CHARACTERISTICS OF STRATEGIC PLANNING IN SMALL MANUFACTURING FIRMS

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ABSTRACT

Numerous articles in academic publications and practitioner-oriented journals have focused on the activities, planning processes, and effectiveness of large firms. However, in recent years a growing amount of research has recognized the importance of planning for small businesses. This special attention has been reinforced by studies showing that these firms have particular attributes that provide them certain competitive advantages. However, there is surprisingly very little empirical work examining the techniques, tools, and approaches to planning that are actually being used by small companies.

This study is designed to partially fill this gap in the literature by reporting the results of a survey of 838 small firms. It seeks to explore their strategic planning tools and techniques. The intent is to develop a profile for small firms with respect to their strategic planning processes. Some explanations as well as implications, limited generalizations and areas for future study are developed.

INTRODUCTION

Research interest in planning began in earnest in the late 1960s. While a large body of this literature has concentrated on large firms, in recent years a growing amount of research attention has been devoted to small companies. There have been four streams of research and writing about these businesses. In one line of research, some have examined the differences between formalized and non-formalized plans and report that the planning process should be far more informal in small firms than it is in large companies (Thomas, 1989; Shrader, Mulford, & Blackburn, 1989). Others have developed various schemes for classifying small businesses based on the thoroughness or sophistication of the planning process (Rhyne, 1987; Bracker & Pearson, 1986; Hahn & Powers, 1999). For example, Rue and Ibrahim (1998) operationalized the construct “planning sophistication” by using the five steps to the strategic planning process: defining a firm's mission; performing an environmental scan and analysis; establishing objectives, strategies, and tactics; implementing; and conducting a performance review and making the necessary adjustments.

In a separate line of research, some attention has been given to whether small firms focus on operational, as opposed to strategic, planning. A number of researchers have shown that small businesses tend to place great emphasis on operational planning (Shrader, *et al*., 1989). This is supported by Carson and Cronie (1990) who found that planning, when conducted by small companies, is limited in its scope and activities and therefore tends to be operational. Indeed, some writers have argued that small companies should not attempt to use planning techniques found in larger businesses and that the usage of these techniques could be one of the reasons behind the failure of many small businesses (Scarborough & Zimmerer, 1987). Other studies strongly suggest that simply engaging in a long-term planning process is beneficial to small firms as it leads to an improved understanding of the business (Lyles, *et al*., 1993). The adoption of a long-term perspective has intuitive appeal. Many small companies are less constrained by the need of professional managers to focus on short-term performance targets, and therefore are apt to adopt a more rational approach to long-term planning. Whereas these managers are inclined to maximize personal benefits over their expected period of employment, time-horizons of small firms’ owners tend to

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extend over a lifetime or across generations.

The third area of research addresses the link between planning and performance. Empirical results are currently inconclusive. Some have found no differences between formalized and non-formalized plans in terms of their impact on performance; both types lead to improved performance (Ackelsberg & Arlow, 1985). Others contend that good planning is a key to a firm's success and is a major contributor to profitability. Bracker and Pearson (1986) identified different levels of performance associated with different levels of planning. Schuman, Sussman, and Shaw (1985) found that only 49.9 percent of small firms prepared a formal business plan. Of those that did, 92 percent reported that their company had benefited from it. A survey of small firms revealed that 94 percent of those that performed strategic planning reported improved performance (Baker, *et al*., 1993). Another study compared small firms with structured planning processes with those whose planning is unstructured and found that the former had plans that are more thorough and accurate, and their performance is significantly higher (Lyles, *et al*., 1993). A meta-analysis by Schwenk and Shrader (1993) of fourteen studies found a strong relationship between long-range planning and small company performance. A more recent study (Rue & Ibrahim, 1998) suggests that these inconsistencies may be an indication that performance depends more on the content of the plan than on the formality of the planning process.

Finally, in what may be an emerging research stream, limited attention has been given to the planning tools and techniques of small businesses. In their seminal study of the planning practices of these firms, Rue and Ibrahim (1996) studied these tools and techniques. They surveyed small firms to determine whether they develop written plans; the duration of these plans; the external factors they consider when plans are developed; the objectives they set; the pro forma financial statements they develop; whether computers or consultants are used in the process; and how frequently company performance is evaluated.

PURPOSES OF THE STUDY

Despite these research efforts and the growing importance of small companies in the U.S. economy in general, there is surprisingly little empirical work that has examined the techniques, tools, and approaches to planning that are actually being used by these businesses. Although the Rue and Ibrahim (1996) study provided interesting insights, it focused on family-owned businesses - typically a subset of small firms.

The present study is designed to partially fill this gap in the literature by reporting the results of a survey of small businesses in the United States. It continues in the tradition of the research stream that attempts to uncover meaningful distinctions among firms, which often are unseen when companies are combined into one large group.

Specifically, it seeks to examine the following areas: (1) whether small firms develop any written plans, (2) the external factors that serve as inputs to the plans, (3) the types of objectives that are formulated, (4) how those who follow a growth strategy intend to achieve it, (5) the types of financial planning undertaken by these companies, (6) whether outside consultants or (7) computers are used to assist in the planning process, and (8) how frequently overall performance is reviewed to detect differences between planned and actual performance. The intent is to develop a profile for small businesses with respect to their strategic planning processes.

METHODOLOGY

Sample

The sampling frame consisted of firms listed in the *North Carolina Manufacturers' Directory*, the *Georgia Manufacturing Directory,* and *the South Carolina Industrial Directory*. Only non-affiliated, autonomous companies were included in the sampling procedure. Consistent with previous writing on the subject, the sample was restricted to a particular region since firms within the same region execute their activities under similar influence from environmental conditions and complexity (Wolff & Pett, 2000).

Also, the analysis focused on one industry, manufacturing, thus ensuring greater homogeneity among the companies. This addresses a concern expressed by Westhead and Cowling (1998) who argued that most small business research is characterized by a failure to control for differences based on the main industrial activity for the companies under study.

In the three states represented in the sample, manufacturing's share of the gross state product in 2008 was $43.3 billion (10.9%) in Georgia, $78 billion (19.5%) in North Carolina, and $25.2 billion (16.1%) in South Carolina. In Georgia, 408,300 persons were employed in manufacturing. On average, their wages in 2008 were 10% higher than overall wages. Comparable figures for North and South Carolina were 514,400 (24%) and 242,400 (33%), respectively (National Association of Manufacturers, 2008). Small businesses account for approximately 66 percent of total employment in the three states (The Small Business Economy, 2009).

Data was collected from a total of 2100 small firms via a mail questionnaire of the owners or top executives. Prior to mailing the questionnaire, telephone calls were made to ascertain that these companies were still in business, confirm the name and title of the key top executive, notify them that they will be receiving a questionnaire within a few days and apprize them of the purpose and importance of the survey. Although there is no universally accepted criterion for delineating small firms, the number of employees was selected as the key indicator of firm size (Wolff & Pett, 2000). In this study the definition of "small firm" follows the U.S. Small Business Administration classification. That is, firms that employ fewer than 500 employees were selected.

Each respondent was sent a copy of the research instrument accompanied with a letter explaining the project and assuring them of the confidentiality of their answers. A first mailing and one telephone follow-up urging participants to complete and return the questionnaire generated 838 completed and usable responses. Since 72 responses were unusable, this resulted in a net overall response rate of 40 percent.

Measures

Respondents were asked to indicate their present position with the company (e.g., CEO, President), in what year the company was founded, the number of full-time employees, the type of ownership of the business, and who founded the company. In addition, they were requested to indicate whether their firm prepares a written plan and, if so, the time period it covers.

Following the convention used in previous research (Rue & Ibrahim 1996), those with written plans were asked whether they attempt to identify and analyze any of the following external factors: population/demographic trends, national political developments and trends, international political developments and trends, personal family incomes, social/cultural trends, non-product technological breakthroughs, labor-management relations, and national and international economic developments and trends. They were then asked if their plan includes quantified objectives for any of the following: sales, earnings, return on investment, capital growth, market share, sales/earnings ratio, and international expansion. Those with a growth strategy were asked whether they develop plans and budgets for any of the following: hiring and training of key management personnel, plant expansion, new product development, managerial succession, corporate acquisition, equipment acquisition, research and development, advertising, and expansion of international markets. Additional items requested information on the types of pro forma statements which are developed; whether outside consultants assist in formulating these plans; whether computers are employed in the planning process; and how frequently performance is evaluated and whether, as a result, the plans are reviewed and revised.

RESULTS

The title of President was held by 592 of the respondents, 468 were CEO's, and 456 chaired their respective boards of directors. Eighty-one percent were private companies and 89 percent were founded by the respondents or their parent(s). The median number of employees was 33, and the median age of the firms was 29 years.

Written Plans

The great majority of the firms in the sample (85.9%) do prepare some type of written plan. Table 1 presents the time period they cover. Almost 50 percent prepare plans extending three or more years into the future. Thus much of the planning that is being undertaken appears to be long-range as opposed to operational. With four exceptions, all those with plans extending longer than five years specified they had an exit strategy in mind. Brief comments indicated that this strategy was chosen due to lack of capital, the owner's age or health concerns, or children who were not interested in the business.

Table 1: Time Period Covered in Long-Range Plans [a]

Time Period	**Total**
	(*n* = 838)
One year	110 (13.1)
Two years	125 (14.9)
Three years	174 (20.8)
Four years	128 (15.3)
Five years	144 (17.2)
Over 5 years	39 (4.7)
No written plans	118 (14.1)

[a] Column percentages are in parentheses.

Planning Techniques

Consistent with the Rue and Ibrahim (1996) study, this survey specifically sought information concerning how the respondents approached the following general areas.

Premises

Because of the potential impact of external forces on a company's future, it is essential that the plan address some of these factors. Premising refers to the consideration of forces outside of the immediate operating environment of the firm. Generally, they are beyond its control. Environmental scanning is the means by which managers can perceive and cope with external events and trends (Miller & Toulouse, 1998). More than two decades ago, it was noted that environmental scanning had become a widely accepted part of the strategic planning process of many U.S. companies (Jain, 1984) and that the effectiveness of strategic planning is strongly influenced by the ability to do so (Specht, 1987). Researchers report that such activities contribute significantly to firm performance (Preble *et al*., 1988; Venkatraman & Prescott 1990).

As shown in Table 2, 12.4 percent of small businesses do not attempt to identify any premises. The most frequently used relate to national economic (62.5%) and political developments and trends (42.8%), followed closely by international economic trends (40.8%). This is probably due to the availability and accessibility of related information and the ability to easily envision a relationship between these events and their businesses.

Table 2: Premises Contained in Written Plans [a]

Premise	**Total (*n* = 720)**
Population/demographic trends	147 (20.4)
National political developments	308 (42.8)
International political developments	181 (25.1)
Personal family incomes	132 (18.3)
Social/cultural trends	137 (19.0)
Non-product technological breakthroughs	70 (9.7)
Labor-management relations	147 (20.4)
National economic trends	450 (62.5)
International economic trends	294 (40.8)
No premises identified	89 (12.4)

[a] Column percentages are in parentheses.

Objectives

Planning can only be a useful managerial function if objectives are properly chosen. Without concrete objectives, the entire planning activity can easily turn into a futile exercise. Objectives provide benchmarks for evaluating progress and represent a managerial commitment to achieving certain results. Companies whose managers set objectives typically outperform those that do not (Thompson & Strickland, 2003). Many firms today are striving to attain multiple objectives as opposed to a single one. When choosing multiple objectives, the strategist must be careful to ensure that the different objectives are compatible. Managers must set objectives so that they are specific and practical; they should challenge the company but must be attainable. Whenever possible, quantified objectives are desirable.

Table 3: Objectives Stipulated in Written Plans [a]

Objective	**Total (*n* = 720)**
Sales	625 (86.8)
Earnings	176 (24.4)
Return on investment	160 (22.2)
Capital growth	228 (31.7)
Market share	215 (29.9)
Sales/earnings ratio	88 (12.2)
International expansion	369 (51.3)
No objectives are established	91 (12.6)

[a] Column percentages are in parentheses.

The great majority of those with written plans establish quantified objectives. Only 12.6% indicated that no objectives are established. Table 3 shows that sales are assigned the highest priority by both groups, probably because they are foremost in the minds of the managers. Indeed, this measure was specified by every company that prepares quantified objectives. Among those who reported setting objectives, all but 79 had more than one measure.

Growth

Eight-six percent of respondents indicated that they pursue a growth strategy. In today's world, many executives view growth as the best path to survival and higher earnings. This is a very seductive strategy; it is exciting and ego-enhancing and is viewed as an indication of success. This strategy is especially important to the survival of small firms. They must formulate and implement growth strategies to avoid decline and enhance their ability to remain competitive (Poza; 1989). On the other hand, growth, if rapid, can be difficult to sustain. Management may possess strong start-up skills but may not have the expertise required to manage subsequent growth (Willard *et al*., 1992), and the firm's systems and processes may not be adequate (Forbrum & Wally, 1989).

Table 4: Approaches for Implementing Growth Strategies [a]

Area	**Total (*n* = 615)**
Hiring and training of key management personnel	195 (31.7)
Plant expansion	216 (35.1)
New product development	13 (2.1)
Managerial succession	56 (9.1)
Corporate acquisitions	75 (12.2)
Equipment acquisitions	304 (49.4)
Research and development	134 (21.8)
Advertising	315 (51.2)
Expanding international markets	362 (58.9)
No plans	149 (24.2)

[a] Column percentages are in parentheses.

As shown in Table 4, approximately one-half of the companies prepare plans and budgets for advertising and equipment acquisitions. Of all the factors listed in this section, these areas are probably the easiest to predict. It is interesting that corporate acquisitions are considered by only 12.2 percent of respondents. Although they are difficult to forecast, it has been shown that those who grow through acquisitions generally outperform those that do so through internal means (Sharma, 1998). Finally, succession plans are developed by less than ten percent of these companies. Among those who reported that their strategy is one of growth, 24.2 percent failed to develop any specific plans and budgets to carry out this strategy.

Financial Analyses

One of the dangers associated with growth stems from the financial mechanisms which are involved in the growth process. The problems caused by the interaction of cash flow and growth have perplexed managers for years. Managers realize that they must maintain a reserve of cash (or other readily convertible current assets) which is adequate to meet expenses as they fall due. Their dilemma is a balancing process that requires accurate forecasts. Once the forecasts for future expenditures (and perhaps growth) are predicted, they must be evaluated to determine if they are financially sound. At the same time, enterprising managers desire to utilize the company's financial resources to provide for growth and the generation of greater profits. They understand that leverage (debt) can be used to balance the risk between the owners and creditors and is a valuable tool when a project yields a higher rate of return than the cost of capital.

Although the financial aspects of business planning can be quite complex, they should culminate in the preparation of pro forma statements. Respondents were asked if they prepared pro forma balance sheets, income statements, and cash flows as an integral part of their plan. Eight companies did not respond to this question. Table 5 shows that a large majority prepare pro forma financial statements. The concern for profit is reflected in the fact that more firms prepare a pro forma income statement (75.1%) than a balance sheet (51.7%) or cash flow analysis (58.7%).

Table 5: Pro Forma Financial Statements Used in Planning [a]

Financial Statement	**Total (*n*= 712)**
Balance Sheet	368 (51.7)
Cash Flow Analysis	418 (58.7)
Income Statement	535 (75.1)
None	157 (22.1)

[a] Column percentages are in parentheses.

Outside Consultants

This study sought information as to whether consultants are used to assist in the planning process. Seven firms did not respond to this question. Table 6 shows that a large percentage (46.4%) do not use the services of consultants in their planning process. This is not surprising since the great majority of smaller businesses are probably reluctant to use outside resources. The data clearly indicate that consulting firms (mostly auditing firms, tax consultants, and international trade specialists) are the single largest source of consultants. They are followed by free lance individuals - primarily business planners - and, finally, contract research firms.

Table 6: The Use of Outside Consultants in Long-Range Planning [a]

Source of Consultants	**Total (*n* = 711)**
Consulting Firms	277 (39.0)
Contract Research Firms	11 (1.5)
Free Lance Individuals	115 (16.2)
None	330 (46.4)

[a] Column percentages are in parentheses.

The Use of Mathematical Models and Computers

The increasing proliferation of computers should make more and better information available for planners. Mathematical models can be developed to test alternative courses of action. Many parts of the planning process can be automated, thus allowing the planners more time to develop strategies. Many articles have been written proclaiming the virtues of computers and mathematical models and how they can assist the planner, particularly by reducing uncertainty and supporting decision making (e.g., Georgeoff & Murdick, 1986; Van den Poel & Buckinx, 2005). Although the focus of these studies has been on large firms (Klein & Linneman, 1984), more recent writers have discussed how small businesses can successfully these tools to assist in planning (e.g., Ahire, 2001). Many techniques are now suitable for small firms because of advances in information technology and the increasing power and declining cost of computers. Fully recognizing the usefulness of these tools, this study sought to determine whether computers or mathematical models are used on a regular basis to assist in developing their written plans. The questionnaire did not inquire as to whether computers are used in areas unrelated to planning.

Among those with written plans, who use, on a regular basis, a computer or mathematical model to assist in planning was 37%. Brief comments describing their use were solicited**.** The most widely used applications are related to financial and sales forecasting as well as financial control. They assist in making decisions concerning sales, financing, inventory, production, and advertising. The specific techniques include spreadsheets, trend analysis, pro forma models and, in three percent of cases, return on investment simulations.

Evaluation

Because planning is a continuous process, plans should be periodically reviewed and revised. In their review of research in family businesses, Chua, Chrisman and Sharma (1999) concluded that very little is known about how company performance is evaluated in many small firms. Clearly, those charged with responsibility for the plan must determine whether the company's performance and other activities are compatible with the plan. All too often a sophisticated written plan is developed and never implemented. Because of the uncertainty involved with planning, the plan must be updated as information is gathered and changes take place.

Table 7: Frequency of Review and Revision of Long-Range Plans [a]

Frequency	**Total (*n* = 709)**
Weekly or less	38 (5.4)
Monthly	164 (23.1)
Quarterly	211 (29.8)
Semi-Annually	29 (4.1)
Annually	124 (17.5)
Never	143 (20.2)

[a] Column percentages are in parentheses.

The respondents were asked if their company periodically conducts a formal performance evaluation and if the plans are reviewed and revised as a consequence of this evaluation. Eleven companies did not respond to this question, and some reported more than one frequency. In these cases, only the most frequent review period was recorded. It is evident from Table 7 that quarterly reviews are the most popular with 29.8% of respondents indicating this frequency of evaluation. However, a full 20.2% of small firms indicated that they never perform and evaluation. Approximately 90 percent of the firms that conduct these evaluations indicated that the plans are then reviewed and revised.

DISCUSSION AND CONCLUSION

The purpose of this study was to partially fill a void in the literature by examining the planning practices of small firms in the U.S., a population which has been largely ignored in past research. Because of the growing prominent role of these businesses in the economy, understanding the extent of their planning efforts is a worthwhile research theme. This study focused on a subgroup of these companies – those in the manufacturing industry.

These results are important for several reasons. They indicate that the planning practices of smaller businesses may be more sophisticated than generally perceived. Almost 86 percent of the responding companies reported that they do prepare some type of written plan, and approximately one-half prepare formal plans with long-term time-horizons. This finding is consistent with the results reported by previous researchers (Dreux, 1990; Muscetello, 1990). Much of the planning appears to be long-range as opposed to operational. Another important point is that the great majority of these firms identify at least one external factor that serves as input to their plans. National and international political and economic trends are examined by many of these firms.

All but 91 of those who developed a written plan established quantified objectives. Adding further encouragement is the fact that many of the plans being prepared by these small businesses contain some fairly sophisticated elements beyond simply setting objectives for sales. For example, one-third set objectives for capital growth and market share, while one-quarter develop objectives for earnings. More than 90 percent reported setting more than one objective. This is supported by previous research on larger firms in several major industries which found that most businesses pursue multiple quantitative objectives (Shetty, 1979; Schneider, 1990). The preponderance of these businesses pursues a growth strategy, and nearly 75% prepare specific plans to implement it. Eighty percent develop some type of pro forma financial statements, just under half seek the services of consultants or other outside sources in their planning process, and 37 percent use, on a regular basis, a computer to assist in planning. Nearly 80 percent conduct a periodic evaluation of their performance to detect differences between planned and actual performance, and revise their plans as a consequence of these evaluations.

On the negative side, just over one-half of these firms develop pro forma balance sheets and cash flow analyses. Also, a very small proportion (9.1%) develops a specific succession plan. This has been one of the most pervasive problems in small companies. In this study almost one-third are actively hiring and training key managers, yet less than 10 percent prepare any type of succession scheme in their written plans. This low percentage is supported by other studies that report the inability or unwillingness of the owners of small enterprises to plan their succession (Seymour, 1993; Welsch, 1993). Current owners tend to view this question as being far away into the future and therefore not pertinent at the present time (Bruce & Picard, 2006). Family members or key employees may be reluctant to delve into this matter because the founders wish to forestall difficult decisions and perceive such discussions as a sign of their mortality (Aronoff & Ward, 1992). Therefore, while this matter is especially critical for these firms, it is not surprising that so few address the problem, given the sensitive and personal nature of this issue. Although much of the research on succession has focused on U.S. firms, many small businesses in other countries face similar predicaments (see, e.g., Power, 2005). However, it is possible that many owners may have addressed this issue and perhaps developed specific succession plans but, fearing conflicts among would-be successors, are reluctant to disclose these plans (Bruce & Picard, 2006).

The results of this study call to attention additional areas of concern. Only one in five companies included population/demographic trends, personal family incomes, social/cultural trends, and labor/management relations in their written premises, while non-product technological breakthroughs are considered by about 1 in 10. It is interesting to note that while 86 percent stated that they are pursuing a growth strategy, only 80 percent of these companies develop specific plans and budgets to implement this strategy. Another interesting finding relates to the fact that nearly one half do not retain any consultants. This is quite surprising given the rapidly changing technological advances and the complexity of laws and regulations affecting business in general. Additionally, there is evidence that many small businesses tend to perceive the consulting services they do receive as having a positive impact (Nahavandi & Chesteen, 1988). Another issue concerns plans that extend beyond five years; less than 5 percent have such a long-term horizon. However, all companies with a long term horizon have an exit strategy in mind. Finally, almost two thirds did not utilize a computer to assist in their planning. This high percentage is not surprising since researchers have found that smaller firms do not have the necessary expertise, the financial resources, and the required software and hardware (Peterson, 1996). Therefore, they tend to use subjective and simpler techniques (Smith, *et al*., 1996). However, the importance of these tools will increase with growing business complexity and the necessity to gain and sustain a competitive advantage.

Although this study provides many important insights, the results raise additional research questions that merit further study. For example, to what extent does the planning practices of these businesses differ from those of large firms? Do these planning practices differ from those of family-owned firms? Does a firm's level of internationalization have an impact on its planning practices? Another interesting issue concerns the relationship between planning and performance. Is the performance of firms categorized as planners different from that of non-planners? Also, future research may need to address the role of the board of directors and its degree of involvement in the planning process. Studies that examined this issue focused mostly on large firms. Another question that arises from this research pertains to succession plans. Given the importance of this issue, future in-depth studies should provide possible explanations for the absence of such plans in nearly all (90%) of these businesses. A comparison of U.S. firms with their counterparts in other countries would be an interesting future research avenue. Finally, with the Presidential goal established of doubling exports in 5 years, are there differences between exporters and non-exporters?

This study is not without limitations. Future extensions should give thought to replicating it using different populations. For example, firms in other regions of the U.S. should be surveyed. An additional caveat concerns the generalizability of the results. A study such as this one focuses on many firms in one industry - manufacturing - thus ensuring a greater homogeneity among the companies. However, it opens a line of inquiry on whether these results are valid across other industries. Thus another study which is devoted to other industries would be a fruitful endeavor. Another cautionary note concerns the possibility of bias in the data provided by the companies in the sample. This cannot be completely ruled out however because self-report measures are indispensable in organizational research (Gupta & Beehr, 1982). Indeed, in certain research contexts, self-reports may provide more accurate estimates of population parameters than behavioral measures (Howard, *et al*., 1980).

In conclusion, this study's major findings will hopefully contribute to efforts to focus the attention of researchers, business practitioners, and policy makers on the planning processes and the needs and challenges facing small firms. Potentially these companies can be formidable competitive forces both domestically and internationally as they often are nimble and can be the sources of technological innovations. Such findings should accelerate the search for ways to improve the capacity of small firms to remain competitive in the global marketplace.

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