1980).

Strategy for the small firm is managerial planning designed to help a small firm adapt to its external environment while achieving sales and profit goals (Sexton & Van Auken, 1982). Therefore, knowing and understanding a small firm's surroundings is a major factor in planning for growth. The idea of the open system theory is that an

organization's growth and survival depends on the nature of the environment it faces (Fahey, King, & Narayanan, 1981). Environmental scanning was developed on the basis of the open systems theory. Dollinger (1985) states that strategic planning activities include identifying market opportunities, marshalling the firm's resources to correspond with the owner's personal values and aspirations and engaging in transactions with customers, suppliers, and other organizations to implement the plan. Dollinger's study (1985) confirms that a positive relationship exists between the owner's contact with the firm's external environment and the financial performance of the firm.

Scanning is defined as the process of monitoring the environment and providing environmental data relevant to managers (Daft & Weick, 1984). In the planning process, the owner/manager of a small business must understand the environment in which he or she operates. Information regarding the environment is obtained through various sources and appropriately interpreted and implemented into one's business. Environmental scanning is considered an integral part of strategic planning and is defined as gathering and interpreting pertinent information and introducing the results into the organizational decision process (Lenz & Engledow, 1986). Scanning helps the owner keep in touch with the business world revolving around them and with current trends, issues and events important to small businesses. In other words, scanning helps the

business keep abreast of environmental happenings (Specht, 1987).

There are various sources organizations depend on to obtain information. The sources are mainly classified by the origin from which they were received such as personal, impersonal, external, and internal (Aguilar, 1967). In analyzing the environment, large firms employ specialized environmental scanners. However, most small firms cannot afford such scanning practices.

Smeltzer, Fann, and Nikolaisen (1988) point out special characteristics in the environmental scanning practices of small firms that may differ from large firms, creating a unique situation. First, owners of small firms function at operational and strategic levels concurrently. Second, formal environmental scanning may be enacted by only one person in a small firm. Third, information that passes through environmental scanners is less formalized and filtered in the small firm. Finally, small firms may lack the resources needed to scan a large number of information sources. In addition, small firms may not belong to formal industry associations and are also less likely to subscribe to formal environmental scanning services (Smeltzer, Fann, & Nikolaisen, 1988).

Apparel is a special merchandise classification in retailing. Because of the immediate impact the environment has on the sales of apparel, it is most imperative that apparel retailers keep up with the changing external

environment in order to maximize profit. The diversity and change in customer profiles and fashion elements has led to a fast obsolescence in inventory (Cash & Frankel, 1986). This obsolescence has given weight to the importance of strategic planning and environmental scanning. All small business managers are not influenced by the same environment. While a fashion trend is booming in some parts of the United States, the same trend might be dying in another area. Also, sales that a small apparel business generates might be influenced by local economic conditions. Therefore, apparel store owners might use different approaches in coping with their own unique environment.

Studies on the environmental scanning activities of small businesses carrying specific types of merchandise are rare. Since, the type of merchandise is assumed to influence scanning activities, the study of the environmental scanning activities of independently owned small apparel businesses will add to the body of knowledge in the retailing field.

Purpose and Objectives

The purpose of this study was to identify the environmental scanning activities of independently owned small apparel businesses. Small apparel businesses are challenged by the effects of constantly changing merchandising trends. The need to understand the surrounding environment may demand more planning effort than

is necessary for businesses carrying nonapparel merchandise. Apparel retailers may scan the environment in different ways. They may increase or decrease their scanning frequency or choose different sources of information to assist in their daily scanning activities. The frequency can be measured in conjunction with the perceived importance of each environment to the retailer. This is described as scanning intensity (Box, 1991).

Scanning intensity in relation to information source utilization, performance of business, and demographic characteristics of owners/managers of independently owned small apparel businesses was studied. Also, the sources of information used in six areas of the business environment - competition, customer, technological, regulatory, economic, and sociocultural - by apparel small retailers were identified. Finally, the relationship between information source utilization and business performance was studied. This study shows the importance of scanning and use of information sources in six areas of the environment.

The objectives of this research were to identify:

1. Differences in scanning intensity of retail store owners/managers based on their demographic characteristics.
2. Differences in scanning intensity of retail store owners/managers based on their information source utilization.
3. The relationship between the scanning intensity of retail store owners/managers and business performance.

4. The most frequently used information sources when scanning the six areas of the business environment.

5. The association between information source utilization and business performance.

This study should benefit the retail sector of the apparel industry by identifying the range of the use of environmental scanning in the planning process and supporting the value and need for such an activity. It will also provide some insight into effective sources of information that may be used in the scanning practices of small apparel businesses.

Research Questions

The following questions were studied in this research.

1. Does scanning intensity of retail store owners/managers vary based on their demographic characteristics?

2. Are there differences in the scanning intensity of retail store owners/managers based on their information source utilization?

3. What is the relationship between the scanning intensity of retail store owners/managers and business performance?

4. What are the most frequently used information sources when scanning the six areas of the business environment?

5. What is the association between information source utilization and business performance?

Assumptions and Limitations

Research aimed at assessing the environmental scanning activities of independently owned small businesses was based on the following assumptions:

1. Apparel retailing requires management techniques different from stores carrying nonapparel merchandise.
2. All independently owned small apparel businesses engage in some form of environmental scanning activity to a certain degree.
3. Small businesses are considered organizations that are open social systems that process information from the environment.

The sample is limited to small businesses that merchandise apparel in the Greater Tulsa Area and the results cannot be generalized in other areas.

Definition of Terms

For the purposes of the study, the following terms are defined and utilized:

Apparel Retailer: The owner or manager of a firm involved in selling apparel and accessories to the consumer.

Environment: The totality of physical and social factors taken into consideration in the decision-making process of organizations (Duncan, 1972).

Environmental Scanning: Gathering and interpreting pertinent information and introducing the results into the organizational decision process (Lenz & Engledow, 1986).

Environment Uncertainty: The lack of information and unpredictability of environmental factors in a decision making situation (Duncan, 1972).

Frequency: The number of times an activity takes place in a given period.

Information Source: The origin whereby the owner/manager secures information.

Open Systems Theory: Organizations are made up of parts or subsystems and organizations themselves are subsystems within larger systems. The open system recognizes the interdependency between the system and its environment (Robbins, 1983).

Performance: The measurement of growth in sales, growth in employment, and the overall perceived firm success.

Scanning Intensity: The degree of scanning defined by the frequency and importance of scanning in an area of the business environment (Box, 1991).

Small Apparel Store: A retail store with less than 500 employees and involved in selling men's, women's, and children's apparel and accessories.

Strategic Planning: The philosophy, objectives and managerial planning designed to attract customers, sell merchandise, and maximize profits (Hawley, 1989).

Organization of Study

Chapter I presents the purpose and objectives of the study followed by research questions to be examined. Also, assumptions and limitations of the study are stated. Finally, definitions of terms that will be frequently used are listed in Chapter I.

Chapter II gives a review of literature that presents past and current research and theories relevant to this study. Chapter III explains the sample and research methodology used to conduct this study.

Chapter IV reports and discusses the results of the study and Chapter V presents a summary of the results and provides implications for small businesses and recommendations for further research.

CHAPTER II

REVIEW OF LITERATURE

The State of Small Business

Small firms play a major role in contributing to the economy. The increase in consumer spending played a major role in the growth of the Gross National Product (GNP) during the first three quarters of 1988 (U.S. Small Business Administration, 1989). Small businesses, especially in retail, wholesale, and service industries, generally benefitted from this growth in consumer expenditures (U.S. Small Business Administration, 1989). However, sole proprietorship and partnership profits grew slowly.

Over the past six years 1.2 million small firms have opened (U.S. Small Business Administration, 1989). Although, the number of businesses continued to increase, the rate of growth in business starts decreased, following a continued downward trend. However, business closure rates, both failures and bankruptcies, were also down (U.S. Small Business Administration, 1989).

Definition of Small Business

There is no standard method of defining the size of a business. The size of a business may be measured in terms

of employment, assets, or receipts. The office of Advocacy of the Small Business Administration defines small business as those having either under 500 or under 100 employees (U.S. Small Business Administration, 1989). A more detailed breakdown of their classifications of business by size is as follows: under 20 employees, very small; 20-99, small; 100-499, medium sized; and over 500, large. The Small Business Administration (1989) states that because the definition used may depend on the question being analyzed or the industry being studied, an upper limit of 100 employees may be most appropriate in studying the retail stores because most retail stores have fewer employees and most retail firms have few establishments (U.S. Small Business Administration, 1989).

The Importance of Small Business to the Economy

Small and growing firms have an important impact on the economy. Johnson and Kuehn (1987) state that "the levels of employment, inventory purchases, and sales provided by small businesses constitute the very lifeblood of our national economy" (p. 53). According to the Small Business Administration (1981), small and growing firms with annual sales of less than \$5 million comprise 97 percent of all U.S. business firms.

The economy has moved closer to full employment and increased number of employees in small business-dominated

industries. Small business employs almost 60 percent of the work force and is expected to employ half of the work force between now and the year 2000 (Moore & Golden, 1989).

Nevertheless, employment in the small business-dominated apparel and accessory stores industry actually declined 2.1 percent and family clothing stores, a large-business-dominated industry, also had an extremely slow growth rate (U.S. Small Business Administration, 1989). The Small Business Administration (1989) shows that the increase in employment, which is evidence of growth, is important to the survival of business.

The Failure of Small Business

According to Thompson (1989), 59.5 percent of the retail trade industry in business five years or less were projected to fail in 1988. The primary factors of failure are insufficient profits and poor growth (Thompson, 1989). The Small Business Administration (1989) states that 29.5 percent of the nongrowing firms fail within two years of their start-up date, compared with 8 percent for growing firms. The all-firm failure rate is 23.7 percent. Also, failure rate for the nongrowing firms was 72.5 percent after the first six years in business compared with 33.7 percent for growing firms. The failure rate for all firms was 62.7 percent.

Small Apparel Retailing

Retailing can be defined as those business activities that involve the sale of goods and services to the ultimate consumer for personal, family, or household use (Berman & Evans, 1983). Retailing is a vital part in the channel of distribution, acting as an intermediary between the manufacturers and/or wholesalers and final customers. The retailer purchases a limited range of merchandise in large quantities from different suppliers and offers a variety of merchandise and services to the customers.

The Small Business Administration (SBA) reports that women's ready-to-wear stores and apparel and accessory stores are among the small-business dominated industries that experienced the greatest average annual increase in productivity between 1972 and 1988 (Small Business Administration, 1990). There are two principal advantages of a small retailer; all resources are tailored to the needs of specific customer categories and personal management and services are provided by the owner (Berman & Evans, 1983). The disadvantages to a small retailer include limited advertising due to costs, long work hours of owner-operator, and competing with the underpricing by large retail establishments through large volume purchases (Berman & Evans, 1983). One other factor that cannot be overlooked considering small retailing is that in many cases, the primary motivation of the owner of a small retail store is

geared toward achieving a certain personal lifestyle and degree of independence rather than to satisfy consumer needs (Carusone & Moscové, 1985).

Apparel retailing is affected by the changes in the environment more severely than most types of businesses. Because of seasonality, fashion cycle, high turnover of merchandise, and customer demand, small businesses must be alert to components surrounding their businesses that will change their growth in profits (Hawley, 1989).

The shifts of shopping habits and taste of customers, gives retailers no choice but to manage their inventory at various levels of risk (Cash & Frankel, 1986). Margin (sales less cost of goods sold), expenses, and profits vary considerably among apparel stores and there is tremendous underestimation of the technical skills needed in apparel retailing. Cash and Frankel (1986) note the principal reasons for failure in apparel retailing to be incompetence and general lack of managerial experience.

Environmental Scanning

The owner/manager's ability to adapt to environmental changes depends on awareness and sensitivity to business surroundings. Based on the open system theory, the business is dependent upon the nature of the environment it encounters (Narchal, Kittappa, & Bhattacharya, 1987). Environmental scanning, provides the small business with current information on the environment and therefore is an

important part of business planning. The conscious retailer seeks sources of information pertaining to their surroundings and plans a strategy on the basis of this information. The accomplishments of a small business's strategic planning is impacted by its ability to scan the environment (Jain, 1984).

Concept of Environmental Scanning

Environmental scanning is an organized way of observing the environment so that planners may anticipate new opportunities and impending dangers soon enough to deal with them effectively (Pearce, Chapman, & David, 1982). It is the activity of acquiring information which simply involves being exposed to and perceiving information (Aguilar, 1967). Environmental scanning provides the direction in which the business should be run. Large amounts of information are required for strategic planning and decision making. Environmental scanning is the activity that supplies that need.

Aguilar (1967) notes that scanning is an easy everyday activity and familiar process, but difficult to isolate and analyze. However, Jain (1984) states that a formalized system of strategic planning is essential to achieve a structured system of environmental scanning. Therefore, accurate analysis provides the best framework for maximizing opportunities and allocating resources for the anticipated future (Jain, 1984). Environmental scanning is the means

through which managers identify trends, events and changes. Therefore, environmental uncertainty increases information processing within the organization (Daft, Sormunen, & Parks, 1988). Perceived complexity and rate of change were also identified as important environmental characteristics that influence environmental scanning (Daft & Wieck, 1984). As complexity and rate of change in the environment increased, the amount of uncertainty perceived by managers also increased (Duncan, 1972).

Modes of Scanning

Scanning models are developed to categorize, compare and evaluate business environmental scanning activities. Aguilar (1967) identified four modes of scanning: (1) undirected viewing, (2) conditioned viewing, (3) informal search, and (4) formal search.

Undirected viewing is exposure to information with no specific purpose, being unaware of issues raised but with possibility of exploration. The viewer is exposed to large amounts of information and does little screening. Conditioned viewing is directed exposure with no active search for a specific type of information. However, the viewer is ready to assess and be sensitive to the information cues given. Informal search is a limited and unstructured effort to obtain specific information for a purpose. Aguilar (1967) notes that informal search can take many forms, from soliciting information to increasing

emphasis on relevant sources. Activities such as reading published materials, or making people aware of one's interest are part of an informal search. Formal search is a deliberate effort to secure specific information. It is a plan or a formalized process to obtain the information.

Commonly, a firm will use one mode of scanning more than others for acquiring information, but also be engaged in all four modes of scanning simultaneously (Aguilar, 1967). Aguilar (1967) notes that although the formal search is the most effective mode, a firm cannot commit all its information requirements to it, and therefore, the information needs must be assigned to other modes of scanning.

The use of various scanning modes and the level of scanning efforts will show the organization's need for different types of information and capacity to scan the environment (Aguilar, 1967). Aguilar further provides criteria or "rules" to systematically select a particular scanning mode depending on the nature of the information. However, he points out that the difficulty of determining the value of information to be gained and the cost of obtaining the information makes it difficult to estimate the scanning effort in which to invest.

Fahey and King (1977) present three scanning models - irregular, regular and continuous - which are based on the frequency of scanning. Companies could gather data about external events irregularly or continuously depending on

their need (Daft, Sormunen, & Parks, 1988). This framework has been used to categorize, evaluate, and compare corporate environmental scanning activities. The irregular scanning model represents a process of ad hoc environmental study motivated by unexpected occurrences in the environment. Its purpose is to react to a crisis and not so much to predict future environmental trends and events. The irregular model's intent is to find the implications of an event that have already taken place. The regular model is a systematic, regular view of the parts of the environment which are considered important. It is more issue, decision, and future oriented than the first model. The continuous model emphasizes the continuous monitoring of various environmental systems. Fahey and King (1977) state that continuous scanning must be organizationally structured and have a planning process that integrates both information processing and information utilization. The degree to which scanning activities are integrated into the overall process is an important indication of the degree to which scanning is a continuing, institutionalized, and accepted activity (Fahey & King, 1977).

In a study of corporations, Jain (1984) identifies four phases in the evolution of environmental scanning. Most environmental scanning systems of business corporations fall into one of the four phases: primitive, ad hoc, reactive, and proactive. Jain (1984) suggests that most systems

originate in the primitive stage and progress to the final proactive phase.

The primitive phase is when information does not influence the strategic decision making of the business. Management simply accepts the impact of the environment and does not make any effort to scan the environment. The ad hoc phase differs from the first phase in that management is sensitive to information on specific issues and watches out for a likely impact on the environment. However, there is no formal system nor initiative to scan the environment. In the reactive phase, environmental scanning is considered important. Efforts are made to monitor the environment and seek information, but in an unstructured way. The firm may be overwhelmed with information, but will follow a leading firm in making strategic moves. Scanning is used to deal with the environment in order to protect the future and respond to markets and competition. Structured and deliberate efforts are performed to collect specific information in the proactive phase. Environmental scanning is practiced to predict the environment for a desired future and lookout for competitive advantage. Using the four phases developed by Jain (1984), scanning effort becomes more intensive as it progresses from one stage to the next.

Areas of the Business Environment

Physical and social factors in the organization or specific decision making units are part of the business

environment (Duncan, 1972). A differentiation is made between the internal and external environment by determining whether the physical and social factors were within or outside the boundaries of the organization or specific decision units (Duncan, 1972). The different factors in each of the environmental areas are also called environmental descriptors because they explain the dynamics of the environmental area (Narchal, Kittappa, & Bhattacharya, 1987). The business environment consists of the task environment and general environment (Bourgeois, 1980). According to Bourgeois (1980), the task environment is the organization's immediate environment which influences day-to-day managerial operations. It consists of the suppliers, customers, and competition. The general environment is composed of multiple task environments. It usually includes the social, demographic and economic areas. Kotler (1988) reports that the general environment is an uncontrollable environment to which the organization must constantly monitor and respond.

Narchal, Kittappa, and Bhattacharya (1987) further classified the business environment into the industry environment, competitive environment, and the general environment. The general environment is considered more relevant to strategic planning and requires a greater degree of innovation in the information collection activities of businesses (Fahey & King, 1977). The area of analysis in the environment separates the small-scale planner from the

large-scale planner, because the environment provides the framework in which the firm operates (Moyer, 1982).

Jain (1984) states that large corporations categorize environmental scanning into four areas: economic, technological, political (including regulatory) and social. In the corporate environment, the economic area is expected to be most significant and is considered to be of primary importance (Jain, 1984). The least effort in environmental scanning is considered to be in the social environmental area (Jain, 1984). This is basically due to the inability to make a systematic effort in the area. In a study of key planning officers of corporations (Fahey & King, 1977), the regulatory environment was considered to be most crucial and one-half of the firms thought that the technological environment was increasing in importance.

In a study of small- to medium-sized manufacturers in Texas, six sectors of the environment were identified by Daft, Sormunen, and Parks (1988):

1. The competition sector. This sector includes the firms and products that compete with your company's products, and companies that make substitute products. It also refers to competitive tactics and actions between your firm and the other competing firms in this industry.
2. The customer sector. This sector refers to those companies or individuals that purchase the products made by your company. Customers include companies that acquire your products for resale, as well as final consumers.
3. The technological sector. This sector includes the development of new production techniques and methods, innovation in materials and products for resale, as well as final consumers.
4. The regulatory sector. This sector includes federal and state legislation and regulations, city or

community policies, and political developments at all levels of the government.

5. The economic sector. This sector includes economic factors such as stock markets, rate of inflation, foreign trade balance, federal and state budgets, interest rates, unemployment and economic growth rate.

6. The sociocultural sector. This sector comprises social values in the general population, the work ethic, and demographic trends such as increasing number of women in the work force. (p.137)

Their study showed customer, economic, and competition sectors had greater strategic uncertainty and were more frequently scanned than the technological, regulatory and sociocultural sectors.

Information Sources

Knowing what sources of information to use is important to the success of environmental scanning in small businesses (Jain, 1984). The information a manager secures comes from both outside and inside sources (Aguilar, 1967). Outside sources include customers, suppliers, business associates, bankers, consultants, friends, trade shows, trade associations, and publications. Inside sources include peers, superiors and capital investment reports.

Aguilar (1967) further classifies the sources of information into personal and impersonal sources. This second classification distinguishes sources from which information was directly communicated to the manager personally (personal sources), or by which the manager accesses information from broadly addressed communications or formalized, group-communication activities (impersonal

sources). Personal sources include customers, suppliers, bankers and consultants. Impersonal sources include publications, conventions, and trade shows. Specht (1987) points out that choosing the type of source is not easy because a number of variables influence the decision of the business, such as the perceived characteristic of the external environment. Daft, Sormunen, and Parks (1988) found that with increase in environmental uncertainty, executives showed greater frequency of scanning and greater use of personal information sources.

Hambrick (1982) and Aguilar (1967) concluded in each of their studies that a common body of knowledge existed within a given industry. Executives in an industry were exposed to the same amount of environmental information and used common sources. Hambrick (1982) suggests that distinctive competencies of organizations arise through the propensity and ability to act on environmental information. Knowledge of environmental information does not automatically ensure a competitive advantage without implementation through strategies.

Environmental Scanning Activities of Small Business

Scanning activities can range from regular reading of a business journal to operations of information analysis by a staff of researchers or analysts (Pearce, Chapman, & David, 1982). In a study of environmental scanning practices of

small businesses, Smeltzer, Fann, and Nikolaisen (1988) found that most small business owners/managers showed efforts in environmental scanning and were found to conduct environmental scanning regularly.

Small business owners/managers valued personal information more than impersonal, and informal information more than formal (Aguilar, 1967; Smeltzer, Fann, & Nikolaisen, 1988). Specht (1987) also found that personal information sources were more appealing than impersonal with perceived environmental change and uncertainty for planning. Still (1974) also found that small businesses preferred to use personal sources of information rather than informal sources. In a comparison of information search activities of small businesses and large organizations, small businesses were found to be regular consumers of external information and spent more time searching for information than their counterparts in large firms (Johnson & Kuehn, 1987).

Traditional sources of business information and advice for small business such as bankers, accountants, Small Business Administration (SBA), and professional organizations were not considered particularly valuable (Smeltzer, Fann, & Nikolaisen, 1988). Small businesses focused largely on their marketing channels to acquire external information (Johnson & Kuehn, 1987). They relied mainly on verbal exchanges with suppliers, distributors, and customers.

The information sources that small businesses decide to use may differ according to the type of business and the planning activities of the firm. In a study of the use of accounting and financial services as inputs to strategic planning by manufacturing firms, Potts (1977) found that successful firms used outside accounting services and information significantly more extensively than unsuccessful firms. Jones (1982) found that the characteristics of small businesses that were considered planning firms included environmental scanning, research, and involved organizational members in the decision making process. On the contrary, in a study of rural apparel retailers, Hawley (1989) found that highly successful retailers utilized professional consultants to a very small extent, and that in general, highly successful rural apparel retailers did not utilize outside information sources more significantly than less successful apparel retailers.

Measures of Performance in Small Business

The performance of small business is explained in terms of "success" and "effectiveness" in business literature. Many studies have tried to define and measure success, however it has been one of the more difficult concepts to evaluate.

From an open systems theory approach, Friedlander and Pickle (1968) identified four components of organizational effectiveness: societal/environmental (community,

government, customers, suppliers, creditors), owners (profitability, growth), and employees (satisfaction). They state that in measuring effectiveness, one must consider profitability of the organization, the degree of satisfaction it gives its members, and the degree to which it is of value to the larger society of which it is included. However, many other researchers argue that the best measure of effectiveness in a small business would be to evaluate the financial component of the business.

Cooper (1979) suggests that small firms must concentrate on short-term profitability due to limited resources. Profitability or earning the maximum return on investment has been identified as a more important measure rather than growth in sales or market share (Hammermesh, Anderson, & Harris, 1978). Return on sales and sales growth are also more convenient sources of information to acquire.

Obtaining data on the economic performance of a business has been difficult for purposes of research. Therefore, obtaining objective performance data on independent small firms is severely restricted (Dess & Robinson, 1984). Rosenbloom and Tripuraneni (1985) suggest that material relating to the financial condition of retailers may be too sensitive to collect. There is no standard way to measure the success of businesses. It may vary depending on how an individual perceives an effective or successful business. However, Dess and Robinson (1984) found a high correlation between subjective and objective

performance measures. More research is needed in developing a systematic method to measure the subjective or perceived success of small businesses (Hawley, 1989).

Summary

The principal focus of this research was to assess the environmental scanning activities of independently owned small apparel stores. The growth of small business is considered important as it is a major contributor to the growth of the U.S. economy. However, it is estimated that more than half of the retail trade industry five years old or less is expected to fail (Thompson, 1989).

Business is dependent on its environment. Environmental scanning allows retailers to observe the changes presently occurring or anticipate what will occur in the environment and deal with it more effectively (Pearce, Chapman, & David, 1982). Studies show that small businesses do in fact participate in environmental scanning and use various information sources. Several studies can be found concerning the environmental scanning activities of small firms, however no studies to date have focused primarily on independent apparel retailers. This study attempts to understand the environmental scanning activities of small apparel businesses and possibly identify ways to assist with the growth of small apparel businesses.

CHAPTER III

SAMPLE AND RESEARCH METHODOLOGY

The purpose of this study was to explore the environmental scanning activities of small apparel retailers. The objectives of this study were to identify (1) differences in scanning intensity of retail store owners/managers based on their demographic characteristics, (2) the differences in scanning intensity of retail store owners/managers based on information source utilization, (3) the relationship of scanning intensity and business performance, (4) the most frequently used information sources when scanning the six areas of the business environment, and (5) the association between information source utilization and business performance. This chapter describes the variables in the study, sample population, questionnaire development, data collection method, and data analysis methods. The procedures related to each of the objectives are discussed in the following sections.

Identification of Variables

A review of literature was conducted to determine the variables typically used in measuring environmental scanning, small business performance, and demographic

characteristics. The sample was selected and the instrument was developed.

The variables used in this study were grouped into the categories of scanning intensity, information source utilization, performance of business, and demographic characteristics of the owners/managers of small business. Items representing these categories were used to develop the questionnaire for this study.

Selection of Participants

The following criteria were used to select the sample to be included in the study:

1. The respondents must be an owner and/or manager of an independently owned small apparel store.
2. A business listed under Clothing Men's (Retail), Clothing Retail, Women's Apparel Retail, Children's & Infants' Wear Retail, Girls' Apparel (Retail), Boys' Clothing and Furnishings Retail, Western Apparel (Retail), and Sportswear Retail, in the Oklahoma Business Directory (1989).
3. A business located in the Greater Tulsa Area, including the areas of Berryhill, Bixby, Broken Arrow, Catoosa, Glenpool, Jenks, Kiefer, Owasso, Sand Springs, Sapulpa, Sperry, and Tulsa.

Development of Questionnaire

A questionnaire was designed to gather information regarding the environmental scanning activities of small apparel retailers. Items on the questionnaire were adapted from various studies identified in the literature review and adjusted by suggestion from experts knowledgeable about small businesses. Preliminary forms of the questionnaire were pretested with a select group of retailers in Stillwater, Oklahoma.

The revised final questionnaire consisted of five parts: (1) environmental scanning intensity, (2) information sources utilized to scan each area of the environment, (3) performance of business, (4) personal and business demographic characteristics, and (5) other characteristics of businesses which might aid in determining the scanning activities. An example of the questionnaire can be found in Appendix A.

Part I of the questionnaire was constructed to measure the scanning intensity of apparel retailers. Part I consists of the degree of importance and frequency of scanning activities of small apparel retailers in each area of the business environment. The participants were asked to indicate perceived importance and frequency of scanning activities in six areas of the business environment. The following definitions for the six business environmental areas adapted from a study by Daft, Sormunen, and Parks

(1988) were stated in the questionnaire for the respondents to use as reference.

1. Competition: Retail stores other than your own that carry the same kind of merchandise and target to the same customers. It also includes competitive practices.

2. Customer: Individuals who purchase your merchandise.

3. Technology: Includes the implementation of state-of-the-art techniques and devices used in merchandising activities such as inventory control, bar-coding, computer usage, etc.

4. Regulatory: Federal and state legislation and regulations, city or community policies, and political developments that will have an effect on your business.

5. Economic: Economic factors such as rate of inflation, interest rates, unemployment, economic growth rate, etc.

6. Sociocultural: Social values in the general population, demographic trends, work ethics, consumer behavior, etc.

The degree of importance of each environmental area was measured using a 7-point Likert-type scale ranging from 1 (not important) to 7 (very important). The frequency of environmental scanning activities was also measured on a 7-point Likert-type scale ranging from 1 (almost never) to 7 (every day).

The frequency of scanning with the importance attached to each area was determined using an index of scanning intensity formulated by Box (1991, p. 54). The scanning intensity was computed for each business as follows:

$$SI = \text{Sum} \{ F_i \times I_i \}, \text{ for } i = 1 \text{ to } 6$$

and, SI = Scanning Intensity for firm

F_i = Frequency of scanning the i-th sector

I_i = Importance of the i-th sector.

Therefore, scanning intensity is the product of the frequency and importance of scanning. Possible overall scanning intensity scores range from 6 to 294.

Part II of the questionnaire addressed the various information sources adapted from the classifications made by Aguilar (1967). The 27 sources of information included in the questionnaire are magazines, newspapers, trade journals, government publications, seminars and conferences, newsletters, catalogs, books, business periodicals, television, trade shows, professional organizations, consultants, accountants, universities, sales representatives, employees, other stores, banker, attorney, vendors, customers, colleagues, buying groups, buying offices, and friends. The items were measured on a 3-point Likert scale ranging from 1 (do not use) to 3 (frequently use). The participants were asked to write a number defined in the questionnaire describing their frequency of use.

Part III of the questionnaire addressed the perceived performance of small apparel businesses by owners/managers.

The performance or success was evaluated by the increase in gross sales, profit percent, and number of employees.

Items in Part IV collected the descriptive data related to the business and owner/manager. Questions 13 and 14 were asked to determine if the participants met the criteria for the study. Information regarding age, gender, education level, retail experience, and store setting was asked to measure demographic characteristics of the owners/managers and their business. Questions on Part V were used to determine other kinds of activities their businesses engaged in to scan the environment. Retailers were also asked for suggestions which they felt would assist small apparel businesses in the future.

Collection of Data

The final instrument was sent to the Institutional Review Board for Human Subjects Research at Oklahoma State University for approval. Upon approval, small apparel stores selected for the study were mailed a packet containing the following items: cover letter (Appendix B), questionnaire, and a self-addressed, stamped return envelope. After a one week period, a follow-up letter (Appendix B) reminding and thanking the participants was sent. The collection of data was partly funded by the Center for Apparel Marketing and Merchandising, Department of Clothing, Textiles, and Merchandising, Oklahoma State University.

The initial mailing list consisted of all businesses in the Greater Tulsa Area listed under Clothing Men's (Retail), Clothing Retail, Women's Apparel Retail, Children's & Infant's Wear Retail, Girls' Apparel (Retail), Boys' Clothing and Furnishings Retail, Western Apparel (Retail), and Sportswear Retail in the Oklahoma Business Directory (1989). Businesses that were not independently owned could not be identified from the mailing list. Duplicate addresses were eliminated and the final mailing list was used in mailing the packets.

The final listing consisted of 263 firms. After a one week period a second mailing consisting of a follow-up letter was sent. Its purpose was to remind and thank participants. The first and second mailing yielded a total response of 40 questionnaires. A third mailing was sent to nonrespondents consisting of a second copy of the questionnaire, a letter requesting response, and a self-addressed stamped return envelope. The third mailing obtained 18 additional responses. Fifty-two were returned as undeliverable. In a final attempt to obtain as many responses as possible, addresses and telephone numbers of 29 nonrespondents were identified from the most current Greater Tulsa Area telephone directory. This effort resulted in 9 returned questionnaires. The first, second, third and final mailings yielded a total of 67 responses, resulting in a response rate of 31.8 percent. A response rate of between 25 and 35 percent places this study at the "high end" of

typical response rates of entrepreneurial research (Hisrich & Peters, 1989).

Compilation of Data

The data obtained from the questionnaire were directly entered into a computer using PC File. Some missing data were retrieved by mail or follow-up telephone calls. Questionnaires with missing data were used as long as the remaining data contributed information to the study.

First, data from questionnaires that were not from any form of independently owned small business were eliminated since they did not meet the criteria of the sample as set forth in the study. Also, data from questionnaires that were not filled out by the owner or manager of the firm were not used. Data from 51 respondents were used.

Analysis of Data

The data were analyzed using analysis of variance, Duncan's multiple range test, and frequency distributions. These statistical techniques and their specific use in the study will be discussed.

Analysis of Variance

Analysis of variance is a statistical procedure appropriate for use with two independent samples. One-way analysis of variance is used for testing the hypothesis that

two or more independent samples were drawn from populations having the same mean (Roscoe, 1975).

Scanning intensity was measured by using the formula developed by Box (1991). With this measure of scanning intensity, the relationship between the scanning intensity of owners/managers and their demographic characteristics (Research Question 1), information source utilization (Research Question 2), and business performance (Research Question 3) were analyzed using analysis of variance.

Prior to the analysis, the categories of age were collapsed from six age ranges to three. The under 20 and 20 - 29 age groupings were collapsed to one category. The 30 - 39 and 40 - 49 age groupings formed a second category and the 50 - 59 and over 60 formed a third category. Another demographic characteristic, education, was collapsed into the four categories of high school diploma or less, some college or equivalent, bachelor's degree, and advanced degree.

Duncan's Multiple Range Test

Duncan's multiple range test is a multiple-comparison procedure for obtaining all pairwise comparisons among sample means (Ott, 1988). This method was used to further clarify significant analysis of variance results by testing the multiple levels of independent variables.

Frequency Distributions

Frequency distributions show the frequency of occurrence of the different attributes of a variable (Roscoe, 1975). This method was used to analyze Research Question 4 and Research Question 5. Research Question 4 identified the sources of information used in the six areas of the business environment and Research Question 5 examined information source utilization and business performance. The business performance of each respondent, represented by change in gross sales and profit percent, was classified into three categories: increased, stayed the same, and decreased. Information source utilization was classified into two categories: use and do not use.

CHAPTER IV

RESULTS AND DISCUSSION

The purpose of this research was to study the environmental scanning activities of small apparel retailers. This chapter presents the characteristics of the sample followed by the results and discussion related to each research question. The questions studied in this research were: (1) Does scanning intensity of retail store owners/managers vary based on their demographic characteristics? (2) Are there differences in scanning intensity of retail store owners/managers based on their information source utilization? (3) What is the relationship between the scanning intensity of retail store owners/managers and business performance? (4) What are the most frequently used information sources when scanning the six areas of the business environment? (5) What is the association between information source utilization and business performance?

Sample Characteristics

Personal and business demographic characteristics are reported in Table 1. The sample consists of 51 owners and/or managers of independently owned small apparel

TABLE 1
SAMPLE CHARACTERISTICS

Variable	Frequency	%
Position with the Firm (N=51)		
Owner	20	39.2
Manager	12	23.5
Owner/Manager	19	37.3
Description of Business (N=51)		
Independent	38	74.5
Chain/Independently Owned	11	21.6
Franchise/Independently Owned	2	3.9
Type of Store Setting (N=51)		
Shopping Center or Mall	21	41.2
Freestanding Store	7	13.7
Main Street	1	2.0
Small Shopping Strip	21	41.2
Other	1	2.0
Years of Experience in Full-Time Retailing (N=51)		
Less than 2 years	1	2.0
3-6 years	13	25.5
7-10 years	10	19.6
More than 10 years	27	52.9
Gender (N=51)		
Male	24	47.1
Female	27	52.9
Age (N=51)		
Under 20	-	-
20-29	9	17.6
30-39	8	15.7
40-49	12	23.5
50-59	14	27.5
Over 60	8	15.7
Education (N=50)		
Less than high school diploma	1	2.0
High School diploma	10	20.0
Some college or equivalent	13	26.0
Bachelor's degree	23	46.0
Advanced degree	3	6.0

Note. N varies due to missing values. Percentage totals may not equal 100 percent due to rounding.

businesses. Thirty-nine percent of the respondents were business owners, 23.5 percent were managers, and 37.3 percent were owners/managers. All of the businesses were independently owned. About 22 percent were independently owned chains, and 3.9 percent were independently owned franchises.

The stores were located in a variety of settings. About 41 percent of the businesses were located in a shopping center or mall. Another 41.2 percent were located in a small shopping strip and 13.7 percent were freestanding stores. Only one respondent's business was located on a main street.

A large number of respondents had many years of experience in full-time retailing. A majority of the respondents had at least three years of experience. Over half of the sample (52.9%) had more than 10 years of experience, while 19.6 percent of the respondents had 7 - 10 years of retail experience. In addition, 25.5 percent of the respondents had 3 - 6 years of experience and only 2 percent less than two years.

Over half of the respondents were female (52.9%) and the remaining respondents were male. About one-third of the respondents were under the age of 40 and 51.0 percent of the respondents were between the ages of 40 and 59. Only three (15.7%) were over the age of 60.

Finally, the sample was well educated. Thirty-nine (78%) respondents had at least some college or equivalent

education. Forty-six percent of the respondents had a bachelors's degree. Twenty percent of the respondents had a high school diploma and two percent had less than a high school diploma.

Scanning Intensity Scores of Respondents

A frequency distribution of scanning intensity scores was examined to determine the range of respondents' scanning intensity scores. An overall scanning intensity score was calculated for each respondent using a formula developed by Box (1991). Refer to Chapter III for a discussion of this procedure. In addition, scanning intensity scores for each area of the business environment were also calculated. A frequency distribution of the respondents' overall scanning intensity scores and scanning intensity scores for each business environment are reported in Tables 8 through 14 found in Appendix C.

The scanning intensity scores could range from a minimum of 6 to a maximum of 294. The scanning intensity scores of the respondents in this study ranged from 6 to 266. The mean of the scanning intensity score for the respondents was 113.87.

The possible scanning intensity scores for each area of the business environment ranged from a minimum of 1 to a maximum of 49. Table 2 shows the scanning intensity means for each area. The scanning intensity scores in each area indicate the importance of each environmental area to the

TABLE 2
SCANNING INTENSITY SCORE MEANS FOR EACH
AREA OF THE BUSINESS ENVIRONMENT

Areas of Business Environment	Mean
Competition	17.43
Customer	36.14
Technological	13.89
Regulatory	9.50
Economic	20.25
Sociocultural	16.68

respondents and the frequency of scanning practiced. Scanning intensity means for each area of the business environment are as follows: competition (17.43), customer (36.14), technological (13.89), regulatory (9.50), economic (20.25), and sociocultural (16.68). The customer area had the highest scanning intensity mean. Forty percent of the respondents had the maximum scanning intensity score of 49 in the customer area. This indicates that the customer area of the business environment is of interest to the respondents. The scanning intensity mean for the regulatory environment was lowest. Over half of the respondents had scanning intensity scores less than 10.

Findings of Research Questions

Data were collected and analyzed to answer five research questions as described in Chapter III. Findings related to each research question are reported and discussed in this section.

Research Question 1

Analysis of the scanning intensity of retail store owners/managers based on their personal and business characteristics is presented in Table 3. Analysis of variance revealed no difference in scanning intensity based on demographic characteristics (store setting, years of experience, gender, age, and education).

TABLE 3

ANALYSIS OF VARIANCE AND MEANS OF SCANNING INTENSITY BASED
ON CHARACTERISTICS OF OWNERS/MANAGERS

Characteristics	Scanning Intensity				
	MS	F	P>F	df	Mean (N)
Store Setting	3501.75	0.26	0.90	4	
Shopping Center/Mall					119.05 (19)
Freestanding Store					127.29 (7)
Main Street					96.00 (1)
Small Shopping Strip					104.79 (19)
Other					112.00 (1)
Years of Experience in Full-Time Retailing	3268.87	1.04	0.39	3	
Less than 2 years					116.00 (1)
7-10 years					87.36 (11)
3-6 years					123.90 (10)
More than 10 years					121.44 (25)
Gender	3281.99	0.93	0.34	1	
Male					105.65 (23)
Female					121.75 (24)
Age	3068.67	2.56	0.09	2	
Under 30					147.63 (8)
30-49					95.06 (18)
Over 50					117.14 (21)
Education	3491.37	0.39	0.76	3	
High school diploma or less					116.56 (9)
Some College or equivalent					99.23 (13)
Bachelor's degree					121.52 (21)
Advanced degree					116.00 (3)

Environmental scanning is a critical part of planning. Jones (1982) reveals in a study of small businesses that planners were older and had a higher level of formal education than nonplanners. However, no relationship could be found between the personal and business characteristics of owners/managers and scanning intensity in this study.

Research Question 2

Research Question 2 examines the relationship between scanning intensity and information source utilization. Some differences in scanning intensity were found based on frequency of information usage. Significant differences in scanning intensity based on information source utilization are presented in Table 4. Data from results of analysis of variance and Duncan's multiple range test may be found in Tables 15 through 26 in Appendices D and E. A discussion of scanning intensity and information utilization for each area of the business environment will be presented.

Competition Area. In the competition environment, significant differences in scanning intensity means were found based on frequency of information usage for five information sources. The sources of information include seminars and conferences, consultants, customers, buying groups, and buying offices. Duncan's multiple range test confirmed the differences in the means of scanning intensity for the five information sources (Table 21 in Appendix E).

TABLE 4

SIGNIFICANT DIFFERENCES IN SCANNING INTENSITY MEANS
BASED ON INFORMATION UTILIZATION FREQUENCY FOR
TWENTY-SEVEN INFORMATION SOURCES

Information Source	Areas of Business Environment ^a					
	1	2	3	4	5	6
Magazines			A	B	A	
Newspaper			A	A	A	
Trade Journals			A			
Government Publications				A	A	A
Seminars & Conferences	A		B		A	
Newsletters			A	A		
Catalogs			A			B
Books			B	A		
Business Periodicals			A	A	A	A
Television		A	B	A	A	
Trade Shows						
Professional Org.		A		A	A	
Consultants	A	A	B	B	A	B
Accountants		B				
Universities		A	A	A	A	A
Sales Representatives					A	A
Employees						
Other Stores		B	B		A	
Banker		C	B			A
Attorney						A
Vendor					A	A
Customers	C	A		A	A	
Colleagues		A		A	A	
Buying Groups	A	A			A	A
Friends			A	A	A	
Family		A			A	
Buying Offices	A	A		A	A	A

Note. A = information source that had a significant difference ($p < .05$) in scanning intensity means and means were higher with increase in utilization frequency; B = Information source had a significant difference ($p < .05$) in scanning intensity means and had highest mean when information was used occasionally; C = Information source had a significant difference ($p < .05$) in scanning intensity means and had highest mean when information was not used.

^a1=Competition, 2=Customer, 3=Technological, 4=Regulatory, 5=Economic, 6=Sociocultural.

The means of scanning intensity for four of the information sources (seminars and conferences, consultants, buying groups, and buying offices) were higher as information usage increased. This pattern differed somewhat for the information source, customers. The highest scanning intensity score for the customer information source was reported by one respondent that did not use customers as a source of information. Disregarding this one score, scanning intensity in the competition area was higher with increased utilization of the information source, customers.

Customer Area. Significant differences in the scanning intensity means based on frequency of information utilization were found for twelve information sources. The twelve sources included television, professional organizations, consultants, accountants, universities, other stores, banker, customers, colleagues, buying groups, family, and buying offices. Duncan's multiple range test confirmed differences in the means for 11 of the information sources (Table 22 in Appendix E). The exception was for the information source, customers. Scanning intensity means for television, professional organizations, consultants, universities, customers, colleagues, buying groups, family, and buying offices were higher with increases in utilization frequency. For the information sources, accountants and other stores, the highest scanning intensity means were reported when the respondents used the information source

occasionally. It should be noted that two information sources, accountants, and bankers, had low frequency counts for some categories of information use frequency.

Technological Area. Significant differences in scanning intensity means were found based on frequency of information usage for 14 information sources. The information sources included magazines, newspapers, trade journals, seminars and conferences, newsletters, catalogs, books, business periodicals, television, consultants, universities, other stores, banker, and friends. Duncan's multiple range test confirmed the differences in the means of scanning intensity for all 14 information sources (Table 23 in Appendix E). In eight cases, the means of scanning intensity increased as information usage increased. They were magazines, newspaper, trade journals, newsletters, catalogs, business periodicals, universities, and friends. The scanning intensity means of the remaining sources (seminars and conferences, books, television, consultants, others stores, and banker) were higher when the sources were used occasionally.

Regulatory Area. Significant differences in the scanning intensity means based on frequency of information utilization were found for 14 information sources. Duncan's multiple range test confirmed differences in the means for all 14 information sources (Table 24 in Appendix E). The information sources included magazines, newspapers,

government publications, newsletters, books, business periodicals, television, professional organizations, consultants, universities, customers, colleagues, friends, and buying offices. The scanning intensity means of magazines and consultants were highest when information was used occasionally. In the remaining 12 cases, the means of scanning intensity increased as information usage increased.

Economic Area. In the economic area, more scanning intensity means were significantly different based on information source utilization than for any of the other five areas of the business environment. A significant difference in the scanning intensity means were found based on frequency of information usage for 18 sources. The information sources included magazines, newspapers, government publications, seminars and conferences, business periodicals, television, professional organizations, consultants, universities, sales representatives, other stores, vendors, customers, colleagues, buying groups, friends, family, and buying offices. Duncan's multiple range test confirmed the difference in the means of scanning intensity for the 18 information sources (Table 25 in Appendix E). The scanning intensity means of all 18 information sources increased as information usage increased.

Sociocultural Area. Significant differences in the scanning intensity means based on frequency of information

utilization were found for 11 information sources. The information sources included government publications, catalogs, business periodicals, consultants, universities, sales representatives, banker, attorney, vendors, buying groups, and buying offices. Duncan's multiple range test confirmed differences in the means for nine sources (Table 26 in Appendix E). The exceptions were for the information sources, banker and attorney. Of the eleven cases, catalogs and consultants had the highest scanning intensity means when the information sources were used occasionally. The scanning intensity means of the remaining nine sources were higher as information usage increased.

Discussion. Differences in scanning intensity based on frequency of information usage were found least often for the competition area of the environment and most often for the economic area. A difference in scanning intensity means based on frequency of information usage was found for the consultant information source in all six areas of the business environment. The scanning intensity means for the information source universities were different in all but the competition area of the business environment. Scanning intensity means for buying office utilization were different in all but the technological area. The influence of scanning intensity on information utilization varied based on the area of the environment.

In a study of manufacturing companies, executives were more uncertain about the customer, economic, and competition areas of the business environment than the technological, regulatory, and sociocultural areas (Daft, Sormunen, & Parks, 1988). When uncertainty appeared to be high, executives reported greater frequency in scanning and greater use of personal sources of information. In the case of small business owners/managers, Smeltzer, Fann, and Nikolaisen (1988) also reported that personal sources of information were believed to be more valuable and the most popular sources of impersonal information were magazines and journals.

In this study the results related to Research Question 2 do not show a relationship between scanning intensity means and utilization frequency of personal information sources more than other sources of information. Scanning intensity means for different types of information sources did vary based on information source utilization.

Research Question 3

The relationship between scanning intensity and business performance was studied in Research Question 3. As shown in Table 5, there was no significant difference between the means of scanning intensity based on business performance as measured by perceived changes in gross sales and profit percent.

TABLE 5
ANALYSIS OF VARIANCE FOR SCANNING INTENSITY
AND BUSINESS PERFORMANCE

Business Performance	Scanning Intensity				
	MS	F	P>F	df	Mean (N)
Gross Sales	3328.55	0.64	0.53	2	
Increased					112.79 (14)
Same					141.20 (5)
Decreased					109.54 (28)
Profit Percent	3363.81	0.90	0.41	2	
Increased					100.75 (12)
Same					102.00 (9)
Decreased					124.36 (25)

Discussion. The results of Research Question 3 do not support previous studies on scanning intensity or related areas. In a study of entrepreneurial manufacturing firms located in the Tulsa Metropolitan Statistical Area (MSA), Box (1991) found scanning intensity to correlate significantly with firm performance. When observing studies related to scanning intensity, Dollinger (1985) reported that successful entrepreneurs spend significant time and energy on negotiations, transactions, and information gathering with many types of individuals and organizations. Hawley (1989) also found that firms with a higher level of subjective success had a higher incidence of formal planning. However, results from a study by Gable and Topol (1987) suggest that planning may have very little impact upon sales or profits.

Research Question 4

Research Question 4 studies the most frequently used information sources in the six areas of the business environment. Table 6 shows information source utilization of 50 percent or more respondents. Tables 27 through 32 in Appendix F indicate the frequency of information source usage in each area of the business environment.

Competition Area. Six sources of information were used frequently by 50 percent or more of the respondents as a source in gathering information regarding the competition

TABLE 6

INFORMATION SOURCE UTILIZATION OF 50 PERCENT OR MORE
RESPONDENTS REGARDING THE BUSINESS ENVIRONMENT

Information Source	Areas of Business Environment ^a					
	1	2	3	4	5	6
Magazines		B				
Newspapers	A				A	
Trade Journals						
Government Publications	C	C	C	C	C	C
Seminars & Conferences	C	C	C	C	C	C
Newsletters	B			C		
Catalogs				C	C	C
Books	C	C	C	C	C	C
Business Periodicals		C		C		
Television		B	C	C		
Trade Shows				C	C	C
Professional Org.	C	C	C	C	C	C
Consultants	C	C	C	C	C	C
Accountants	C	C	C			C
Universities	C	C	C	C	C	C
Sales Representatives	A			C		C
Employees	A	A		C		
Other Stores			C	C		
Banker	C	C	C	C	C	C
Attorney	C	C	C	C	C	C
Vendors	A			C		
Customers	A	A	C	C		A
Colleagues			C	C		
Buying Groups	C	C	C	C	C	C
Friends	A		C	C		
Family			C	C		
Buying Offices	C	C	C	C	C	C

Note. A = 50 percent or more respondents frequently used the information source for the business environment; B = 50 percent or more respondents occasionally used the information source for the business environment; C = 50 percent or more respondents did not use the information source for the business environment.

^a1=competition, 2=customer, 3=technological, 4=regulatory, 5=economic, 6=sociocultural.

area. About 73 percent of the respondents frequently used customers. Newspapers (58.3%), vendors (58.3%), employees (54.2%), sales representatives (50.0%), and friends (50.0%) were also frequently used to gather information about the competition area. About 52 percent of the respondents occasionally used newsletters as a source of information. Information sources that were not used to gather information regarding the competition area by more than half of the respondents were government publications, seminars and conferences, books, professional organizations, consultants, accountants, universities, banker, attorney, buying groups, and buying offices.

Customer Area. Employees (64.6%) and customers (83.3%) were two information sources frequently used to gather information regarding the customer area of the business environment by 50 percent or more of the respondents. Magazines (52.1%) and television (50.0%) were used occasionally by a majority of the respondents. Sources of information that were not used by at least half of the respondents were government publications, seminars and conferences, books, business periodicals, professional organizations, consultants, accountants, universities, banker, attorney, buying groups, and buying offices.

Technological Area. None of the information sources in the technological area were frequently or occasionally used by 50 percent or more of the respondents. Information

sources that were not used to gather information by 50 percent or more of the respondents include government publications, seminars and conferences, books, television, professional organizations, consultants, accountants, universities, other stores, banker, attorney, customers, colleagues, buying groups, friends, family, buying offices.

Regulatory Area. None of the information sources were used frequently or occasionally by at least half of the respondents when gathering information regarding the regulatory environment. Twenty-three of the information sources were not used by 50 percent or more respondents.

Economic Area. Only one source, newspapers (54.2%), was frequently used by over half of the respondents when gathering information regarding the economic environment. No source was used occasionally by 50 percent or more respondents. Sources that were not used by 50 percent or more respondents included government publications, seminars and conferences, catalogs, books, trade shows, professional organizations, consultants, universities, banker, attorney, buying groups, and buying offices.

Sociocultural Area. The customer (57.4%) was the only source that was frequently used by 50 percent or more respondents when gathering information about the sociocultural area. None of the sources for this area were used occasionally by 50 percent or more respondents.

However, a large number of information sources were not used by 50 percent or more respondents. They include government publications, seminars and conferences, catalogs, books, trade shows, professional organizations, consultants, accountants, universities, sales representatives, banker, attorney, buying groups, and buying offices.

Discussion. Results show that very few sources of information were used frequently in gathering information regarding the six areas of the business environment. The greatest number of information sources frequently used by 50 percent or more respondents was in the competition area with six sources.

Information sources that were used frequently in gathering information regarding at least one area of the business environment by 50 percent or more respondents were newspapers, sales representatives, employees, vendors, customers, and friends. Ten sources (government publications, seminars and conferences, books, professional organizations, consultants, universities, bankers, attorney, buying groups and buying offices) were not used by 50 percent or more respondents in any of the six areas of the business environment. Finally, trade journals did not show 50 percent or more respondents in any category of utilization frequency regarding all six areas of the business environment.

Smeltzer, Fann, and Nikolaison (1988) found that the most popular impersonal information sources were magazines and journals. The results of this study show that magazines were used by over 50 percent of the respondents when gathering information regarding the customer environment. However, trade journals were not used frequently or occasionally by 50 percent or more of the respondents in the six business environments.

Previous research notes that small business retailers value the use of personal sources of information (Aguilar, 1967; Smeltzer, Fann, Nikolaison, 1988; Specht, 1987). The results of Research Question 4 show six personal sources of information (newspapers, sales representatives, employees, vendors, customers, and friends) to be frequently used by respondents. These findings also support the study by Smeltzer, Fann, and Nikolaisen (1988) that report owners/managers do not use traditional sources of business information such as bankers, accountants, lawyers, Small Business Administration (SBA), and professional organizations.

Research Question 5

The association between information source utilization and business performance was addressed in Research Question 5. Business performance was defined as the subjective change in gross sales and profit percent. Tables 33 through 44 found in Appendix G present the results of the frequency

distributions and percentages. Table 7 reflects a summary of the tables and shows information sources used by 50 percent or more of the respondents who indicate an increase in business performance.

Competition Area. Sixty percent of the respondents used customers as an information source and also reported an increase in gross sales. Newspapers (58%), sales representatives (54%), and vendors (54%) were also information sources used by over 50 percent of the respondents that reported an increase in gross sales. Newspapers (55%), sales representatives (53%), vendors (51%), and customers (55%) were information sources used by over 50 percent of the respondents who reported an increase in profit percent.

The results show four information sources used by over 50 percent of the respondents who increased in both gross sales and profit percent. The information sources are sales representatives, vendors, and customers.

Customer Area. Newspapers (52%), employees (52%), vendors (50%), and customers (56%) were the sources of information used by over 50 percent of the respondents that reported an increase in gross sales in the customer area. Fifty percent of the respondents used vendors and reported an increase in gross sales. Newspapers (51%), employees (51%) and customers (55%) were also information sources used by respondents that reported an increase in profit percent.

TABLE 7
 INFORMATION SOURCES USED BY 50 PERCENT OR MORE OF THE
 RESPONDENTS INDICATING AN INCREASE IN
 BUSINESS PERFORMANCE

Business Environment	Information Usage	Business Performance Increase
Competition	Newspapers	GS, PP
	Sales Representative	GS, PP
	Vendors	GS, PP
	Customers	GS, PP
Customer	Newspapers	GS, PP
	Employees	GS, PP
	Vendors	GS
	Customers	GS, PP
Technological	No information source.	
Regulatory	No information source.	
Economic	Newspapers	GS
Sociocultural	Newspapers	GS
	Customers	GS

Note. GS = Gross Sales; PP = Profit Percent

Results show that newspapers, employees, and customers were information sources used by retailers that report increases in both gross sales and profit percent.

Technological Area. No information sources were reported to be used in the technological area by at least half of the respondents who also increased in gross sales or profit percent. Use of information in scanning the technological area of the environment did not appear to be related to an increase in gross sales or profit percent.

Regulatory Area. In the regulatory area, no information sources were identified by at least 50 percent of the respondents who also increased in gross sales or profit percent. Information usage in scanning the regulatory area did not appear to be related to an increase in gross sales or profit percent.

Economic Area. Fifty percent of the respondents used newspapers as an information source and also reported an increase in gross sales. In the economic area, no information source was used by at least half of the respondents that also reported an increase in profit percent.

Sociocultural Area. Of the respondents who increased in gross sales, 50 percent used newspapers and 53 percent used customers as information sources when gathering information regarding the sociocultural environment. The

results indicate that no information source was used by 50 percent or more respondents that also increased in profit percent.

Discussion. The relationship between business performance and frequency of information usage was not consistent across the six areas of the business environment. More sources were used when gathering information regarding the areas of competition and customer. Customers and newspapers were information sources used by at least half of the respondents that indicated an increase in both gross sales and profit percent in the competition, customer, and sociocultural environmental areas. The newspaper is an information source used by 50 percent or more respondents in four business environments (competition, customer, economic, and sociocultural).

In a study of environmental contacts and firm performance, Dollinger (1985) reported that the relationship between the amount of time spent in environmental interaction and performance is strong, however, the relationship between any particular environmental factor and performance is not. The results of Research Question 5 support Dollinger's findings. Only a limited number of information sources were used by 50 percent or more of the respondents that reported an increase in business performance.

CHAPTER V

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

The growth and survival of small businesses depends on their ability to adapt to the environment. Moreover, the immediate impact of the environment on the sales of apparel has made it necessary for apparel retailers to keep up with the environment. Environmental scanning is part of the activity that small business owners/managers undertake to understand and plan for anticipated changes in the business environment. Few studies have been conducted and limited literature was available pertaining to environmental scanning activities of small businesses, especially small apparel retailers.

The purpose of this study was to examine the environmental scanning activities of small apparel businesses. The relationship of scanning intensity, demographic characteristics of owners/managers, business performance and information usage for six areas of the business environment - competition, customer, technological, regulatory, economic, and sociocultural were studied. Literature in related areas of small business, apparel retailing, environmental scanning, information source

utilization, and business performance measures were used in conducting the study.

Summary of Procedures

A review of literature was conducted to determine variables typically used in measuring environmental scanning activities, small business performance and demographic characteristics. A questionnaire was developed to collect information related to scanning intensity, information source utilization regarding six areas of the business environment, business performance, and demographic characteristics of owners/managers. The questionnaire was sent to 263 apparel retail firms listed in the Oklahoma Business Directory (1989) located in the Greater Tulsa Area. A total of 67 questionnaires were returned. Data from questionnaires that were not from any form of independently owned small business and were not completed by owners and/or managers were eliminated. Subsequently 51 responses were usable for analysis.

Methods of analysis included analysis of variance, Duncan's multiple range test, and frequency distributions. The formula developed by Box (1991, p. 54) was used to calculate scanning intensity:

$$SI = \text{Sum } \{F_i \times I_i\}, \text{ for } i = 1 \text{ to } 6$$

and, SI = Scanning Intensity for firm

F_i = Frequency of scanning the i-th sector

I_i = Importance of the i-th sector.

Analysis of variance in conjunction with Duncan's multiple range test was used to study the relationship between scanning intensity with information source utilization, demographic characteristics of owners/managers, and business performance. Performance measures of sales and profitability were measured using a subjective perception by the owner/manager.

Frequency distributions were employed to identify information sources used in gathering information concerning the six areas of the business environment. Frequency distributions were also used to examine the relationship between information source utilization and business performance.

Summary of Findings

The sample consisted of owners (39%), managers (24%), and owners/managers (37%) of independently owned small businesses. The majority of their businesses were located in a shopping center, mall, or a small shopping strip (82%).

There was almost an equal number of male (47%) and female (53%) respondents and approximately half were between the ages of 40 and 59. The majority of the respondents had some college or equivalent education (72%) with more than three years of retail experience (98%).

Based on the frequency and importance of each business environment, an overall scanning intensity score was calculated. The mean of the overall scanning intensity

scores of respondents was 133.87. When examined in respect to individual business environments, the customer area reported the highest scanning intensity score and the regulatory area the lowest.

Further analysis of data were undertaken to evaluate the five research questions. Research Question 1 examined the differences in scanning intensity of retail store owners/managers based on their personal and business demographic characteristics. Analysis of variance found no relationship existed between demographic characteristics and scanning intensity.

Research Question 2 examined the differences in scanning intensity of retail store owners/managers based on their information source utilization. Significant differences in scanning intensity based on frequency of information usage for sources were found least often for the competition area and most often for the economic area. A difference in the scanning intensity means based on utilization frequency for the consultants information source was found for all six areas of the business environment. For other information sources, the differences in scanning intensity means based on information usage varied based on the area of the business environment.

Research Question 3 identified the relationship between scanning intensity and business performance. The results indicated that there was no significant difference between the means of scanning intensity and business performance

measured by perceived changes in gross sales and profit percent.

The most frequently used information sources when scanning the six areas of the business environment were examined in Research Question 4. Few sources of information were used frequently in gathering information regarding the six areas of the business environment. Information sources that were used frequently by 50 percent or more respondents in gathering information regarding at least one area of the business environment were newspapers, universities, vendors, and customers. Government publications, professional organizations, consultants, buying groups, and buying offices were not used by 50 percent or more respondents.

Research Question 5 examined the association between information source utilization and business performance. No information source was consistently used in the six areas of the business environment used by 50 percent or more respondents that increased in gross sales or profit percent. However, customers and newspapers were major information sources for retailers who also reported an increase in gross sales or profit percent.

This study identified a relationship between information sources and the degree of scanning intensity and business performance. Scanning intensity means were different with utilization frequency of certain information sources. Also, an association was found between some information sources and business performance.

Interestingly, different groups of information sources were frequently used in each of the six areas of the business environment. Customers as an information source have been identified several times throughout this study as a viable source of information. However, it is important to note that no relationship was reported between scanning intensity and business performance. Also, scanning intensity of apparel retail store owners/managers did not vary based on their business and personal characteristics.

Implications

The findings of this study can be beneficial to retailers and a number of related organizations. This research shows that small apparel retailers engage in scanning activities to varying degrees to gather information relevant to the future of their business. It was also evident that retailers acquire or receive different types of information pertinent to their business from a number of different information sources. This study also isolated the information sources such as customers and newspapers used by successful small apparel retailers.

By better understanding the types of information sources utilized by successful retailers, this study may provide guidance to retailers who are struggling to stay in business. In addition, the results from this study may aid organizations developed to assist small businesses in searching for ways to communicate information to retailers.

Finally, this research contributes to the literature related to environmental scanning and small apparel retailers. A scale defined as scanning intensity was first used to examine the scanning activities of independently owned small apparel stores and may be relevant for subsequent inclusion in research based on environmental scanning.

Recommendations for Further Research

Based on the findings of this study, the following recommendations for further research in environmental scanning are suggested:

1. Investigate the environmental scanning process of small apparel retailers by identifying factors that motivate small apparel retailers to scan the environment.
2. Conduct a study to uncover the underlying reasons small apparel owners/managers utilize one information source over another.
3. Develop an instrument to evaluate and identify information sources most beneficial to small apparel retailers.
4. Broaden the scope of the study to examine small apparel retailers in a large geographic area thus increasing the generality of results.
5. Replicate the study to compare similarities and differences in the environmental scanning activities of various sizes and types of apparel retail businesses (department stores, discount stores, etc).

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APPENDICES

APPENDIX A
QUESTIONNAIRE

APPAREL RETAIL STORE SURVEY

The business environment can be categorized into six areas. Please answer the questions in the questionnaire in reference to the business environmental areas described below.

- ◆ **Competition:** Retail stores other than your own that carry the same kind of merchandise and target to the same customers. It also includes competitive practices.
- ◆ **Customer:** Individuals who purchase your merchandise.
- ◆ **Technology:** Includes the implementation of state-of-the-art techniques and devices used in merchandising activities such as inventory control, bar-coding, computer usage, etc.
- ◆ **Regulatory:** Federal and state legislation and regulations, city or community policies, and political developments that will have an effect on your business.
- ◆ **Economic:** Economic factors such as rate of inflation, interest rates, unemployment, economic growth rate, etc.
- ◆ **Sociocultural:** Social values in the general population, demographic trends, work ethics, consumer behavior, etc.

PART I

- (1) Please circle the answer that best describes how often (**FREQUENCY**) you gather information from each business environmental area.

	Almost Never		Every Month		Every Week		Every Day
Competition	1	2	3	4	5	6	7
Customer	1	2	3	4	5	6	7
Technology	1	2	3	4	5	6	7
Regulatory	1	2	3	4	5	6	7
Economic	1	2	3	4	5	6	7
Sociocultural	1	2	3	4	5	6	7

- (2) Please circle the answer that best describes the importance of each business environmental area.

	Not Important		Moderately Important			Very Important	
Competition	1	2	3	4	5	6	7
Customer	1	2	3	4	5	6	7
Technology	1	2	3	4	5	6	7
Regulatory	1	2	3	4	5	6	7
Economic	1	2	3	4	5	6	7
Sociocultural	1	2	3	4	5	6	7

PART II

- (3) Please write a number in the blank that describes how often you use each of the following sources in gathering information regarding the **COMPETITION** environment.

1 = DO NOT USE
 2 = USE OCCASIONALLY
 3 = USE FREQUENTLY

COMPETITION

<input type="checkbox"/> Magazines	<input type="checkbox"/> Newsletters
<input type="checkbox"/> Newspapers	<input type="checkbox"/> Catalogs
<input type="checkbox"/> Trade Journals	<input type="checkbox"/> Books
<input type="checkbox"/> Government Publications	<input type="checkbox"/> Business Periodicals
<input type="checkbox"/> Seminars & Conferences	<input type="checkbox"/> Television
<input type="checkbox"/> Trade Shows	<input type="checkbox"/> Sales Representatives
<input type="checkbox"/> Professional Organizations	<input type="checkbox"/> Employees
<input type="checkbox"/> Consultants	<input type="checkbox"/> Other Stores
<input type="checkbox"/> Accountants	<input type="checkbox"/> Banker
<input type="checkbox"/> Universities	<input type="checkbox"/> Attorney
<input type="checkbox"/> Vendors	<input type="checkbox"/> Friends
<input type="checkbox"/> Customers	<input type="checkbox"/> Family
<input type="checkbox"/> Colleagues	<input type="checkbox"/> Buying Offices
<input type="checkbox"/> Buying Groups	<input type="checkbox"/> Others (Specify)

- (4) Please write a number in the blank that describes how you use each of the following sources in gathering information regarding the CUSTOMER environment

1 = DO NOT USE

2 = USE OCCASIONALLY

3 = USE FREQUENTLY

CUSTOMER

___ Magazines

___ Newspapers

___ Trade Journals

___ Government Publications

___ Seminars & Conferences

___ Trade Shows

___ Professional Organizations

___ Consultants

___ Accountants

___ Universities

___ Vendors

___ Customers

___ Colleagues

___ Buying Groups

___ Newsletters

___ Catalogs

___ Books

___ Business Periodicals

___ Television

___ Sales Representatives

___ Employees

___ Other Stores

___ Banker

___ Attorney

___ Friends

___ Family

___ Buying Offices

___ Others (Specify)

- (5) Please write a number in the blank that describes how you use each of the following sources in gathering information regarding the **TECHNOLOGY** environment

- 1 = DO NOT USE
 2 = USE OCCASIONALLY
 3 = USE FREQUENTLY

TECHNOLOGY

- | | |
|---|--|
| <input type="checkbox"/> Magazines | <input type="checkbox"/> Newsletters |
| <input type="checkbox"/> Newspapers | <input type="checkbox"/> Catalogs |
| <input type="checkbox"/> Trade Journals | <input type="checkbox"/> Books |
| <input type="checkbox"/> Government Publications | <input type="checkbox"/> Business Periodicals |
| <input type="checkbox"/> Seminars & Conferences | <input type="checkbox"/> Television |
|
 | |
| <input type="checkbox"/> Trade Shows | <input type="checkbox"/> Sales Representatives |
| <input type="checkbox"/> Professional Organizations | <input type="checkbox"/> Employees |
| <input type="checkbox"/> Consultants | <input type="checkbox"/> Other Stores |
| <input type="checkbox"/> Accountants | <input type="checkbox"/> Banker |
| <input type="checkbox"/> Universities | <input type="checkbox"/> Attorney |
|
 | |
| <input type="checkbox"/> Vendors | <input type="checkbox"/> Friends |
| <input type="checkbox"/> Customers | <input type="checkbox"/> Family |
| <input type="checkbox"/> Colleagues | <input type="checkbox"/> Buying Offices |
| <input type="checkbox"/> Buying Groups | <input type="checkbox"/> Others (Specify) |
| | _____ |
| | _____ |
| | _____ |

- (6) Please write a number in the blank that describes how you use each of the following sources in gathering information regarding the **REGULATORY** environment.

1 = DO NOT USE

2 = USE OCCASIONALLY

3 = USE FREQUENTLY

REGULATORY

___ Magazines

___ Newspapers

___ Trade Journals

___ Government Publications

___ Seminars & Conferences

___ Trade Shows

___ Professional Organizations

___ Consultants

___ Accountants

___ Universities

___ Vendors

___ Customers

___ Colleagues

___ Buying Groups

___ Newsletters

___ Catalogs

___ Books

___ Business Periodicals

___ Television

___ Sales Representatives

___ Employees

___ Other Stores

___ Banker

___ Attorney

___ Friends

___ Family

___ Buying Offices

___ Others (Specify)

- (7) Please write a number in the blank that describes how you use each of the following sources in gathering information regarding the **ECONOMIC** environment

1 = DO NOT USE
 2 = USE OCCASIONALLY
 3 = USE FREQUENTLY

ECONOMIC

<input type="checkbox"/> Magazines	<input type="checkbox"/> Newsletters
<input type="checkbox"/> Newspapers	<input type="checkbox"/> Catalogs
<input type="checkbox"/> Trade Journals	<input type="checkbox"/> Books
<input type="checkbox"/> Government Publications	<input type="checkbox"/> Business Periodicals
<input type="checkbox"/> Seminars & Conferences	<input type="checkbox"/> Television
<input type="checkbox"/> Trade Shows	<input type="checkbox"/> Sales Representatives
<input type="checkbox"/> Professional Organizations	<input type="checkbox"/> Employees
<input type="checkbox"/> Consultants	<input type="checkbox"/> Other Stores
<input type="checkbox"/> Accountants	<input type="checkbox"/> Banker
<input type="checkbox"/> Universities	<input type="checkbox"/> Attorney
<input type="checkbox"/> Vendors	<input type="checkbox"/> Friends
<input type="checkbox"/> Customers	<input type="checkbox"/> Family
<input type="checkbox"/> Colleagues	<input type="checkbox"/> Buying Offices
<input type="checkbox"/> Buying Groups	<input type="checkbox"/> Others (Specify)

- (8) Please write a number in the blank that describes how you use each of the following sources in gathering information regarding the **SOCIOCULTURAL** environment

- 1 = DO NOT USE
2 = USE OCCASIONALLY
3 = USE FREQUENTLY

SOCIOCULTURAL

___ Magazines
___ Newspapers
___ Trade Journals
___ Government Publications
___ Seminars & Conferences

___ Trade Shows
___ Professional Organizations
___ Consultants
___ Accountants
___ Universities

___ Vendors
___ Customers
___ Colleagues
___ Buying Groups

___ Newsletters
___ Catalogs
___ Books
___ Business Periodicals
___ Television

___ Sales Representatives
___ Employees
___ Other Stores
___ Banker
___ Attorney

___ Friends
___ Family
___ Buying Offices
___ Others (Specify)

PART III

PLEASE PLACE A CHECK MARK BY THE ANSWER WHICH BEST DESCRIBES THE PERFORMANCE OF YOUR BUSINESS.

- (9) During the last fiscal year, how did your gross sales compare to the previous year's gross sales?

☐ Decreased by a great amount
☐ Decreased by a small amount
☐ Stayed the same
☐ Increased by a small amount
☐ Increased by a great amount

- (10) During the last fiscal year, how did your profit percent compare to that of the previous year?

☐ Decreased by a great amount
☐ Decreased by a small amount
☐ Stayed the same
☐ Increased by a small amount
☐ Increased by a great amount

PLEASE WRITE THE ANSWERS IN THE CORRESPONDING SPACES.

- (11) How many employees did your firm have in each of the categories shown for the first full year of operations and for 1989?

	First Year of Operations	1989
a Owners of the business	_____	_____
b Full-time employees	_____	_____
c Part-time employees	_____	_____
d Others (specify) _____	_____	_____

- (12) What was your first full calendar year of operations? _____ (Year)

PART IV

PLEASE PLACE A CHECK MARK BY THE ANSWER WHICH BEST DESCRIBES YOU AND YOUR BUSINESS

(13) What is your position with the firm?

- ☐ Owner ☐ Owner/Manager
☐ Manager ☐ Other (specify) _____

(14) Which of the following descriptions best describes your business?

- ☐ Independent
☐ Chain/Independently Owned
☐ Chain
☐ Franchise/Independently Owned
☐ Franchise
☐ Other (specify) _____

(15) In what type of store setting does your store belong?

- ☐ Shopping Center or Mall
☐ Freestanding Store
☐ Main Street
☐ Small Shopping Strip
☐ Other (specify) _____

(16) How many years of experience do you have in full-time retailing?

- ☐ Less than 2 years ☐ 7-10 years
☐ 3-6 years ☐ More than 10 years

(17) What is your gender? ☐ Male ☐ Female

(18) Indicate your age bracket

<input type="checkbox"/> Under 20	<input type="checkbox"/> 40-49
<input type="checkbox"/> 20-29	<input type="checkbox"/> 50-59
<input type="checkbox"/> 30-39	<input type="checkbox"/> Over 60

(19) What is your level of education?

☐ Less than high school diploma
☐ High school diploma
☐ Some college or equivalent
☐ Bachelor's degree
☐ Advanced degree
☐ Other (specify) _____

PART V

(20) Write the name and location and check the answer that best describes 3 other apparel retail stores that you perceive to be your greatest competitors

a Name of store _____

Approximate distance from your store _____ Miles or _____ Blocks

Type of store setting:

<input type="checkbox"/>	Shopping Center or Mall
<input type="checkbox"/>	Freestanding Store
<input type="checkbox"/>	Main Street
<input type="checkbox"/>	Small Shopping Strip
<input type="checkbox"/>	Other (specify) _____

b Name of store _____

Approximate distance from your store _____ Miles or _____ Blocks

Type of store setting: _____ Shopping Center or Mall
 _____ Freestanding Store
 _____ Main Street
 _____ Small Shopping Strip
 _____ Other (specify) _____

c. Name of store _____

Approximate distance from your store _____ Miles or _____ Blocks

Type of store setting: _____ Shopping Center or Mall
 _____ Freestanding Store
 _____ Main Street
 _____ Small Shopping Strip
 _____ Other (specify) _____

PLEASE PLACE A CHECK MARK BESIDE THE ANSWER THAT BEST DESCRIBES YOU AND YOUR BUSINESS

(21) What areas of the business environment do you perceive to be your strengths?

_____ Competition Area	_____ Regulatory Area
_____ Customer Area	_____ Economic Area
_____ Technology Area	_____ Sociocultural Area

(22) In what areas of the business environment do you most need improvement?

_____ Competition Area	_____ Regulatory Area
_____ Customer Area	_____ Economic Area
_____ Technology Area	_____ Sociocultural Area

(23) Compared to your major competitors, how often do you think you gather information concerning your business environment?

_____ Less often

_____ About the same

_____ More often

**Is there anything else you would like to tell us about the kinds of activities your business engages in to scan the environment? If so, please use this space for that purpose
Also, any comments you wish to make which you think may help us in the future to service the small apparel retailers will be appreciated.**

Your contribution to this effort is greatly appreciated. If you would like a summary of the results, please print your name and address on the back of the return envelope and we will see that you get it.

_____ This number is for follow-up purposes only

APPENDIX B

CORRESPONDENCE



Oklahoma State University

CENTER FOR APPAREL MARKETING & MERCHANDISING
COLLEGE OF HOME ECONOMICS

STILLWATER OKLAHOMA 74078-0337
HOME ECONOMICS 306
(405) 744-7469

October 4, 1990

Dear Retailer

In today's rapidly changing environment, retailers must be effective planners in order to prosper and survive. Finding information concerning the environment in which the business is active is considered part of this planning process.

Your firm has been chosen to help us identify the activities and information sources apparel retailers of the Greater Tulsa Area seek concerning their business environment. In order for the results to truly represent the apparel retailers of the Tulsa city area, it is important that this survey be completed and returned.

The results of the questionnaire will be available to anybody requesting it. You may receive a summary of results by writing your name and address on the back of the return envelope.

Please take a few minutes to answer the questionnaire. All responses will be kept confidential. If you have any questions regarding this survey, please call (405) 744-7469.

Thank you for your assistance and prompt return of this survey. Your answers will be invaluable to us!

Sincerely,

Tana Stufflebean
Assistant Professor

Hye-Shin Kim
Researcher



Celebrating the Past Preparing for the Future



Oklahoma State University

CENTER FOR APPAREL MARKETING & MERCHANDISING
COLLEGE OF HOME ECONOMICS

STILLWATER OKLAHOMA 74078-0337
HOME ECONOMICS 306
(405) 744-7469

October 12, 1990

Dear Retailer,

Last week a questionnaire seeking the environmental scanning activities of your business was mailed to you. It is important for us to receive your response.

If you have already completed and returned it to us, THANK YOU. If not, please do so today. Your response is important for us to accurately understand the small apparel retailers of the Greater Tulsa Area.

If you did not receive the questionnaire or misplaced it, please call us at (405)744-7469 and we will immediately mail one to you today.

Sincerely,

Tana Stufflebean
Assistant Professor

Hye-Shin Kim
Researcher



Celebrating the Past Preparing for the Future



Oklahoma State University

CENTER FOR APPAREL MARKETING & MERCHANDISING
COLLEGE OF HOME ECONOMICS

STILLWATER OKLAHOMA 74078-0337
HOME ECONOMICS 306
(405) 744-7469

September 21, 1990

Dear Retailer

In today's rapidly changing environment, retailers must be effective planners in order to prosper and survive. Finding information concerning the environment in which the business is active is considered part of this planning process.

Your firm has been chosen to help us identify the activities and information sources apparel retailers of the Tulsa Metropolitan Statistical Area seek concerning their business environment. In order for the results to truly represent the apparel retailers of the Tulsa city area, it is important that this survey be completed and returned.

The results of the questionnaire will be available to anybody requesting it. You may receive a summary of results by writing your name and address on the back of the return envelope.

Please take a few minutes to answer the questionnaire. All responses will be kept confidential. If you have any questions regarding this survey, please call (405) 744-7469.

Thank you for your assistance and prompt return of this survey. Your answers will be invaluable to us!

Sincerely,

Tana Stufflebean
Assistant Professor

Hye-Shin Kim
Researcher



Celebrating the Past Preparing for the Future

APPENDIX C

**FREQUENCY DISTRIBUTION OF SCANNING
INTENSITY SCORES**

TABLE 8

FREQUENCY AND PERCENT OF SCANNING INTENSITY SCORES
(N=47)

Scanning Intensity	Frequency	Percent
6	1	2.1
18	1	2.1
24	1	2.1
35	1	2.1
44	1	2.1
45	1	2.1
49	1	2.1
55	1	2.1
65	2	4.3
67	1	2.1
78	1	2.1
85	1	2.1
86	1	2.1
90	1	2.1
91	1	2.1
94	2	4.3
96	1	2.1
98	1	2.1
99	1	2.1
108	1	2.1
112	1	2.1
113	1	2.1
116	1	2.1
118	2	4.3
124	2	4.3
128	1	2.1
133	1	2.1
135	1	2.1
136	1	2.1
138	1	2.1
144	1	2.1
145	1	2.1
146	1	2.1
150	1	2.1
154	1	2.1
158	1	2.1
160	1	2.1
166	1	2.1
186	1	2.1
208	1	2.1
216	1	2.1
266	2	4.3

TABLE 9

FREQUENCY AND PERCENT OF SCANNING INTENSITY SCORES FOR THE
COMPETITION AREA OF THE BUSINESS ENVIRONMENT
(N=47)

Scanning Intensity	Frequency	Percent
1	2	4.3
2	1	2.1
4	4	8.5
6	1	2.1
7	3	6.4
8	3	6.4
9	2	4.3
12	2	4.3
14	1	2.1
15	4	8.5
16	2	4.3
18	4	8.5
20	3	6.4
21	2	4.3
24	3	6.4
25	1	2.1
28	1	2.1
30	1	2.1
35	2	4.3
36	1	2.1
42	1	2.1
49	2	4.3

TABLE 10

FREQUENCY AND PERCENT OF SCANNING INTENSITY SCORES FOR THE
 CUSTOMER AREA OF THE BUSINESS ENVIRONMENT
 (N=47)

Scanning Intensity	Frequency	Percent
1	1	2.1
4	2	4.3
7	2	4.3
14	2	4.3
18	1	2.1
21	1	2.1
28	2	4.3
30	2	4.3
35	8	17.0
36	2	4.3
42	5	10.6
49	19	40.4

TABLE 11

FREQUENCY AND PERCENT OF SCANNING INTENSITY SCORES FOR THE
TECHNOLOGICAL AREA OF THE BUSINESS ENVIRONMENT
(N=47)

Scanning Intensity	Frequency	Percent
1	5	10.6
2	2	4.3
3	2	4.3
4	8	17.0
5	1	2.1
6	3	6.4
8	2	4.3
9	1	2.1
10	1	2.1
12	4	8.5
15	2	4.3
16	3	6.4
18	1	2.1
21	1	2.1
24	2	4.3
25	1	2.1
28	1	2.1
30	1	2.1
35	1	2.1
42	1	8.5
49	1	2.1

TABLE 12

FREQUENCY AND PERCENT OF SCANNING INTENSITY SCORES FOR THE
REGULATORY AREA OF THE BUSINESS ENVIRONMENT
(N=47)

Scanning Intensity	Frequency	Percent
1	7	14.7
2	3	6.4
3	1	2.1
4	9	19.1
6	4	8.5
8	5	10.6
9	3	6.4
12	3	6.4
14	1	2.1
15	3	6.4
16	1	2.1
18	2	4.3
20	1	2.1
24	2	4.3
42	1	2.1
49	1	2.1

TABLE 13

FREQUENCY AND PERCENT OF SCANNING INTENSITY SCORES FOR THE
ECONOMIC AREA OF THE BUSINESS ENVIRONMENT
(N=47)

Scanning Intensity	Frequency	Percent
1	2	4.3
3	1	2.1
4	2	4.3
5	1	2.1
6	3	6.4
7	2	4.3
8	1	2.1
9	2	4.3
10	2	4.3
12	5	10.6
18	3	6.4
20	2	4.3
21	4	8.5
24	3	6.4
25	1	2.1
28	2	4.3
30	1	2.1
35	1	2.1
36	1	2.1
42	4	8.5
49	4	8.5

TABLE 14

FREQUENCY AND PERCENT OF SCANNING INTENSITY SCORES FOR THE
 SOCIOCULTURAL AREA OF THE BUSINESS ENVIRONMENT
 (N=47)

Scanning Intensity	Frequency	Percent
1	2	4.3
3	1	2.1
4	6	12.8
5	1	2.1
6	3	6.4
9	3	6.4
10	2	4.3
12	6	12.8
14	2	4.3
15	2	4.3
16	1	2.1
20	3	6.4
21	1	2.1
24	2	4.3
25	2	4.3
28	1	2.1
30	4	8.5
36	2	4.3
42	1	2.1
49	2	4.3

APPENDIX D

RESULTS OF ANALYSIS OF VARIANCE

TABLE 15

INFORMATION SOURCE UTILIZATION AND SCANNING INTENSITY
IN THE COMPETITION AREA OF THE BUSINESS ENVIRONMENT
(N=45, df=2)

Information Source	Scanning Intensity		
	MS	F	P>F
Magazines	3201.02	0.56	0.58
Newspapers	3271.42	0.09	0.91
Trade Journals	3349.18	0.09	0.91 ^a
Government Publications	3265.65	0.13	0.88
Seminars and Conferences	2605.48	5.48	0.01
Newsletters	3103.10	1.24	0.30
Catalogs	3100.30	1.26	0.30
Books	3110.32	1.18	0.32
Business Periodicals	3040.77	1.69	0.20
Television	2853.13	2.79	0.70 ^a
Trade Shows	3136.68	1.00	0.38
Professional Organizations	3046.22	1.65	0.20
Consultants	2693.30	4.62	0.02
Accountants	2957.45	2.33	0.11
Universities	3006.80	2.90	0.10 ^b
Sales Representatives	3152.10	0.89	0.42
Employees	3162.45	0.82	0.45
Other Stores	3188.37	0.64	0.53
Banker	3234.53	0.33	0.72
Attorney	3106.77	1.21	0.31
Vendors	3263.92	0.14	0.87
Customers	2404.44	7.70	0.00
Colleagues	2874.80	3.00	0.06
Buying Groups	2811.64	3.54	0.04
Friends	3159.93	0.84	0.44
Family	2995.16	2.04	0.14
Buying Offices	2248.07	9.69	0.00

Note. Total N varies due to missing values.

^aN=44

^bdf=1

TABLE 16

INFORMATION SOURCE UTILIZATION AND SCANNING INTENSITY
IN THE CUSTOMER AREA OF THE BUSINESS ENVIRONMENT
(N=45, df=2)

Information Source	Scanning Intensity		
	MS	F	P>F
Magazines	3243.88	0.27	0.76
Newspapers	3268.47	0.11	0.90
Trade Journals	3161.45	0.89	0.45
Government Publications	3042.75	1.68	0.20
Seminars and Conferences	2893.55	2.85	0.07
Newsletters	3121.20	1.11	0.34
Catalogs	3054.33	1.59	0.22
Books	3235.63	0.32	0.72
Business Periodicals	2941.57	2.46	0.10
Television	2846.10	3.24	0.05
Trade Shows	3062.84	1.53	0.23
Professional Organizations	2408.16	7.67	0.00
Consultants	2663.33	4.91	0.01
Accountants	2522.52	6.35	0.00
Universities	2894.47	4.68	0.04 ^a
Sales Representatives	3088.86	1.34	0.27
Employees	2979.60	2.16	0.13
Other Stores	2725.03	4.32	0.02
Banker	2650.64	5.03	0.01
Attorney	2936.71	2.50	0.09
Vendors	3146.78	0.93	0.40
Customers	2858.62	3.14	0.05
Colleagues	2689.13	4.66	0.01
Buying Groups	2120.21	11.54	0.00
Friends	2887.93	2.89	0.07
Family	2527.66	6.30	0.00
Buying Offices	2212.35	10.19	0.00

^adf=1

TABLE 17

INFORMATION SOURCE UTILIZATION AND SCANNING INTENSITY IN
THE TECHNOLOGICAL AREA OF THE BUSINESS ENVIRONMENT
(N=46, df=2)

Information Source	Scanning Intensity		
	MS	F	P>F
Magazines	2629.80	4.90	0.01
Newspapers	2479.86	6.49	0.00
Trade Journals	2670.47	4.50	0.02
Government Publications	2924.40	2.24	0.12
Seminars and Conferences	2791.80	3.37	0.04
Newsletters	2667.27	4.53	0.02
Catalogs	2786.64	3.41	0.04
Books	2635.48	4.83	0.01
Business Periodicals	2516.27	6.09	0.00
Television	2749.26	3.75	0.03
Trade Shows	3187.39	0.30	0.74
Professional Organizations	2901.61	2.43	0.10
Consultants	2635.36	4.84	0.01
Accountants	3030.53	1.41	0.26
Universities	2566.38	5.55	0.01
Sales Representatives	3052.95	1.24	0.30
Employees	3046.50	1.29	0.29
Other Stores	2667.69	4.52	0.02
Banker	2756.19	3.69	0.03
Attorney	2956.98	1.98	0.15
Vendors	3156.14	0.50	0.61
Customers	3029.03	1.42	0.25
Colleagues	3001.18	1.63	0.21
Buying Groups	3100.12	0.89	0.41
Friends	2800.54	3.29	0.05
Family	2932.12	2.18	0.13
Buying Offices	2989.97	1.72	0.19

TABLE 18

INFORMATION SOURCE UTILIZATION AND SCANNING INTENSITY
IN THE REGULATORY AREA OF THE BUSINESS ENVIRONMENT
(N=45, df=2)

Information Source	Scanning Intensity		
	MS	F	P>F
Magazines	2690.91	4.64	0.02
Newspapers	2843.03	3.27	0.05
Trade Journals	2864.75	3.09	0.06
Government Publications	2241.74	9.78	0.00
Seminars and Conferences	2911.98	2.69	0.08
Newsletters	2781.55	3.81	0.03
Catalogs	3054.09	1.59	0.22
Books	2851.12	3.20	0.05
Business Periodicals	2229.40	9.95	0.00
Television	2453.65	7.12	0.00
Trade Shows	3250.58	0.23	0.80
Professional Organizations	2780.34	3.82	0.03
Consultants	2718.31	4.38	0.02
Accountants	3111.68	1.17	0.32
Universities	2629.24	9.49	0.00 ^a
Sales Representatives	2955.26	2.35	0.11
Employees	3023.39	1.82	0.17
Other Stores	3093.04	1.31	0.28
Banker	3202.60	0.54	0.58
Attorney	3228.97	0.37	0.69
Vendors	3265.00	0.13	0.88
Customers	2762.58	3.98	0.03
Colleagues	2566.12	5.89	0.01
Buying Groups	2894.81	2.84	0.07
Friends	2748.43	4.10	0.02
Family	2909.59	2.71	0.08
Buying Offices	2756.96	4.03	0.03

^adf=1

TABLE 19

INFORMATION SOURCE UTILIZATION AND SCANNING INTENSITY
IN THE ECONOMIC AREA OF THE BUSINESS ENVIRONMENT
(N=45, df=2)

Information Source	Scanning Intensity		
	MS	F	P>F
Magazines	2533.38	6.24	0.00
Newspapers	2771.48	3.90	0.03
Trade Journals	3042.44	1.68	0.20
Government Publications	2707.61	4.48	0.02
Seminars and Conferences	2502.43	6.57	0.00
Newsletters	3008.14	1.94	0.16
Catalogs	2986.69	2.10	0.13
Books	3110.96	1.18	0.32
Business Periodicals	2531.15	6.26	0.00
Television	2324.78	8.68	0.00
Trade Shows	3118.56	1.13	0.33
Professional Organizations	2346.64	8.40	0.00
Consultants	2145.19	11.16	0.00
Accountants	3022.75	1.83	0.17
Universities	2739.82	7.37	0.01 ^a
Sales Representatives	2317.94	8.77	0.00
Employees	2956.29	2.34	0.11
Other Stores	2852.08	3.19	0.05
Banker	3012.19	1.91	0.16
Attorney	3096.17	1.29	0.29
Vendors	2422.90	7.48	0.00
Customers	2655.18	4.99	0.01
Colleagues	2418.64	7.53	0.00
Buying Groups	2293.81	9.08	0.00
Friends	2615.47	5.38	0.00
Family	2759.86	4.00	0.03
Buying Offices	2503.37	6.56	0.00

^adf=1

TABLE 20

INFORMATION SOURCE UTILIZATION AND SCANNING INTENSITY IN
THE SOCIOCULTURAL AREA OF THE BUSINESS ENVIRONMENT
(N=45, df=2)

Information Source	Scanning Intensity		
	MS	F	P>F
Magazines	3134.01	1.02	0.37
Newspapers	3041.50	1.69	0.20
Trade Journals	3165.48	0.80	0.46
Government Publications	2607.86	5.46	0.00
Seminars and Conferences	2865.52	3.08	0.06
Newsletters	3279.35	0.04	0.96
Catalogs	2791.38	3.72	0.03
Books	3084.94	1.73	0.20
Business Periodicals	2802.26	3.62	0.04
Television	3032.64	1.75	0.20
Trade Shows	3252.04	0.22	0.81
Professional Organizations	2898.54	2.80	0.07
Consultants	2738.15	4.20	0.02
Accountants	3069.23	1.48	0.24
Universities	2915.26	5.33	0.03 ^a
Sales Representatives	2856.58	3.15	0.05
Employees	2985.32	2.11	0.13
Other Stores	2876.57	2.99	0.06
Banker	2811.19	3.54	0.04
Attorney	2783.11	3.79	0.03
Vendors	2629.41	5.39	0.00 ^b
Customers	2885.70	3.09	0.06 ^b
Colleagues	3168.45	0.99	0.38 ^b
Buying Groups	2090.13	6.96	0.00 ^c
Friends	3130.00	1.04	0.36
Family	3037.69	1.71	0.19
Buying Offices	2634.68	5.19	0.00

Note. Total N varies due to missing values.

^aN=44, df=1

^bN=44

^cN=43

APPENDIX E

TABLE OF SCANNING INTENSITY MEANS

TABLE 21

SCANNING INTENSITY MEANS BASED ON INFORMATION UTILIZATION
FOR THE COMPETITION AREA OF THE BUSINESS ENVIRONMENT
(N=45)

Information Source	Do not Use Mean (N)	Use Occasionally Mean (N)	Use Frequently Mean (N)
Magazines	102.93 (14)	123.94 (18)	117.62 (13)
Newspapers	117.00 (2)	110.69 (16)	118.37 (27)
Trade Journals	111.00 (16)	115.79 (14)	120.00 (14)
Government Pub.	114.71 (38)	116.33 (6)	144.00 (1)
Seminars & Conf.	95.84 (25) B	132.59 (17) A	183.67 (3) A ^a
Newsletters	112.20 (15)	125.13 (24)	85.83 (6)
Catalogs	100.42 (19)	129.20 (15)	123.18 (11)
Books	110.11 (28)	128.94 (16)	55.00 (1)
Bus. Periodicals	97.89 (19)	128.71 (17)	128.11 (9)
Television	91.11 (18)	129.18 (17)	131.00 (9)
Trade Shows	124.94 (17)	120.06 (16)	96.33 (12)
Prof. Organizations	104.83 (24)	119.00 (15)	150.00 (6)
Consultants	102.59 (34) B	140.75 (4) AB	164.29 (7) A
Accountants	104.54 (24)	141.57 (14)	101.43 (7)
Universities	108.14 (35)	141.60 (10)	-
Sales Rep.	85.80 (5)	114.94 (18)	122.86 (22)
Employees	105.86 (7)	102.46 (13)	125.12 (25)
Other Stores	96.13 (8)	116.00 (16)	122.67 (21)
Banker	110.56 (27)	125.33 (15)	112.00 (3)
Attorney	108.91 (33)	137.82 (11)	91.00 (1)
Vendors	103.60 (5)	119.29 (14)	115.88 (26)
Customers	266.00 (1) A	83.17 (32) C	123.03 (12) B
Colleagues	79.50 (6)	104.59 (17)	133.91 (22)
Buying Groups	107.30 (30) B	117.00 (12) B	192.67 (3) A
Friends	104.38 (8)	103.77 (13)	125.71 (24)
Family	94.09 (11)	107.36 (14)	133.15 (20)
Buying Offices	99.17 (29) B	112.89 (9) B	187.00 (7) A

Note. Total N varies due to missing values.

^aMeans in the same row with the same letter are not significantly different at the $p < .05$ level based on Duncan's multiple range test.

TABLE 22

SCANNING INTENSITY MEANS BASED ON INFORMATION UTILIZATION
FOR THE CUSTOMER AREA OF THE BUSINESS ENVIRONMENT
(N=45)

Information Source	Do not Use Mean(N)	Use Occasionally Mean(N)	Use Frequently Mean(N)
Magazines	105.60(10)	123.94(23)	117.62(12)
Newspapers	123.86(7)	116.17(18)	112.15(20)
Trade Journals	103.28(18)	119.63(16)	129.82(11)
Government Pub.	109.13(38)	151.67(6)	144.00(1)
Seminars & Conf.	101.50(28)	143.50(14)	116.67(3)
Newsletters	117.67(15)	128.63(16)	98.43(14)
Catalogs	105.76(21)	136.33(15)	103.89(9)
Books	110.90(30)	124.14(14)	136.00(1)
Bus. Periodicals	101.00(23)	124.11(18)	161.00(4)
Television	96.93(15) B	112.57(21) AB	153.67(9) A ^a
Trade Shows	117.57(21)	139.11(9)	98.67(15)
Prof. Organizations	101.17(28) B	107.90(10) B	182.00(7) A
Consultants	100.69(32) B	140.33(7) B	162.43(6) A
Accountants	100.18(33) B	162.45(11) A	108.00(1) AB
Universities	107.51(37) B	152.88(8) A	-
Sales Rep.	99.10(10)	106.80(15)	130.40(20)
Employees	85.00(6)	98.50(10)	127.79(29)
Other Stores	72.90(10) B	129.53(19) A	125.69(16) A
Banker	109.12(33) B	108.89(9) B	206.67(3) A
Attorney	108.43(37)	140.14(7)	208.00(1)
Vendors	95.56(9)	114.18(17)	126.32(19)
Customers	50.00(2) A	82.83(6) A	124.43(37) A
Colleagues	83.40(10) B	104.81(16) B	141.58(19) A
Buying Groups	97.77(31) B	124.50(8) B	195.67(6) A
Friends	86.88(8)	102.14(14)	133.74(23)
Family	73.70(10) B	108.73(15) AB	141.65(20) A
Buying Offices	100.53(34) B	123.60(5) B	194.17(6) A

^aMeans in the same row with the same letter are not significantly different at the $p < .05$ level based on Duncan's multiple range test.

TABLE 23

SCANNING INTENSITY MEANS BASED ON INFORMATION UTILIZATION
FOR THE TECHNOLOGICAL AREA OF THE BUSINESS ENVIRONMENT
(N=46)

Information Source	Do not Use Mean (N)	Use Occasionally Mean (N)	Use Frequently Mean (N)
Magazines	97.57(14) B	107.30(20) B	155.17(12) A ^a
Newspapers	98.21(19) B	105.38(16) B	163.09(11) A
Trade Journals	97.83(18) B	104.00(13) B	148.87(15) A
Government Pub.	107.69(36)	140.14(7)	162.67(3)
Seminars & Conf.	101.31(29) B	145.79(14) A	122.33(3) AB
Newsletters	98.55(22) B	122.85(20) B	180.25(4) A
Catalogs	96.05(22) B	129.06(17) AB	148.43(7) A
Books	99.27(30) B	151.92(12) A	136.25(4) AB
Bus. Periodicals	89.36(22) B	138.40(15) A	144.89(9) A
Television	104.00(33) B	164.17(6) A	132.71(7) AB
Trade Shows	111.63(19)	112.93(14)	126.46(13)
Prof. Organizations	103.76(29)	131.62(13)	156.50(4)
Consultants	100.06(31) B	157.00(7) A	143.13(8) AB
Accountants	108.66(29)	117.73(11)	150.00(6)
Universities	105.34(38) B	161.00(7) A	216.00(1) A
Sales Rep.	111.70(20)	134.71(7)	102.17(1)
Employees	103.43(23)	126.50(16)	134.71(7)
Other Stores	93.61(23) B	140.43(21) A	122.00(2) AB
Banker	106.62(37) B	165.29(7) A	122.00(2) AB
Attorney	110.98(40)	161.60(5)	99.00(1)
Vendors	121.00(15)	121.21(19)	102.33(12)
Customers	107.10(30)	126.00(10)	145.50(6)
Colleagues	103.58(24)	125.12(17)	146.60(5)
Buying Groups	113.28(39)	123.67(6)	186.00(1)
Friends	101.59(27) B	126.62(13) AB	159.50(6) A
Family	104.74(31)	142.36(11)	133.25(4)
Buying Offices	109.62(37)	138.00(8)	186.00(1)

^aMeans in the same row with the same letter are not significantly different at the $p < .05$ level based on Duncan's multiple range test.

TABLE 24

SCANNING INTENSITY MEANS BASED ON INFORMATION UTILIZATION
FOR THE REGULATORY AREA OF THE BUSINESS ENVIRONMENT
(N=45)

Information Source	Do not Use Mean(N)	Use Occasionally Mean(N)	Use Frequently Mean(N)
Magazines	97.73(22) B	140.83(18) A	129.60(5) AB ^a
Newspapers	98.82(17) B	112.16(19) AB	154.44(9) A
Trade Journals	101.00(22)	111.08(12)	149.64(11)
Government Pub.	97.15(26) B	114.25(12) B	186.29(7) A
Seminars & Conf.	103.69(32)	143.78(9)	147.25(4)
Newsletters	98.44(25) B	129.38(16) AB	167.50(4) A
Catalogs	109.82(39)	152.00(5)	158.00(1)
Books	104.83(35) B	152.44(9) A	160.00(1) AB
Bus. Periodicals	92.54(24) B	119.54(13) B	178.25(8) A
Television	98.93(30) B	130.60(10) A	185.40(5) A
Trade Shows	111.46(28)	124.67(12)	116.80(5)
Prof. Organizations	101.13(30) B	138.08(12) A	170.00(3) A
Consultants	102.97(34) B	164.00(7) A	138.00(4) AB
Accountants	104.14(22)	115.89(9)	132.36(14)
Universities	105.47(38) B	170.43(7) A	-
Sales Rep.	108.27(26)	141.62(13)	90.83(6)
Employees	104.80(30)	135.50(14)	160.00(1)
Other Stores	107.09(32)	138.10(10)	131.00(3)
Banker	110.00(31)	124.60(10)	136.25(4)
Attorney	113.84(25)	126.33(12)	104.88(8)
Vendors	112.19(26)	118.23(13)	124.50(6)
Customers	101.63(12) B	147.55(11) A	163.00(2) AB
Colleagues	95.89(27) B	134.50(12) A	166.33(6) A
Buying Groups	109.63(41)	173.33(3)	186.00(1)
Friends	102.85(34) B	154.00(9) A	159.00(2) AB
Family	104.97(34)	147.20(10)	160.00(1)
Buying Offices	106.76(38) B	154.67(6) AB	216.00(1) A

^aMeans in the same row with the same letter are not significantly different at the $p < .05$ level based on Duncan's multiple range test.

TABLE 25

SCANNING INTENSITY MEANS BASED ON INFORMATION UTILIZATION
FOR THE ECONOMIC AREA OF THE BUSINESS ENVIRONMENT
(N=45)

Information Source	Do not Use Mean (N)	Use Occasionally Mean (N)	Use Frequently Mean (N)
Magazines	84.42 (12) B	107.94 (17) B	148.56 (16) A ^a
Newspapers	66.67 (6) B	108.73 (15) AB	132.08 (24) A
Trade Journals	106.77 (13)	100.36 (14)	133.78 (18)
Government Pub.	97.48 (25) B	127.00 (14) AB	164.33 (6) A
Seminars & Conf.	97.41 (27) B	125.67 (12) B	177.17 (6) A
Newsletters	101.44 (16)	109.69 (16)	140.23 (13)
Catalogs	106.18 (34)	142.33 (9)	155.00 (2)
Books	166.00 (2)	124.91 (11)	109.22 (32)
Bus. Periodicals	96.19 (16) B	101.25 (16) B	157.08 (13) A
Television	77.07 (14) C	119.50 (20) B	157.45 (11) A
Trade Shows	108.66 (29)	118.73 (11)	148.80 (5)
Prof. Organizations	96.65 (26) B	120.92 (13) B	186.00 (6) A
Consultants	93.53 (30) B	141.86 (7) A	175.25 (8) A
Accountants	101.00 (22)	120.83 (12)	139.00 (11)
Universities	105.73 (37) B	161.13 (8) A	-
Sales Rep.	90.78 (18) C	115.15 (20) B	180.57 (7) A
Employees	94.11 (18)	129.53 (19)	130.75 (8)
Other Stores	94.35 (20) B	127.00 (18) AB	146.86 (7) A
Banker	106.15 (26)	116.38 (13)	154.67 (6)
Attorney	107.91 (33)	133.30 (10)	153.50 (2)
Vendors	81.81 (16) B	122.21 (19) A	157.00 (10) A
Customers	84.21 (14) B	114.80 (15) B	143.75 (16) A
Colleagues	84.53 (17) AB	118.00 (16) B	156.33 (12) A
Buying Groups	102.55 (38) B	182.80 (5) A	195.00 (2) A
Friends	97.14 (22) B	117.19 (16) B	169.86 (7) A
Family	97.14 (22) B	122.53 (17) AB	163.50 (7) A
Buying Offices	104.20 (35) B	132.29 (7) B	209.33 (3) A

^aMeans in the same row with the same letter are not significantly different at the $p < .05$ level based on Duncan's multiple range test.

TABLE 26

SCANNING INTENSITY MEANS BASED ON INFORMATION UTILIZATION
FOR THE SOCIOCULTURAL AREA OF THE BUSINESS ENVIRONMENT
(N=45)

Information Source	Do not Use Mean(N)	Use Occasionally Mean(N)	Use Frequently Mean(N)
Magazines	106.91(11)	107.32(19)	32.40(15)
Newspapers	98.00(11)	105.71(14)	132.15(20)
Trade Journals	106.38(21)	115.85(13)	132.82(11)
Government Pub.	100.68(31) B	137.45(11) A	189.33(3) A ^a
Seminars & Conf.	104.48(33)	137.89(9)	170.67(3)
Newsletters	112.53(17)	116.87(15)	118.80(13)
Catalogs	96.21(24) B	141.76(17) A	120.50(4) AB
Books	107.48(29)	130.25(16)	-
Bus. Periodicals	100.30(20) B	111.44(16) B	156.89(9) A
Television	97.40(15)	115.65(17)	136.46(13)
Trade Shows	114.15(27)	110.20(10)	127.13(8)
Prof. Organizations	101.55(29)	138.55(11)	146.40(5)
Consultants	98.79(29) B	146.89(9) A	144.86(7) A
Accountants	109.40(35)	125.71(7)	164.00(3)
Universities	108.05(38) B	162.83(6) A	-
Sales Rep.	97.09(22) B	123.64(14) AB	148.22(9) A
Employees	98.75(16)	110.50(14)	138.27(15)
Other Stores	96.45(20)	138.78(18)	110.57(7)
Banker	106.54(37) A	150.14(7) A	208.00(1) A
Attorney	108.18(40) A	166.50(4) A	208.00(1) A
Vendors	100.23(22) B	106.64(14) B	168.13(8) A
Customers	83.67(9)	100.20(10)	131.52(25)
Colleagues	104.70(20)	114.00(14)	135.30(10)
Buying Groups	101.66(38) B	182.00(4) A	186.00(1) AB
Friends	99.38(16)	125.25(16)	123.62(13)
Family	97.06(18)	129.69(16)	125.36(11)
Buying Offices	106.76(38) B	133.50(4) AB	203.33(3) A

Note. Total N varies due to missing values.

^aMeans in the same row with the same letter are not significantly different at the $p < .05$ level based on Duncan's multiple range test.

APPENDIX F

**FREQUENCY DISTRIBUTION OF INFORMATION
INFORMATION SOURCE UTILIZATION**

TABLE 27

FREQUENCY OF INFORMATION SOURCE USAGE IN THE COMPETITION
AREA OF THE BUSINESS ENVIRONMENT
(N=48)

Information Source	Do Not Use		Use Occasionally		Use Frequently	
	f ^a	%	f	%	f	%
Magazines	14	29.2	20	41.7	14	29.2
Newspapers	2	4.2	18	37.5	28	58.3
Trade Journals	17	36.2	15	31.9	15	31.9
Government Publications	41	85.4	6	12.5	1	2.1
Seminars and Conferences	26	54.2	19	39.6	3	6.2
Newsletters	16	33.3	25	52.1	7	14.6
Catalogs	20	41.7	16	33.3	12	25.0
Books	30	62.5	17	35.4	1	2.1
Business Periodicals	19	39.6	20	41.7	9	18.8
Television	18	38.3	19	40.4	10	21.3
Trade Shows	18	37.5	17	35.4	13	27.1
Professional Organizations	26	54.2	16	33.3	6	12.5
Consultants	35	72.9	6	12.5	7	14.6
Accountants	26	54.2	15	31.3	7	14.6
Universities	38	79.2	10	20.8	-	-
Sales Representatives	6	12.5	18	37.5	24	50.0
Employees	7	14.6	15	31.3	26	54.2
Other Stores	8	16.7	19	39.6	21	43.7
Banker	29	60.4	16	33.3	3	6.2
Attorney	35	72.9	12	25.0	1	2.1
Vendors	5	10.4	15	31.3	28	58.3
Customers	1	2.1	12	25.0	35	72.9
Colleagues	7	14.6	18	37.5	23	47.9
Buying Groups	32	66.7	12	25.0	4	8.3
Friends	8	16.7	16	33.3	24	50.0
Family	12	25.0	16	33.3	20	41.7
Buying Offices	31	64.6	10	20.8	7	14.6

Note. Total N varies due to missing values.

^af is the frequency of responses.

TABLE 28

FREQUENCY OF INFORMATION SOURCE USAGE IN THE CUSTOMER
AREA OF THE BUSINESS ENVIRONMENT
(N=48)

Information Source	Do Not Use		Use Occasionally		Use Frequently	
	f ^a	%	f	%	f	%
Magazines	10	20.8	25	52.1	13	27.1
Newspapers	7	14.7	20	41.7	21	43.7
Trade Journals	19	39.6	17	35.4	12	25.0
Government Publications	41	85.4	6	12.5	1	2.1
Seminars and Conferences	30	62.5	15	31.3	3	6.2
Newsletters	17	35.4	16	33.3	15	31.3
Catalogs	22	45.8	17	35.4	9	18.8
Books	33	68.7	14	29.2	1	2.1
Business Periodicals	24	50.0	20	41.7	4	8.3
Television	15	31.3	24	50.0	9	18.8
Trade Shows	22	45.8	10	20.8	16	33.3
Professional Organizations	29	60.4	12	25.0	7	14.6
Consultants	34	70.8	7	14.6	7	14.6
Accountants	36	75.0	11	22.9	1	2.1
Universities	40	83.3	8	16.7	-	-
Sales Representatives	11	22.9	15	31.3	22	45.8
Employees	6	12.5	11	22.9	31	64.6
Other Stores	11	22.9	21	43.7	16	33.3
Banker	36	75.0	9	18.8	3	6.2
Attorney	40	83.3	7	14.6	1	2.1
Vendors	9	18.8	18	37.5	21	43.7
Customers	2	4.2	6	12.5	40	83.3
Colleagues	11	22.9	17	35.4	20	41.7
Buying Groups	33	68.7	8	16.7	7	14.6
Friends	8	16.7	17	35.4	23	47.9
Family	10	20.8	18	37.5	20	41.7
Buying Offices	36	75.0	6	12.5	6	12.5

^af is the frequency of responses.

TABLE 29

FREQUENCY OF INFORMATION SOURCE USAGE IN THE TECHNOLOGICAL
AREA OF THE BUSINESS ENVIRONMENT
(N=49)

Information Source	Do Not Use		Use Occasionally		Use Frequently	
	f ^a	%	f	%	f	%
Magazines	15	30.6	22	44.9	12	24.5
Newspapers	20	40.8	18	36.7	11	22.4
Trade Journals	18	36.7	16	32.7	15	30.6
Government Publications	39	79.6	7	14.3	3	6.1
Seminars and Conferences	32	65.3	14	28.6	3	6.1
Newsletters	24	49.0	20	40.8	5	10.2
Catalogs	23	46.9	19	38.8	7	14.3
Books	33	67.3	12	24.5	4	8.2
Business Periodicals	24	49.0	16	32.7	9	18.4
Television	36	73.5	6	12.2	7	14.3
Trade Shows	21	42.9	15	30.6	13	26.5
Professional Organizations	32	65.3	13	26.5	4	8.2
Consultants	33	67.3	8	16.3	8	16.3
Accountants	31	63.3	12	24.5	6	12.2
Universities	41	83.7	7	14.3	1	2.0
Sales Representatives	22	44.9	15	30.6	12	24.5
Employees	23	46.9	19	38.8	7	14.3
Other Stores	25	51.0	22	44.9	2	4.1
Banker	39	79.6	8	16.3	2	4.1
Attorney	43	87.8	5	10.2	1	2.0
Vendors	16	32.7	21	42.9	12	24.5
Customers	32	65.3	11	22.4	6	12.2
Colleagues	26	53.1	18	36.7	5	10.2
Buying Groups	42	85.7	6	12.2	1	2.0
Friends	29	59.2	14	28.6	6	12.2
Family	33	67.3	12	24.5	4	8.2
Buying Offices	40	81.6	8	16.3	1	2.0

^af is the frequency of responses.

TABLE 30

FREQUENCY OF INFORMATION SOURCE USAGE IN THE REGULATORY
AREA OF THE BUSINESS ENVIRONMENT
(N=48)

Information Source	Do Not Use		Use Occasionally		Use Frequently	
	f ^a	%	f	%	f	%
Magazines	23	47.9	20	41.7	5	10.4
Newspapers	18	37.5	21	43.7	9	18.8
Trade Journals	23	47.9	14	29.2	11	22.9
Government Publications	27	56.3	14	29.2	7	14.6
Seminars and Conferences	35	72.9	9	18.8	4	8.3
Newsletters	26	54.2	17	35.4	5	10.4
Catalogs	41	85.4	6	12.5	1	2.1
Books	38	79.2	9	18.8	1	2.1
Business Periodicals	25	52.1	14	29.2	9	18.8
Television	32	66.7	10	20.8	6	12.5
Trade Shows	30	62.5	13	27.1	5	10.4
Professional Organizations	32	66.7	13	27.1	3	6.2
Consultants	36	75.0	8	16.7	4	8.3
Accountants	23	47.9	11	22.9	14	29.2
Universities	41	85.4	7	14.6	-	-
Sales Representatives	28	58.3	13	27.1	7	14.6
Employees	32	66.7	15	31.3	1	2.1
Other Stores	34	70.8	11	22.9	3	6.2
Banker	32	66.7	12	25.0	4	8.3
Attorney	27	56.3	13	27.1	8	16.7
Vendors	27	56.3	15	31.3	6	12.5
Customers	35	72.9	11	22.9	2	4.2
Colleagues	28	58.3	14	29.2	6	12.5
Buying Groups	43	89.6	4	8.3	1	2.1
Friends	36	75.0	10	20.8	2	4.2
Family	36	75.0	11	22.9	1	2.1
Buying Offices	40	83.3	7	14.6	1	2.1

^af is the frequency of responses.

TABLE 31

FREQUENCY OF INFORMATION SOURCE USAGE IN THE ECONOMIC
AREA OF THE BUSINESS ENVIRONMENT
(N=48)

Information Source	Do Not Use		Use Occasionally		Use Frequently	
	f ^a	%	f	%	f	%
Magazines	12	25.0	19	39.6	17	35.4
Newspapers	6	12.5	16	33.3	26	54.2
Trade Journals	14	29.2	14	29.2	20	41.7
Government Publications	27	56.3	14	29.2	7	14.6
Seminars and Conferences	29	60.4	13	27.1	6	12.5
Newsletters	18	37.5	16	33.3	14	29.2
Catalogs	37	77.1	9	18.8	2	4.2
Books	35	72.9	11	22.9	2	4.2
Business Periodicals	17	35.4	17	35.4	14	29.2
Television	15	31.3	20	41.7	13	27.1
Trade Shows	31	64.6	11	22.9	6	12.5
Professional Organizations	27	56.3	14	29.2	7	14.6
Consultants	32	66.7	7	14.6	9	18.8
Accountants	23	47.9	12	25.0	13	27.1
Universities	40	83.3	8	16.7	-	-
Sales Representatives	20	41.7	20	41.7	8	16.7
Employees	19	39.6	21	43.7	8	16.7
Other Stores	22	45.8	19	39.6	7	14.6
Banker	27	56.3	14	29.2	7	14.6
Attorney	35	72.9	11	22.9	2	4.2
Vendors	17	35.4	21	43.7	10	20.8
Customers	14	29.2	18	37.5	16	33.3
Colleagues	18	37.5	18	37.5	12	25.0
Buying Groups	40	83.3	5	10.4	3	6.2
Friends	23	47.9	18	37.5	7	14.6
Family	23	47.9	19	39.6	6	12.5
Buying Offices	38	79.2	7	14.6	3	6.2

^af is the frequency of responses.

TABLE 32

FREQUENCY OF INFORMATION SOURCE USAGE IN THE SOCIOCULTURAL
AREA OF THE BUSINESS ENVIRONMENT
(N=48)

Information Source	Do Not Use		Use Occasionally		Use Frequently	
	f ^a	%	f	%	f	%
Magazines	11	22.9	20	41.7	17	35.4
Newspapers	11	22.9	15	31.3	22	45.8
Trade Journals	22	45.8	13	27.1	13	27.1
Government Publications	34	70.8	11	22.9	3	6.2
Seminars and Conferences	35	72.9	9	18.8	4	8.3
Newsletters	19	39.6	15	31.3	14	29.2
Catalogs	26	54.2	17	35.4	5	10.4
Books	32	66.7	16	33.3	-	-
Business Periodicals	22	45.8	17	35.4	9	18.8
Television	16	33.3	17	35.4	15	31.3
Trade Shows	29	60.4	10	20.8	9	18.8
Professional Organizations	31	64.6	12	25.0	5	10.4
Consultants	31	64.6	9	18.8	8	16.7
Accountants	37	77.1	8	16.7	3	6.2
Universities	41	87.2	6	12.8	-	-
Sales Representatives	24	50.0	14	29.2	10	20.8
Employees	17	35.4	15	31.3	16	33.3
Other Stores	22	45.8	18	37.5	8	16.7
Banker	39	81.2	8	16.7	1	2.1
Attorney	43	89.6	4	8.3	1	2.1
Vendors	23	48.9	15	31.9	9	19.1
Customers	9	19.1	11	23.4	27	57.4
Colleagues	21	44.7	15	31.9	11	23.4
Buying Groups	40	87.0	4	8.7	2	4.3
Friends	17	35.4	18	37.5	13	27.1
Family	19	39.6	18	37.5	11	22.9
Buying Offices	41	85.4	4	8.3	3	6.2

Note. Total N varies due to missing values.

^af is the frequency of responses.

APPENDIX G

**FREQUENCY DISTRIBUTION OF INFORMATION
SOURCE UTILIZATION AND
BUSINESS PERFORMANCE**

TABLE 33

INFORMATION SOURCE UTILIZATION REGARDING THE COMPETITION
BUSINESS ENVIRONMENT AND GROSS SALES
(N=48)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Magazines				
Do not use	14 (29)	3 (6)	1 (21)	10 (2)
Use	34 (71)	11 (23)	4 (8)	19 (40)
Newspapers				
Do not use	2 (4)	1 (2)	0 (0)	1 (2)
Use	46 (96)	13 (27)	5 (10)	28 (58)
Trade Journals				
Do not use	17 (36)	5 (11)	3 (6)	9 (19)
Use	30 (64)	9 (19)	2 (4)	19 (40)
Government Publications				
Do not use	41 (85)	11 (23)	4 (4)	26 (54)
Use	7 (15)	3 (2)	1 (2)	3 (4)
Seminars and Conferences				
Do not use	26 (54)	7 (15)	2 (4)	17 (35)
Use	22 (46)	7 (15)	3 (6)	12 (25)
Newsletter				
Do not use	16 (33)	5 (10)	1 (2)	10 (21)
Use	32 (67)	9 (19)	4 (8)	19 (40)
Catalogs				
Do not use	20 (42)	4 (8)	1 (2)	15 (31)
Use	28 (58)	10 (21)	4 (8)	14 (29)
Books				
Do not use	20 (43)	4 (9)	4 (9)	12 (26)
Use	27 (57)	7 (15)	5 (11)	15 (32)
Business Periodicals				
Do not use	19 (40)	4 (8)	2 (4)	13 (27)
Use	29 (60)	10 (21)	3 (6)	16 (33)
Television				
Do not use	18 (38)	4 (9)	1 (2)	13 (28)
Use	29 (62)	9 (19)	4 (9)	16 (34)

TABLE 33 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Trade Shows				
Do not use	18(38)	6(13)	1(2)	11(23)
Use	30(63)	8(17)	4(8)	18(38)
Professional Organizations				
Do not use	26(54)	7(15)	1(2)	18(38)
Use	22(46)	7(15)	4(8)	11(23)
Consultants				
Do not use	35(73)	10(21)	3(6)	22(46)
Use	13(27)	4(8)	2(4)	7(15)
Accountants				
Do not use	26(54)	7(15)	2(4)	17(35)
Use	22(46)	7(15)	3(6)	12(25)
Universities				
Do not use	38(79)	11(23)	4(8)	23(48)
Use	10(21)	3(6)	1(2)	6(13)
Sales Representatives				
Do not use	6(13)	3(6)	0(0)	3(6)
Use	42(88)	11(23)	5(10)	26(54)
Employees				
Do not use	7(15)	1(2)	0(0)	6(13)
Use	41(85)	13(12)	5(10)	23(48)
Other Stores				
Do not use	8(17)	2(4)	0(0)	6(13)
Use	40(83)	12(25)	5(10)	23(48)
Banker				
Do not use	29(60)	6(13)	3(6)	20(42)
Use	19(40)	8(17)	2(4)	9(19)
Attorney				
Do not use	35(73)	9(19)	2(4)	24(50)
Use	13(27)	5(10)	3(6)	5(10)
Vendors				
Do not use	5(10)	2(4)	0(0)	3(6)
Use	43(90)	12(25)	5(10)	26(54)

TABLE 33 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Customers				
Do not use	1 (2)	0 (0)	1 (2)	0 (0)
Use	47 (98)	14 (29)	4 (8)	29 (60)
Colleagues				
Do not use	7 (15)	0 (0)	0 (0)	7 (15)
Use	41 (85)	14 (29)	5 (10)	22 (46)
Buying Groups				
Do not use	32 (67)	9 (19)	2 (4)	21 (44)
Use	16 (33)	5 (10)	3 (6)	8 (17)
Friends				
Do not use	8 (17)	1 (2)	1 (2)	6 (13)
Use	40 (83)	13 (27)	4 (8)	23 (48)
Family				
Do not use	12 (25)	3 (6)	1 (2)	8 (17)
Use	36 (75)	11 (23)	4 (8)	21 (44)
Buying Offices				
Do not use	31 (65)	6 (13)	2 (4)	23 (48)
Use	17 (35)	8 (17)	3 (6)	6 (13)

Note. Total N varies due to missing values

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number.

TABLE 34

INFORMATION SOURCE UTILIZATION REGARDING THE COMPETITION
BUSINESS ENVIRONMENT AND PROFIT PERCENT
(N=47)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Magazines				
Do not use	14 (30)	3 (6)	3 (6)	8 (17)
Use	33 (70)	8 (17)	6 (13)	19 (40)
Newspapers				
Do not use	1 (2)	0 (0)	0 (0)	1 (2)
Use	46 (98)	11 (23)	9 (19)	26 (55)
Trade Journals				
Do not use	16 (35)	4 (9)	1 (2)	11 (24)
Use	30 (65)	7 (15)	8 (17)	15 (33)
Government Publications				
Do not use	40 (85)	9 (19)	6 (13)	25 (53)
Use	7 (15)	2 (4)	3 (6)	2 (4)
Seminars and Conferences				
Do not use	25 (53)	6 (13)	8 (17)	11 (23)
Use	22 (47)	5 (11)	1 (2)	16 (34)
Newsletter				
Do not use	15 (32)	4 (9)	2 (4)	9 (19)
Use	32 (68)	7 (15)	7 (15)	18 (38)
Catalogs				
Do not use	20 (43)	4 (9)	4 (9)	12 (26)
Use	27 (57)	7 (15)	5 (11)	15 (32)
Books				
Do not use	29 (62)	5 (11)	7 (15)	17 (36)
Use	18 (38)	6 (13)	2 (4)	10 (21)
Business Periodicals				
Do not use	18 (38)	3 (6)	4 (9)	11 (23)
Use	29 (62)	8 (17)	5 (11)	16 (34)
Television				
Do not use	17 (37)	3 (4)	3 (7)	11 (24)
Use	29 (63)	7 (6)	6 (13)	16 (35)

TABLE 34 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Trade Shows				
Do not use	17(36)	6(13)	2(4)	9(19)
Use	30(64)	5(11)	7(15)	18(38)
Professional Organizations				
Do not use	25(72)	7(15)	5(11)	13(28)
Use	22(47)	4(9)	4(9)	14(30)
Consultants				
Do not use	34(72)	10(21)	7(15)	17(36)
Use	13(28)	1(2)	2(4)	10(21)
Accountants				
Do not use	20(48)	2(5)	5(12)	13(31)
Use	22(52)	4(10)	4(10)	14(33)
Universities				
Do not use	37(79)	9(19)	8(17)	20(43)
Use	10(21)	2(4)	1(2)	7(15)
Sales Representatives				
Do not use	6(13)	3(6)	1(2)	2(4)
Use	41(87)	8(17)	8(17)	25(53)
Employees				
Do not use	7(15)	1(2)	2(4)	4(9)
Use	40(85)	10(21)	7(15)	23(49)
Other Stores				
Do not use	8(17)	2(4)	1(2)	5(11)
Use	39(83)	9(19)	8(17)	22(47)
Banker				
Do not use	28(60)	6(13)	6(13)	16(34)
Use	19(40)	5(11)	3(6)	11(23)
Attorney				
Do not use	34(72)	9(19)	7(7)	18(38)
Use	13(28)	2(4)	2(2)	9(19)
Vendors				
Do not use	4(9)	1(2)	0(0)	3(6)
Use	43(91)	10(21)	9(19)	24(51)

TABLE 34 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Customers				
Do not use	1(2)	0(0)	0(0)	1(2)
Use	46(98)	11(23)	9(19)	26(55)
Colleagues				
Do not use	7(15)	0(0)	3(6)	4(9)
Use	40(85)	11(23)	6(13)	23(49)
Buying Groups				
Do not use	31(66)	8(17)	6(13)	17(36)
Use	16(34)	3(6)	3(6)	10(21)
Friends				
Do not use	7(15)	0(0)	3(6)	4(9)
Use	40(85)	11(23)	6(13)	23(49)
Family				
Do not use	11(23)	2(4)	3(6)	6(13)
Use	36(77)	9(19)	6(13)	21(45)
Buying Offices				
Do not use	30(64)	6(13)	8(17)	16(34)
Use	17(36)	5(11)	1(2)	11(23)

Note. Total N varies due to missing values.

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number.

TABLE 35

INFORMATION SOURCE UTILIZATION REGARDING THE CUSTOMER
BUSINESS ENVIRONMENT AND GROSS SALES
(N=48)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Magazines				
Do not use	10(21)	3(6)	1(2)	6(13)
Use	38(79)	11(23)	4(8)	23(48)
Newspapers				
Do not use	7(15)	3(6)	0(0)	4(8)
Use	41(85)	11(23)	5(10)	25(52)
Trade Journals				
Do not use	19(40)	6(13)	3(6)	10(21)
Use	29(60)	8(17)	2(4)	19(40)
Government Publications				
Do not use	41(85)	11(23)	5(10)	25(52)
Use	7(15)	3(6)	0(0)	4(8)
Seminars and Conferences				
Do not use	30(63)	7(15)	2(4)	21(44)
Use	18(38)	7(15)	3(6)	8(17)
Newsletter				
Do not use	17(35)	3(6)	1(2)	13(27)
Use	31(65)	11(23)	4(8)	16(33)
Catalogs				
Do not use	22(46)	5(10)	2(4)	15(31)
Use	26(54)	9(19)	3(6)	14(29)
Books				
Do not use	33(69)	9(19)	4(8)	20(42)
Use	15(31)	5(10)	1(2)	9(19)
Business Periodicals				
Do not use	24(50)	5(10)	3(6)	16(33)
Use	24(50)	9(19)	2(4)	13(27)
Television				
Do not use	15(31)	3(6)	3(6)	9(19)
Use	33(69)	11(23)	2(4)	20(42)

TABLE 35 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Trade Shows				
Do not use	22(46)	10(21)	1(2)	11(23)
Use	26(54)	4(8)	4(8)	18(37)
Professional Organizations				
Do not use	29(60)	8(17)	2(4)	19(40)
Use	19(40)	6(13)	3(6)	10(21)
Consultants				
Do not use	34(71)	10(21)	3(6)	21(44)
Use	14(29)	4(8)	2(4)	8(17)
Accountants				
Do not use	36(75)	11(23)	3(6)	22(46)
Use	12(25)	3(6)	2(4)	7(15)
Universities				
Do not use	40(83)	11(23)	5(10)	24(50)
Use	8(17)	3(6)	0(0)	5(10)
Sales Representatives				
Do not use	11(23)	3(6)	1(2)	7(15)
Use	37(77)	11(23)	4(8)	22(46)
Employees				
Do not use	6(13)	2(4)	0(0)	4(8)
Use	42(88)	12(25)	5(10)	25(52)
Other Stores				
Do not use	11(23)	2(4)	0(0)	9(19)
Use	37(77)	12(25)	5(10)	20(42)
Banker				
Do not use	36(75)	10(21)	2(4)	24(50)
Use	12(25)	4(8)	3(6)	5(10)
Attorney				
Do not use	40(83)	11(23)	4(8)	25(52)
Use	8(17)	3(6)	1(2)	4(8)
Vendors				
Do not use	9(19)	3(6)	1(2)	5(10)
Use	39(81)	11(23)	4(8)	24(50)

TABLE 35 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Customers				
Do not use	2(4)	0(0)	0(0)	2(4)
Use	46(96)	14(29)	5(10)	27(56)
Colleagues				
Do not use	11(23)	0(0)	1(2)	10(21)
Use	37(77)	14(29)	4(8)	19(40)
Buying Groups				
Do not use	33(69)	8(17)	3(6)	22(46)
Use	15(31)	6(13)	2(4)	7(15)
Friends				
Do not use	8(17)	1(2)	0(0)	7(15)
Use	40(83)	13(27)	5(10)	22(46)
Family				
Do not use	10(21)	1(2)	0(0)	9(19)
Use	38(79)	13(27)	5(10)	20(42)
Buying Offices				
Do not use	36(75)	8(17)	3(6)	25(52)
Use	12(25)	6(13)	2(4)	4(8)

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number.

TABLE 36

INFORMATION SOURCE UTILIZATION REGARDING THE CUSTOMER
BUSINESS ENVIRONMENT AND PROFIT PERCENT
(N=47)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Magazines				
Do not use	10(21)	3(6)	2(4)	5(11)
Use	37(79)	8(17)	7(15)	22(47)
Newspapers				
Do not use	6(13)	2(4)	1(2)	3(6)
Use	41(87)	9(19)	8(17)	24(51)
Trade Journals				
Do not use	18(38)	5(11)	3(6)	10(21)
Use	29(62)	6(13)	6(13)	17(36)
Government Publications				
Do not use	40(85)	9(19)	8(17)	23(49)
Use	7(15)	2(4)	1(2)	4(9)
Seminars and Conferences				
Do not use	29(62)	6(13)	8(17)	15(32)
Use	18(38)	5(11)	1(2)	12(26)
Newsletter				
Do not use	16(34)	2(4)	4(8)	10(21)
Use	31(66)	9(19)	5(11)	17(36)
Catalogs				
Do not use	22(47)	4(9)	5(11)	13(28)
Use	25(53)	7(15)	4(9)	14(30)
Books				
Do not use	32(68)	6(13)	7(15)	19(40)
Use	15(32)	5(11)	2(4)	8(17)
Business Periodicals				
Do not use	23(49)	4(9)	6(13)	13(28)
Use	24(51)	7(15)	3(6)	14(30)
Television				
Do not use	14(30)	2(4)	4(9)	8(17)
Use	33(70)	9(19)	5(11)	19(40)

TABLE 36 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Trade Shows				
Do not use	21(45)	10(21)	3(6)	8(17)
Use	26(55)	1(2)	6(13)	19(40)
Professional Organizations				
Do not use	28(60)	8(17)	6(13)	14(30)
Use	19(40)	3(6)	3(6)	13(28)
Consultants				
Do not use	33(70)	10(21)	7(15)	16(34)
Use	14(30)	1(2)	2(4)	11(23)
Accountants				
Do not use	35(74)	10(21)	6(13)	19(40)
Use	12(26)	1(2)	3(6)	8(17)
Universities				
Do not use	39(83)	9(19)	9(19)	21(45)
Use	8(17)	2(4)	0(0)	6(13)
Sales Representatives				
Do not use	11(23)	3(6)	2(4)	6(13)
Use	36(77)	8(17)	7(15)	21(45)
Employees				
Do not use	6(13)	2(4)	1(2)	3(6)
Use	41(87)	9(19)	8(17)	24(51)
Other Stores				
Do not use	10(21)	2(4)	3(6)	5(11)
Use	37(79)	9(19)	6(13)	22(47)
Banker				
Do not use	35(74)	9(19)	6(13)	20(43)
Use	12(26)	2(4)	3(6)	7(15)
Attorney				
Do not use	39(83)	10(21)	9(19)	20(43)
Use	8(17)	1(2)	0(0)	7(15)
Vendors				
Do not use	8(17)	2(4)	2(4)	4(6)
Use	39(83)	9(19)	7(15)	23(49)

TABLE 36 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Customers				
Do not use	2 (4)	0 (0)	1 (2)	1 (2)
Use	45 (96)	11 (23)	8 (17)	26 (55)
Colleagues				
Do not use	11 (23)	0 (0)	4 (9)	7 (15)
Use	36 (77)	11 (23)	5 (11)	20 (43)
Buying Groups				
Do not use	33 (70)	8 (17)	9 (19)	16 (34)
Use	14 (30)	3 (6)	0 (0)	11 (23)
Friends				
Do not use	7 (15)	0 (0)	3 (6)	4 (9)
Use	40 (85)	11 (23)	6 (13)	23 (49)
Family				
Do not use	9 (19)	0 (0)	3 (6)	6 (13)
Use	38 (81)	11 (23)	6 (13)	21 (45)
Buying Offices				
Do not use	35 (74)	8 (17)	9 (19)	18 (38)
Use	12 (26)	3 (6)	0 (0)	9 (19)

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number.

TABLE 37

INFORMATION SOURCE UTILIZATION REGARDING THE TECHNOLOGICAL
BUSINESS ENVIRONMENT AND GROSS SALES
(N=49)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Magazines				
Do not use	15(31)	5(10)	1(2)	9(18)
Use	34(69)	9(18)	4(8)	21(43)
Newspapers				
Do not use	20(41)	8(16)	2(4)	10(20)
Use	29(59)	6(12)	3(6)	20(41)
Trade Journals				
Do not use	18(37)	5(10)	3(6)	10(20)
Use	31(63)	9(18)	2(4)	20(41)
Government Publications				
Do not use	39(80)	10(20)	5(10)	24(49)
Use	10(20)	4(8)	0(0)	6(12)
Seminars and Conferences				
Do not use	32(65)	9(18)	4(8)	19(39)
Use	17(35)	5(10)	1(2)	11(22)
Newsletter				
Do not use	24(49)	7(14)	4(8)	13(27)
Use	25(51)	7(14)	1(2)	17(35)
Catalogs				
Do not use	23(47)	3(6)	3(6)	17(35)
Use	26(53)	11(22)	2(4)	13(27)
Books				
Do not use	33(67)	9(18)	4(8)	20(41)
Use	16(33)	5(10)	1(2)	10(20)
Business Periodicals				
Do not use	24(49)	7(14)	2(4)	15(31)
Use	25(51)	7(14)	3(6)	15(31)
Television				
Do not use	36(73)	10(20)	4(8)	22(45)
Use	13(27)	4(8)	1(2)	8(16)

TABLE 37 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Trade Shows				
Do not use	21(43)	6(12)	3(6)	12(24)
Use	28(57)	8(16)	2(4)	18(37)
Professional Organizations				
Do not use	32(65)	8(16)	3(6)	21(43)
Use	17(35)	6(12)	2(4)	9(18)
Consultants				
Do not use	33(67)	9(18)	4(8)	20(41)
Use	16(33)	5(10)	1(2)	10(20)
Accountants				
Do not use	31(63)	9(18)	2(4)	20(41)
Use	18(37)	5(10)	3(6)	10(20)
Universities				
Do not use	41(84)	11(22)	5(10)	25(51)
Use	8(16)	3(6)	0(0)	5(10)
Sales Representatives				
Do not use	22(45)	6(12)	3(6)	13(27)
Use	27(55)	8(16)	2(4)	17(35)
Employees				
Do not use	23(47)	6(12)	2(4)	15(31)
Use	26(53)	8(16)	3(6)	15(31)
Other Stores				
Do not use	25(51)	7(14)	3(6)	15(31)
Use	24(49)	7(14)	2(4)	15(31)
Banker				
Do not use	39(80)	10(20)	4(8)	25(51)
Use	10(20)	4(8)	1(2)	5(10)
Attorney				
Do not use	43(88)	11(22)	4(8)	28(57)
Use	6(12)	3(6)	1(2)	2(4)
Vendors				
Do not use	16(33)	5(10)	3(6)	8(16)
Use	33(67)	9(18)	2(4)	22(45)

TABLE 37 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Customers				
Do not use	32(65)	7(14)	4(8)	21(43)
Use	17(35)	7(14)	1(2)	9(18)
Colleagues				
Do not use	26(53)	7(14)	3(6)	16(33)
Use	23(47)	7(14)	2(4)	14(29)
Buying Groups				
Do not use	42(86)	12(24)	5(10)	25(51)
Use	7(14)	2(4)	0(0)	5(10)
Friends				
Do not use	29(59)	10(20)	4(8)	15(31)
Use	20(41)	4(8)	1(2)	15(31)
Family				
Do not use	33(67)	10(20)	4(8)	19(39)
Use	16(33)	4(8)	1(2)	11(22)
Buying Offices				
Do not use	40(82)	10(20)	5(10)	25(51)
Use	9(18)	4(8)	0(0)	5(10)

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number

TABLE 38

INFORMATION SOURCE UTILIZATION REGARDING THE TECHNOLOGICAL
BUSINESS ENVIRONMENT AND PROFIT PERCENT
(N=48)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Magazines				
Do not use	14 (29)	4 (8)	1 (2)	9 (19)
Use	34 (71)	8 (17)	8 (17)	18 (38)
Newspapers				
Do not use	19 (40)	6 (13)	3 (6)	10 (21)
Use	29 (60)	6 (13)	6 (13)	17 (35)
Trade Journals				
Do not use	17 (35)	4 (8)	2 (23)	11 (4)
Use	31 (65)	8 (17)	7 (33)	16 (15)
Government Publications				
Do not use	38 (79)	9 (19)	8 (17)	21 (44)
Use	10 (21)	3 (6)	1 (2)	6 (13)
Seminars and Conferences				
Do not use	32 (67)	8 (17)	8 (89)	16 (33)
Use	16 (33)	4 (8)	1 (2)	11 (23)
Newsletter				
Do not use	24 (50)	6 (13)	6 (13)	12 (25)
Use	24 (50)	6 (13)	3 (6)	15 (31)
Catalogs				
Do not use	23 (48)	3 (6)	6 (13)	14 (29)
Use	25 (52)	9 (19)	3 (6)	13 (27)
Books				
Do not use	32 (67)	7 (58)	7 (15)	18 (38)
Use	16 (33)	5 (42)	2 (4)	9 (19)
Business Periodicals				
Do not use	23 (48)	6 (13)	4 (8)	13 (27)
Use	25 (52)	6 (13)	5 (10)	14 (29)
Television				
Do not use	35 (73)	9 (19)	6 (13)	20 (42)
Use	13 (27)	3 (6)	3 (6)	7 (15)

TABLE 38 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Trade Shows				
Do not use	20(42)	5(10)	4(8)	11(23)
Use	28(58)	7(15)	5(10)	16(33)
Professional Organizations				
Do not use	31(65)	8(17)	6(13)	17(35)
Use	17(35)	4(8)	3(6)	10(21)
Consultants				
Do not use	32(67)	9(19)	7(15)	16(33)
Use	16(33)	3(6)	2(4)	11(23)
Accountants				
Do not use	30(63)	7(15)	5(10)	18(38)
Use	18(38)	5(10)	4(8)	9(18)
Universities				
Do not use	40(83)	11(23)	9(19)	20(42)
Use	8(17)	1(2)	0(0)	7(15)
Sales Representatives				
Do not use	22(46)	6(13)	4(8)	12(25)
Use	26(54)	6(13)	5(10)	15(31)
Employees				
Do not use	22(46)	5(10)	5(10)	12(25)
Use	26(54)	7(15)	4(8)	15(31)
Other Stores				
Do not use	24(50)	6(13)	5(10)	13(27)
Use	24(50)	6(13)	4(8)	14(29)
Banker				
Do not use	38(79)	10(21)	8(17)	20(42)
Use	10(21)	2(4)	1(2)	7(15)
Attorney				
Do not use	42(88)	11(23)	8(17)	23(48)
Use	6(13)	1(2)	1(2)	4(8)
Vendors				
Do not use	16(33)	5(10)	4(8)	7(15)
Use	32(67)	7(15)	5(10)	20(42)

TABLE 38 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Customers				
Do not use	31(65)	7(15)	7(15)	17(35)
Use	17(35)	5(10)	2(4)	10(21)
Colleagues				
Do not use	25(52)	6(13)	6(13)	13(27)
Use	23(48)	6(13)	3(6)	14(29)
Buying Groups				
Do not use	41(85)	11(23)	9(19)	21(44)
Use	7(15)	1(2)	0(0)	6(13)
Friends				
Do not use	28(58)	7(15)	6(13)	15(31)
Use	20(42)	5(10)	3(6)	12(25)
Family				
Do not use	32(67)	9(19)	7(15)	16(33)
Use	16(33)	3(6)	2(4)	11(23)
Buying Offices				
Do not use	39(81)	10(21)	9(19)	20(42)
Use	9(19)	2(4)	0(0)	7(15)

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number.

TABLE 39

INFORMATION SOURCE UTILIZATION REGARDING THE REGULATORY
BUSINESS ENVIRONMENT AND GROSS SALES
(N=48)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Magazines				
Do not use	23(48)	7(15)	3(6)	13(27)
Use	25(52)	7(15)	2(4)	16(33)
Newspapers				
Do not use	18(34)	6(13)	3(6)	9(19)
Use	30(63)	8(17)	2(4)	20(42)
Trade Journals				
Do not use	23(48)	7(15)	3(6)	13(27)
Use	25(52)	7(15)	2(4)	16(33)
Government Publications				
Do not use	27(56)	7(15)	4(8)	16(33)
Use	21(44)	7(15)	1(2)	13(27)
Seminars and Conferences				
Do not use	35(73)	8(17)	4(8)	23(48)
Use	13(27)	6(13)	1(2)	6(13)
Newsletter				
Do not use	26(54)	8(17)	4(8)	14(29)
Use	22(46)	6(13)	1(2)	15(31)
Catalogs				
Do not use	41(85)	10(21)	5(10)	26(54)
Use	7(15)	4(8)	0(0)	3(6)
Books				
Do not use	38(79)	9(19)	5(10)	24(50)
Use	10(21)	5(10)	0(0)	5(10)
Business Periodicals				
Do not use	25(52)	6(13)	3(6)	16(33)
Use	23(48)	8(17)	2(4)	13(27)
Television				
Do not use	32(67)	10(21)	3(6)	19(40)
Use	16(33)	4(8)	2(4)	10(21)

TABLE 39 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Trade Shows				
Do not use	30(63)	7(15)	3(6)	20(42)
Use	18(38)	7(15)	2(4)	9(19)
Professional Organizations				
Do not use	32(67)	7(15)	3(6)	22(46)
Use	16(33)	7(15)	2(4)	7(15)
Consultants				
Do not use	36(75)	10(21)	5(10)	21(44)
Use	12(25)	4(8)	0(0)	8(17)
Accountants				
Do not use	23(48)	6(13)	3(6)	14(29)
Use	25(52)	8(17)	2(4)	15(31)
Universities				
Do not use	40(85)	11(23)	5(11)	25(53)
Use	7(15)	3(6)	0(0)	4(9)
Sales Representatives				
Do not use	28(58)	7(15)	3(6)	18(38)
Use	20(42)	7(15)	2(4)	11(23)
Employees				
Do not use	32(67)	9(19)	3(6)	20(42)
Use	16(33)	5(10)	2(4)	9(19)
Other Stores				
Do not use	34(71)	9(19)	2(4)	23(48)
Use	14(29)	5(10)	3(6)	6(13)
Banker				
Do not use	32(67)	9(19)	3(6)	20(42)
Use	16(33)	5(10)	2(4)	9(19)
Attorney				
Do not use	27(56)	7(15)	3(6)	17(35)
Use	21(44)	7(15)	2(4)	12(25)
Vendors				
Do not use	27(56)	6(13)	3(6)	18(38)
Use	21(44)	8(17)	2(4)	11(23)

TABLE 39 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Customers				
Do not use	35(73)	9(19)	3(6)	23(48)
Use	13(27)	5(10)	2(4)	6(13)
Colleagues				
Do not use	28(58)	6(13)	3(6)	19(40)
Use	20(42)	8(17)	2(4)	10(21)
Buying Groups				
Do not use	43(90)	10(21)	5(10)	28(58)
Use	5(10)	4(8)	0(0)	1(2)
Friends				
Do not use	36(75)	11(23)	5(10)	20(42)
Use	12(25)	3(6)	0(0)	9(19)
Family				
Do not use	36(75)	11(23)	5(10)	20(42)
Use	12(25)	3(6)	0(0)	9(19)
Buying Offices				
Do not use	40(83)	9(19)	5(10)	26(54)
Use	8(17)	5(10)	0(0)	3(6)

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number.

TABLE 40

INFORMATION SOURCE UTILIZATION REGARDING THE REGULATORY
BUSINESS ENVIRONMENT AND PROFIT PERCENT
(N=47)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Magazines				
Do not use	22 (47)	6 (13)	5 (11)	11 (23)
Use	25 (53)	5 (11)	4 (9)	16 (34)
Newspapers				
Do not use	18 (38)	6 (13)	3 (6)	9 (19)
Use	29 (62)	5 (11)	6 (13)	18 (38)
Trade Journals				
Do not use	22 (47)	5 (11)	3 (6)	14 (30)
Use	25 (53)	6 (13)	6 (13)	13 (28)
Government Publications				
Do not use	27 (57)	7 (15)	5 (11)	15 (32)
Use	20 (43)	4 (9)	4 (9)	12 (26)
Seminars and Conferences				
Do not use	34 (72)	7 (15)	8 (17)	19 (40)
Use	13 (28)	4 (9)	1 (2)	8 (17)
Newsletter				
Do not use	25 (53)	7 (15)	5 (11)	13 (28)
Use	22 (47)	4 (9)	4 (9)	14 (30)
Catalogs				
Do not use	40 (85)	9 (19)	9 (19)	22 (47)
Use	7 (15)	2 (4)	0 (0)	5 (11)
Books				
Do not use	37 (79)	8 (17)	9 (19)	20 (43)
Use	10 (21)	3 (6)	0 (0)	7 (15)
Business Periodicals				
Do not use	24 (51)	5 (11)	4 (9)	15 (32)
Use	23 (49)	6 (13)	5 (11)	12 (26)
Television				
Do not use	31 (66)	8 (17)	5 (11)	18 (38)
Use	16 (34)	3 (6)	4 (9)	9 (19)

TABLE 40 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Trade Shows				
Do not use	29 (62)	6 (13)	6 (13)	17 (36)
Use	18 (38)	5 (11)	3 (6)	10 (21)
Professional Organizations				
Do not use	31 (66)	7 (15)	7 (15)	17 (36)
Use	16 (34)	4 (9)	2 (9)	10 (21)
Consultants				
Do not use	35 (74)	10 (21)	8 (17)	17 (36)
Use	12 (26)	1 (2)	1 (2)	10 (21)
Accountants				
Do not use	22 (47)	5 (11)	5 (11)	12 (26)
Use	25 (53)	6 (13)	4 (9)	15 (32)
Universities				
Do not use	40 (85)	10 (21)	9 (19)	21 (45)
Use	7 (15)	1 (2)	0 (0)	6 (13)
Sales Representatives				
Do not use	27 (57)	6 (13)	6 (13)	15 (32)
Use	20 (43)	5 (11)	3 (6)	12 (26)
Employees				
Do not use	31 (66)	8 (17)	7 (15)	16 (34)
Use	16 (34)	3 (6)	2 (4)	11 (23)
Other Stores				
Do not use	33 (70)	9 (19)	6 (13)	18 (38)
Use	14 (30)	2 (4)	3 (6)	9 (19)
Banker				
Do not use	31 (66)	7 (15)	6 (13)	18 (38)
Use	16 (34)	4 (9)	3 (6)	9 (19)
Attorney				
Do not use	26 (55)	5 (11)	6 (13)	15 (32)
Use	21 (45)	6 (13)	3 (6)	12 (26)
Vendors				
Do not use	26 (55)	6 (13)	5 (11)	15 (32)
Use	21 (45)	5 (11)	4 (9)	12 (26)

TABLE 40 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Customers				
Do not use	34 (72)	9 (19)	7 (15)	18 (38)
Use	13 (28)	2 (4)	2 (4)	9 (19)
Colleagues				
Do not use	27 (57)	5 (11)	6 (13)	16 (34)
Use	20 (43)	6 (13)	3 (6)	11 (23)
Buying Groups				
Do not use	42 (89)	9 (19)	9 (19)	24 (51)
Use	5 (11)	2 (4)	0 (0)	3 (6)
Friends				
Do not use	35 (74)	8 (17)	8 (17)	19 (40)
Use	12 (26)	3 (6)	1 (2)	8 (17)
Family				
Do not use	35 (74)	8 (17)	8 (17)	19 (40)
Use	12 (26)	3 (6)	1 (2)	8 (17)
Buying Offices				
Do not use	39 (83)	9 (19)	9 (19)	21 (45)
Use	8 (17)	2 (4)	0 (0)	6 (13)

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number.

TABLE 41

INFORMATION SOURCE UTILIZATION REGARDING THE ECONOMIC
BUSINESS ENVIRONMENT AND GROSS SALES
(N=48)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Magazines				
Do not use	12(25)	1(2)	1(2)	10(21)
Use	36(75)	13(27)	4(8)	19(40)
Newspapers				
Do not use	6(13)	0(0)	1(2)	5(10)
Use	42(86)	14(29)	4(8)	24(50)
Trade Journals				
Do not use	14(29)	4(8)	2(4)	8(17)
Use	34(71)	10(21)	3(6)	21(44)
Government Publications				
Do not use	27(56)	7(15)	3(6)	17(35)
Use	21(44)	7(15)	2(4)	12(25)
Seminars and Conferences				
Do not use	29(60)	9(19)	3(6)	17(35)
Use	19(40)	5(10)	2(4)	12(25)
Newsletter				
Do not use	18(38)	4(8)	3(6)	11(23)
Use	30(63)	10(21)	2(4)	18(38)
Catalogs				
Do not use	37(77)	9(19)	4(8)	24(50)
Use	11(23)	5(10)	1(2)	5(10)
Books				
Do not use	35(73)	8(17)	4(8)	23(48)
Use	13(27)	6(13)	1(2)	6(13)
Business Periodicals				
Do not use	17(35)	3(6)	2(4)	12(25)
Use	31(65)	11(23)	3(6)	17(35)
Television				
Do not use	15(31)	5(10)	2(4)	8(17)
Use	33(69)	9(19)	3(6)	21(44)

TABLE 41 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Trade Shows				
Do not use	31(65)	7(15)	2(4)	22(46)
Use	17(35)	7(15)	3(6)	7(15)
Professional Organizations				
Do not use	27(56)	5(10)	2(4)	20(42)
Use	21(44)	9(19)	3(6)	9(19)
Consultants				
Do not use	32(67)	8(17)	4(8)	20(42)
Use	16(33)	6(13)	1(2)	9(19)
Accountants				
Do not use	23(48)	6(13)	1(2)	16(33)
Use	25(52)	8(17)	4(8)	13(27)
Universities				
Do not use	40(83)	10(21)	5(10)	25(52)
Use	8(17)	4(8)	0(0)	4(8)
Sales Representatives				
Do not use	20(42)	4(8)	2(4)	14(29)
Use	28(58)	10(21)	3(6)	15(31)
Employees				
Do not use	20(41)	4(8)	2(4)	14(29)
Use	29(59)	10(20)	3(6)	16(33)
Other Stores				
Do not use	22(46)	4(8)	2(4)	16(33)
Use	26(54)	10(21)	3(6)	13(27)
Banker				
Do not use	27(56)	7(15)	2(4)	18(38)
Use	21(44)	7(15)	3(6)	11(23)
Attorney				
Do not use	35(73)	10(21)	3(6)	22(46)
Use	13(27)	4(8)	2(4)	7(15)
Vendors				
Do not use	17(35)	3(6)	2(4)	12(25)
Use	31(65)	11(23)	3(6)	17(35)

TABLE 41 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Customers				
Do not use	14(29)	2(4)	1(2)	11(23)
Use	34(71)	12(25)	4(8)	18(38)
Colleagues				
Do not use	18(37)	1(2)	1(2)	16(33)
Use	30(63)	13(27)	4(8)	13(27)
Buying Groups				
Do not use	40(83)	11(23)	4(8)	25(52)
Use	8(17)	3(6)	1(2)	4(8)
Friends				
Do not use	23(48)	6(13)	3(6)	14(29)
Use	25(52)	8(17)	2(4)	15(31)
Family				
Do not use	23(48)	6(13)	3(6)	14(29)
Use	25(52)	8(17)	2(4)	15(31)
Buying Offices				
Do not use	38(79)	9(19)	4(8)	25(52)
Use	10(21)	5(10)	1(2)	4(8)

Note. Total N varies due to missing values.

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number.

TABLE 42

INFORMATION SOURCE UTILIZATION REGARDING THE ECONOMIC
BUSINESS ENVIRONMENT AND PROFIT PERCENT
(N=47)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Magazines				
Do not use	12(26)	1(2)	2(4)	9(19)
Use	35(74)	10(21)	7(15)	18(38)
Newspapers				
Do not use	6(13)	0(0)	0(0)	6(13)
Use	41(87)	11(23)	9(19)	21(45)
Trade Journals				
Do not use	13(28)	3(6)	1(2)	9(19)
Use	34(72)	8(17)	8(17)	18(38)
Government Publications				
Do not use	26(55)	6(13)	4(9)	16(34)
Use	21(45)	5(11)	5(11)	11(23)
Seminars and Conferences				
Do not use	28(60)	8(17)	7(15)	13(28)
Use	19(40)	3(27)	2(4)	14(30)
Newsletter				
Do not use	17(36)	3(6)	2(4)	12(26)
Use	30(64)	8(17)	7(15)	15(32)
Catalogs				
Do not use	36(77)	7(15)	8(17)	21(45)
Use	11(23)	4(9)	1(2)	6(13)
Books				
Do not use	34(72)	6(13)	6(13)	22(47)
Use	13(28)	5(11)	3(6)	5(11)
Business Periodicals				
Do not use	17(36)	3(6)	1(2)	13(28)
Use	30(64)	8(17)	8(17)	14(30)
Television				
Do not use	14(30)	4(9)	2(4)	8(17)
Use	33(70)	7(15)	7(15)	19(40)

TABLE 42 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Trade Shows				
Do not use	31(65)	7(15)	5(10)	19(40)
Use	17(35)	5(10)	4(8)	8(17)
Professional Organizations				
Do not use	26(55)	5(11)	5(11)	16(34)
Use	21(45)	6(13)	4(9)	11(23)
Consultants				
Do not use	31(66)	8(17)	8(17)	15(32)
Use	16(34)	3(6)	1(2)	12(26)
Accountants				
Do not use	22(47)	5(11)	4(9)	13(28)
Use	25(53)	6(13)	5(11)	14(30)
Universities				
Do not use	39(83)	9(19)	9(19)	21(45)
Use	8(17)	2(4)	0(0)	6(13)
Sales Representatives				
Do not use	19(40)	3(6)	3(6)	13(28)
Use	28(6)	8(17)	6(13)	14(30)
Employees				
Do not use	18(38)	2(4)	5(13)	11(23)
Use	29(62)	9(19)	4(19)	16(34)
Other Stores				
Do not use	21(45)	2(4)	5(11)	14(30)
Use	26(55)	9(19)	4(9)	13(28)
Banker				
Do not use	26(55)	6(13)	5(11)	15(32)
Use	21(45)	5(11)	4(9)	12(26)
Attorney				
Do not use	34(72)	9(19)	7(15)	18(39)
Use	13(28)	2(4)	2(4)	9(19)
Vendors				
Do not use	16(34)	2(4)	5(11)	9(19)
Use	31(66)	9(19)	4(9)	18(38)

TABLE 42 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Customers				
Do not use	13(28)	1(2)	3(6)	9(19)
Use	34(72)	10(21)	6(13)	18(38)
Colleagues				
Do not use	17(36)	0(0)	4(9)	13(28)
Use	30(64)	11(23)	5(11)	14(30)
Buying Groups				
Do not use	39(83)	10(21)	9(19)	20(43)
Use	8(17)	1(2)	0(0)	7(15)
Friends				
Do not use	22(47)	4(9)	6(13)	12(26)
Use	25(53)	7(15)	3(6)	15(32)
Family				
Do not use	22(47)	4(9)	6(13)	12(26)
Use	25(53)	7(15)	3(6)	15(32)
Buying Offices				
Do not use	37(79)	8(17)	9(19)	20(43)
Use	10(21)	3(6)	0(0)	7(15)

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number.

TABLE 43

INFORMATION SOURCE UTILIZATION REGARDING THE SOCIOCULTURAL
BUSINESS ENVIRONMENT AND GROSS SALES
(N=48)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Magazines				
Do not use	11(23)	3(6)	2(4)	6(13)
Use	37(77)	11(23)	3(6)	23(48)
Newspapers				
Do not use	11(23)	4(8)	2(4)	5(10)
Use	37(77)	10(21)	3(6)	24(50)
Trade Journals				
Do not use	22(46)	6(13)	4(8)	12(25)
Use	26(54)	8(17)	1(2)	17(35)
Government Publications				
Do not use	34(71)	8(17)	5(10)	21(44)
Use	14(29)	6(13)	0(0)	8(17)
Seminars and Conferences				
Do not use	35(73)	9(19)	5(16)	21(44)
Use	13(27)	5(10)	0(0)	8(17)
Newsletter				
Do not use	19(40)	4(8)	4(8)	11(23)
Use	29(60)	10(21)	1(2)	18(38)
Catalogs				
Do not use	26(54)	6(13)	3(6)	17(35)
Use	22(46)	8(17)	2(4)	12(25)
Books				
Do not use	32(67)	9(19)	4(8)	19(40)
Use	16(33)	5(10)	1(2)	10(21)
Business Periodicals				
Do not use	22(46)	5(10)	3(6)	14(29)
Use	26(54)	9(19)	2(4)	15(31)
Television				
Do not use	16(33)	6(13)	3(6)	7(15)
Use	32(67)	8(17)	2(4)	22(46)

TABLE 43 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Trade Shows				
Do not use	29 (60)	6 (13)	4 (8)	19 (40)
Use	19 (40)	8 (17)	1 (2)	10 (21)
Professional Organizations				
Do not use	31 (65)	7 (15)	4 (8)	20 (42)
Use	17 (35)	7 (15)	1 (2)	9 (19)
Consultants				
Do not use	31 (65)	8 (17)	5 (10)	18 (38)
Use	17 (35)	6 (13)	0 (0)	11 (23)
Accountants				
Do not use	37 (77)	10 (21)	4 (8)	23 (48)
Use	11 (23)	4 (8)	1 (2)	6 (13)
Universities				
Do not use	41 (87)	12 (26)	5 (11)	24 (51)
Use	6 (13)	2 (42)	0 (0)	4 (9)
Sales Representatives				
Do not use	24 (50)	5 (10)	4 (8)	15 (31)
Use	24 (50)	9 (19)	1 (2)	14 (29)
Employees				
Do not use	17 (35)	5 (10)	3 (6)	9 (19)
Use	31 (65)	9 (19)	2 (4)	20 (42)
Other Stores				
Do not use	22 (46)	5 (10)	4 (8)	13 (27)
Use	26 (54)	9 (19)	1 (2)	16 (33)
Banker				
Do not use	39 (81)	12 (25)	5 (10)	22 (46)
Use	9 (19)	2 (4)	0 (0)	7 (15)
Attorney				
Do not use	43 (90)	12 (25)	5 (10)	26 (54)
Use	5 (10)	2 (4)	0 (0)	3 (6)
Vendors				
Do not use	23 (49)	4 (9)	4 (9)	15 (32)
Use	24 (51)	9 (19)	1 (2)	14 (30)

TABLE 43 (Continued)

Information Source	N ^a	Gross Sales		
		Decreased	Same	Increased
Customers				
Do not use	9(17)	1(2)	2(4)	6(12)
Use	42(82)	12(24)	3(6)	27(53)
Colleagues				
Do not use	21(45)	3(6)	2(4)	16(34)
Use	26(55)	10(21)	3(6)	13(28)
Buying Groups				
Do not use	40(87)	10(22)	5(11)	25(54)
Use	6(13)	3(7)	0(0)	3(6)
Friends				
Do not use	17(35)	4(8)	2(4)	11(23)
Use	31(65)	10(21)	3(6)	18(38)
Family				
Do not use	19(40)	4(8)	3(6)	12(25)
Use	29(60)	10(21)	2(4)	17(35)
Buying Offices				
Do not use	41(85)	10(21)	5(10)	26(54)
Use	7(15)	4(8)	0(0)	3(6)

Note. Total N varies due to missing values.

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number.

TABLE 44

INFORMATION SOURCE UTILIZATION REGARDING THE SOCIOCULTURAL
BUSINESS ENVIRONMENT AND PROFIT PERCENT
(N=47)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Magazines				
Do not use	11(23)	3(6)	0(0)	8(17)
Use	36(77)	8(17)	9(19)	19(40)
Newspapers				
Do not use	10(21)	3(6)	0(0)	7(15)
Use	38(79)	8(17)	9(19)	21(44)
Trade Journals				
Do not use	21(45)	5(11)	3(6)	13(28)
Use	26(55)	6(13)	6(13)	14(30)
Government Publications				
Do not use	33(70)	8(17)	8(17)	17(36)
Use	14(30)	3(6)	1(2)	10(21)
Seminars and Conferences				
Do not use	34(72)	9(19)	8(17)	17(36)
Use	13(28)	2(4)	1(2)	10(21)
Newsletter				
Do not use	19(40)	4(9)	4(9)	11(23)
Use	28(60)	7(15)	5(11)	16(34)
Catalogs				
Do not use	26(55)	7(15)	5(11)	14(30)
Use	21(45)	4(9)	4(9)	13(28)
Books				
Do not use	31(66)	7(15)	6(13)	18(38)
Use	16(34)	4(9)	3(6)	9(19)
Business Periodicals				
Do not use	21(45)	4(9)	3(6)	14(30)
Use	26(55)	7(15)	6(13)	13(28)
Television				
Do not use	15(32)	5(11)	3(6)	7(15)
Use	32(68)	6(13)	6(13)	20(43)

TABLE 44 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Trade Shows				
Do not use	28(60)	6(13)	5(11)	17(36)
Use	19(40)	5(11)	4(9)	10(21)
Professional Organizations				
Do not use	30(64)	7(15)	7(15)	16(34)
Use	17(36)	4(9)	2(4)	11(23)
Consultants				
Do not use	30(64)	8(17)	8(17)	14(30)
Use	17(36)	3(6)	1(2)	13(28)
Accountants				
Do not use	36(77)	9(19)	8(17)	19(40)
Use	11(23)	2(4)	1(2)	8(17)
Universities				
Do not use	31(66)	7(15)	6(13)	18(38)
Use	16(34)	4(9)	3(6)	9(19)
Sales Representatives				
Do not use	23(49)	5(11)	6(13)	12(26)
Use	24(51)	6(13)	3(6)	15(32)
Employees				
Do not use	16(34)	4(9)	4(9)	8(17)
Use	31(66)	7(15)	5(11)	19(40)
Other Stores				
Do not use	21(45)	4(9)	5(11)	12(26)
Use	26(55)	7(15)	4(9)	15(32)
Banker				
Do not use	38(81)	10(21)	9(19)	19(40)
Use	9(19)	1(2)	0(0)	8(9)
Attorney				
Do not use	42(89)	10(21)	9(19)	23(49)
Use	5(11)	1(2)	0(0)	4(9)
Vendors				
Do not use	22(48)	4(9)	6(13)	12(26)
Use	24(52)	6(13)	3(7)	15(33)

TABLE 44 (Continued)

Information Source	N ^a	Profit Percent		
		Decreased	Same	Increased
Customers				
Do not use	9(20)	1(2)	2(4)	6(13)
Use	37(80)	9(20)	7(15)	21(46)
Colleagues				
Do not use	20(43)	2(4)	5(11)	13(28)
Use	26(57)	8(17)	4(9)	14(30)
Buying Groups				
Do not use	39(87)	9(20)	8(18)	22(49)
Use	6(13)	1(2)	0(0)	5(11)
Friends				
Do not use	17(35)	4(8)	2(4)	11(23)
Use	31(65)	8(17)	7(15)	16(33)
Family				
Do not use	18(38)	3(6)	4(9)	11(23)
Use	29(62)	8(17)	5(11)	16(34)
Buying Offices				
Do not use	40(85)	10(21)	9(19)	21(45)
Use	7(15)	1(2)	0(0)	6(13)

Note. Total N varies due to missing values.

^aNumbers enclosed in parentheses are percentages of the total number responding for the item. The percentages were rounded to the nearest whole number.

VITA |

Hye-Shin Kim

Candidate for the Degree of
Master of Science

Thesis: ENVIRONMENTAL SCANNING ACTIVITIES OF SMALL APPAREL
STORES

Major Field: Clothing, Textiles, Merchandising

Biographical:

Personal Data: Born in Taejon, South Korea, October
18, 1966, the Daughter of Soo-Chul Kim and Bong-
Ock Shin.

Education: Graduated from Sung-Mo Girls' High School,
Taejon, South Korea, in February, 1985; received
the Bachelor of Science Degree in Home Economics
Education from Chung-Ang University, Seoul, South
Korea in February, 1989; completed requirements
for the Master of Science degree at Oklahoma State
University in December, 1991.

Professional Experience: Graduate Assistant,
Department of Clothing, Textiles, and
Merchandising, The Center for Apparel Marketing
and Merchandising, Oklahoma State University,
August, 1989 to May, 1991.

Professional Organizations: Association of College
Professors of Textiles and Clothing, American Home
Economics Association, Kappa Omicron Nu.