## THE RELATIONSHIP BETWEEN STRATEGIC PLANNING AND GROWTH IN SMALL BUSINESSES

By

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## A DISSERTATION

# Submitted to H. Wayne Huizenga School of Business & Entrepreneurship Nova Southeastern University

# In partial fulfillment of the requirements For the degree of

# DOCTOR OF BUSINESS ADMINISTRATION

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By

### K. Shelette Stewart

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K. Shelette Stewart

#### ABSTRACT THE RELATIONSHIP BETWEEN STRATEGIC PLANNING AND GROWTH IN SMALL BUSINESSES

by

K. Shelette Stewart

Small businesses play a critical role in the economy of the United States. However, the U. S. Small Business Administration reports that approximately half of new small businesses fail within the first five years of operation. Given the significance of small firms to the national economy and the fact that most empirical strategic planning studies have focused on large businesses, this survey investigates the linkage between strategic planning and growth in small businesses.

Survey research was conducted with a sample population of 121 small businesses located within the Atlanta, Georgia metropolitan statistical area. The study incorporated a strategic planning and growth model as well as a strategic planning activities questionnaire. Findings include a statistically significant positive correlation between strategic planning and growth among small businesses. Conclusions drawn from these findings suggest that enhanced planning may lead to stronger growth and greater success for small firms.

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#### CHAPTER 1

#### INTRODUCTION

#### Background

Innovation through entrepreneurship and small business development has proven to be a foundation upon which the pillars of American economic growth stand. This viewpoint is shared by a number of American leaders who have acknowledged the myriad of important innovations that may be traced back to entrepreneurs or small business owners. In *The President's Small Business Agenda*, President George W. Bush maintains:

Small businesses are the heart of the American economy because they drive innovation – new firms are established on the very premise that they can do a better job. For innovative small businesses, adequate growth is never good enough and excellence is an endless pursuit. These dynamic companies also drive the job creation process. In fact small and young companies create two thirds of the net new jobs in our economy, and they employ half of all private-sector workers. Entrepreneurship has become the path of prosperity for many Americans, including minorities and women.

In the 1993 edition of The State of Small Business: A Report of the President,

President William J. Clinton stated that "small businesses create many new jobs and are an important part of our nation's economic growth" and that "only by fully developing our technological and human resources can we expect to be leaders in the international marketplace." Asserting a similar view, President Ronald W. Reagan declared, in his 1983 report to Congress on the state of small business, that "small business plays a key role in moving our nation toward certain basic economic objectives - - more employment opportunities, new technological innovations, a higher standard of living - - as well as supplying goods and services to our people;" Therefore, he continued, "the bottom line is quite straightforward: America needs small business formation and growth . . .the importance of the small business sector cannot and should not be ignored . . . for me, small business is the heart and soul of our free enterprise system."

Small businesses continue to play a critical role in the U.S. economy. According to the U.S. Small Business Administration (SBA), there are approximately 25.5 million small businesses in the U.S. These firms provide approximately 80% of new jobs; represent 96% of employers; employ 53% of private sector workers; employ an estimated 40% of the private workers in high-tech occupations and generate 55% of innovations.

The Association of Small Business Development Centers (ASBDC), reports that over 800,000 small firms were started within the last year alone. Furthermore, the ASBDC reports that small businesses account for 99% of U.S. businesses; employ 53% of the private work force; contribute to over half of the nation's gross domestic product, and provide livelihood for more than 100 million Americans. Hence, small businesses are critical to the state of the U.S. economy.

#### Statement of the Problem

Although the state of small business may generally appear positive, business failures occur daily. A plethora of reasons have been offered for small business failures. Filed bankruptcies, foreclosures, and voluntary withdrawals represent documented evidence of business closings (Scarborough and Zimmerman, 1984). In *Effective Small Business Management*, Norman Scarborough and Thomas Zimmerman assert that "because of their limited resources and lack of financial stability, small businesses suffer

a mortality rate higher than that of big business" (Scarborough and Zimmerman, 1984). According to the SBA, approximately half of new small businesses fail within the first five years of operation. The agency reports that over half a million small businesses closed and/or filed for bankruptcy during the year 2000.

The importance of small business in the U.S. economy suggests that an understanding of why firms fail is crucial to the stability and health of the nation's economy. However, limited studies exist on the topic of business planning activity and growth of small firms. In *Successful Small Business Management*, the authors offer a number of general causes for small business failures. Lack of capital, unplanned expansion, management incompetence, undetermined capital, over-investing in fixed assets, lack of inventory control, and poor customer service are cited as typical reasons for small firm closings. For instance, Van Auken and Howard (1993) conducted a study that examined perceived causes of small business failure in the apparel and accessory retailing industry. The study found that perceived failure factors of discontinued small apparel and accessory retailers clustered in four areas: poor managerial functions, capital management, competitive environment, and growth and expansion. Nevertheless, each of these challenges may be effectively addressed by one endeavor: *strategic planning*.

In Basics of Successful Business Planning, William Osgood states:

Planning means anticipating what is likely to happen in the future and then determining what must be done in the present in order to take advantage of opportunities and avoid problems that the future may contain. This is done consciously or unconsciously by most individuals for most activities. It is an essential part of decision making that people automatically engage in for normal activities. However, when it comes to applying the same technique to planning for a business, the individuals who need planning the most - - those who start and run their own businesses - - back away with a variety of excuses. *There isn't time. It's too complicated. I don't know how.* These excuses are all due to the

fact that the principals really don't understand why they should plan (Osgood, 1980).

Osgood, along with countless numbers of economists, offers a deliberate, concise, and effective argument for the importance of "planning" in the most fundamental sense of the term. This is not to claim that all small business terminations are due to lack of strategic planning. Furthermore, the fact that a number of unsuccessful firms might have actually developed and implemented business planning techniques is not being discounted. Hence, it is acknowledged that planning is critical to, but not sufficient for, small business success. Planning does not guarantee business success (Mintzberg, 1994). However, it is maintained that many of the contributing factors to business failures may be predicted and effectively addressed during the infancy of small business development when strategic planning is employed, thereby decreasing the failure rate for small businesses.

A common adage suggests that individuals do not plan to fail; they simply fail to plan. This may be aptly applied to businesses. Hence, the importance of empirical research to enhance understanding of the relationship between strategic planning and growth in small businesses.

#### Justification of the Study

Due to prominent role of small businesses in the national economy, the U.S. SBA reports that the fates of both are inevitably linked to each other. Nevertheless, most empirical studies, of the relationship between strategic planning and growth, focus on large businesses and multinational corporations (Chandler, 1962; Fayol, 1949; Hong,

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1978; Kramarczuk, 1987; Richardson, 1986). Studies such as those conducted by Ringbakk (1968), Grinyer and Norburn (1974) and Naylor and Gattis (1976) indicate that strategic planning is widely accepted and practiced among corporations. This general acceptance and use of strategic planning contributes to the overriding industry perspective that business growth is enhanced by strategic planning (Steiner, 1966; Glueck, 1980). Nevertheless, a number of studies such as Richardson (1986) and Kramarczuk (1987) have not concluded a clear relationship between strategic planning and financial growth of large organizations. Moreover, the results of the empirical investigations, linking strategic planning and small business growth, also remain mixed (Wood and LaForge, 1979; Kudla, 1980; Robinson and Pearce, 1983). Thus, it is expected that this study will expand the body of knowledge in the area planning and growth relative to small firms specifically.

Most of the literature pertaining to small business planning is generally more prescriptive than descriptive. For instance, there is a myriad of manuals currently available for small business owners and operators on the topic of business planning. Yet, the number of empirical studies on the topic pales in comparison to the number of these practitioner-oriented resources. This study addresses this concern by increasing the level of scholarly research devoted to the topic.

Both academic and practitioner-oriented stakeholders continue to support and recommend the practice of strategic planning for small business success. A number of public and private sector organizations and initiatives have a vested interest in small business success in general and in studies pertaining to factors that may be impact the growth of these firms. These stakeholders include, but are not limited to: small business

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owners and operators, the U.S. SBA Office of Advocacy, ASBDC, Service Corps of Retired Executives (SCORE), Chambers of Commerce, the U.S. Small Business Act, including section 8(a) Business Development Programs and section 7(j) Management and Technical Assistance Programs, in addition to numerous professional consultants, academic resource centers, and corporate-instituted minority and supplier development programs.

#### Purpose of the Study

Given SBA reports indicating that approximately half of new small businesses fail within the first five years of operation and the importance of small businesses to the U.S. economy, it is important to investigate the extent to which small firms practice formal business planning and subsequently to explore the linkage between strategic planning and growth.

In *An Investigation of Strategic Planning and Financial Growth of Selected U.S. Businesses*, Woodrow David Richardson explored four characteristics (formality, participation, time and complexity) of strategic planning processes of U.S. corporations and their relationship to financial growth (Richardson, 1986). The findings of the study included data indicating that approximately 90% of the firms surveyed used written strategic plans. However, the study did not show significant differences in the formality of strategic planning for low, medium, and high business performers based on financial data. Moreover, the data did not support a clear relationship between strategic planning and financial growth. This was referenced as an important issue for large businesses

employing or contemplating the employment of strategic planning practices. It is postulated that the relationship between planning and growth is also applicable to small firms. Hence, this study will relate previously identified strategic planning variables, which have been either theoretically proposed or empirically tested to be correlated with growth of large businesses, to the growth of small firms.

The purpose of this study is to contribute to the existing knowledge of planning and growth by supporting both practitioners and academicians in understanding the relationship between strategic planning and growth relative to the small business arena. The overall goals of the research are to: 1) identify key implications for small business success and longevity, and 2) ultimately support the economic progress of the nation.

#### Scope and Limitations

This study will focus on a sample of small corporations, partnerships and sole proprietorships as opposed to strategic business units (SBUs) of a single conglomerate. The sample, which will be taken from the Atlanta, Georgia Metropolitan Statistical Area (MSA), will include a wide variety of industries including manufacturing, wholesaling, services, retail, construction, and agriculture. Firms participating in the study may be either national or international in the scope of their operations. However, they must have a least one physical location or site in the metro Atlanta area. Inherent in this requirement is the risk of geographic bias. Hence, the sample from the Atlanta market may be non-representative of small businesses in other regions of the United States.

Another critical limitation of the study concerns the classification of small business and the liberal definition of a "small business" by the SBA as a business that is independently owned and operated and has fewer than 500 employees. Thus, the sample of small firms will vary greatly in the criteria of years in operation, annual income, and legal classification such as sole proprietorship and corporation.

Extensive review of the existing literature has been conducted to synthesize the Strategic Planning and Growth model and to identify inherent variables. However, it is important to note that it is entirely possible that there are other underlying factors, such as political, social, economic, managerial, and other unknown conditions and moderating variables that have not been identified and may ultimately interact with the identified planning and growth variables in an unknown fashion.

Lastly, it is recognized that exploration of the core relationship between strategic planning and growth may be not only multi-dimensional, but also bi-directional. Certain levels of strategic planning sophistication may impact growth. However, on the contrary, certain growth levels may contribute to an organization's propensity for strategic planning. An investigation of such phenomena is beyond the intent and parameters for this study.

#### **Definition of Terms**

There are a number of terms used in the study that require definition:

 Small business is not consistently defined across industries and organizations (Holt, 1992; Megginson et al, 1994; Siropolis, 1990). For instance, Holt (1992) defines small businesses as firms having less than 100 employees; medium-sized companies as those having 100 to 499 employees, and large businesses as those employing 500 or more individuals. The Internal Revenue Service (IRS) classifies American businesses with annual revenues of \$1 million or less as small. Additionally, the National Federation of Independent Business (NFIB) classifies a small business as 100 or less employees. For purposes of this study, the SBA definition of a small business as one that is independently owned and operated with less than 500 employees will be utilized. The terms small business and small firm will be used interchangeably.

- 2. Strategic planning is generally defined as the process of decision making that identifies basic values and needs to be addressed by the firm, establishes the pattern of major goals and objectives, determines the field(s) of endeavor of firm activity, and sets forward major courses of action and resource allocations. Implicit in this definition is the notion of strategic control that is a process of assessing output of the strategic planning system for compatibility with firm goals and the environment (Still 1974). The end product of the strategic planning process is typically a comprehensive document outlining an organization's vision, mission, goals, objectives, strategies, tactics, internal strengths and weaknesses, external opportunities and threats, as well as implementation details and evaluation procedures. This document, which is often identified as a business plan or strategic plan, is usually long term and futuristic in terms of scope and guidelines for the organization. For purposes of this study, the phrases "strategic planning," "business planning," "formal business planning," and "small business planning" will be used synonymously.
- 3. Growth for small businesses is not consistently defined across industries and organizations. In contrast to the growth measurements and requirements, such as shareholder value and return on capital for large corporations, there are no formal reporting requirements for the majority of small businesses. Thus, governmental organizations such as the U.S. Census Bureau often rely on a recorded event, such as small business bankruptcy filings, as a surrogate growth measure. Several empirical studies have incorporated both qualitative and quantitative measurements of business growth and performance (Dalton & Kesner, 1985; Geeley 1986; Venkatraman and Ramanujan, 1987). However, what might be considered strong performance for one

industry or organization, may be deemed weak performance for another. Hence, it is extremely difficult to measure and to operationalize growth in empirical studies on small firm planning and growth. This is a major weakness in the available research on the topic (Venkatraman and Ramanujam, 1986). Nevertheless, for this study, growth will be determined by responses to four self-reported measures via a questionnaire: (1) sales / revenue growth, (2) expansion of customer / client base, (3) establishment of new locations / sites, and (4) staff increases. All four growth dimensions are relative to key competitors. Consideration has been given to the fact that some growth indicators may not pertain to certain businesses. For example, some small firms may have no intention of establishing new locations and sites. Hence, several different growth indicators were selected due to their generalizability across numerous and varied industry segments. The following terms will be used interchangeably in the study: growth, performance, commercial growth, business growth, and small business growth.

- 4. The phrases "small business development," "small business success," and the terms "success" and "longevity" will be used to refer to the overall positive growth and progress of a firm and will often be used interchangeably.
- Owners of small businesses are defined as the individuals who actually own the businesses. Owner, President, Chief Executive Officer (CEO), Director, and Principal are common professional titles for individuals in ownership positions.
- 6. Operators of small businesses are defined as persons who hold senior management positions or vital operational assignments within the business, and who support the principal(s) of the firm in the strategic planning process. Vice President, Chief Financial Officer (CFO), and Assistant Director are examples of acceptable titles for small business operators.

#### Assumptions of the Study

This study assumes that this topic will be relevant and important to both the academic and business communities at large. It is also understood that academicians are often interested in theories, concepts and the analysis of quantitative and qualitative data and that, on the contrary, business managers, marketing practitioners, and owners of small businesses are often more interested in the tangible plans, practical tactics and the revenue/profit implications for their businesses. Therefore, it is assumed that the results of this study will prove beneficial to all of these stakeholders.

#### Organization of the Study

This study is organized into five chapters. This introductory chapter provides background information, including a statement of the problem and the purpose of the research. Chapter II presents a review of the relevant planning literature applicable to this study. This chapter includes coverage of scholarly studies pertaining to the evolution and elements of the strategic planning process and the relationship between small business planning and growth.

The third chapter describes the research methodology employed in this study. It includes discussions of the research instrument and the data analysis procedure. Additional topics covered in this chapter include the operationalization of variables, data collection technique, and pilot study results.

Chapter IV consists of the presentation and analysis of the findings. A descriptive analysis of the planning processes of the firms surveyed is presented in this chapter. In addition to the descriptive analysis, the relationship between strategic planning and growth is examined in an effort to provide a prescriptive element to the study.

Chapter V, the final chapter, summarizes the findings presented in Chapter IV. The major hypotheses are discussed and compared to the literature presented in Chapter II. Conclusions and implications of the research are discussed along with suggestions for further research on strategic planning and small business development.

#### Summary

In this introduction, the importance of small businesses to the national economy has been acknowledged and the problem of small business failures has been identified. What is the relationship between strategic planning and growth in small businesses? Previous research has focused on either developing descriptive models by observing the planning processes and growth measures of large businesses, or simply prescribing business planning techniques for small firms.

In the next chapter, the relevant literature on strategic planning and growth will be examined and evaluated. Based on the existing literature, the variables that underlie the strategic planning process and growth measures will also be identified.

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# CHAPTER 2

#### LITERATURE REVIEW

### Introduction

The literature review begins with a discussion of the theoretical foundations, models and general evolution of strategic planning. Following, is a discussion on the importance of business planning, including studies pertaining to the strategic planning practices of small firms. The topic of growth is introduced by a review of empirical studies incorporating both qualitative and quantitative growth measurements relative to small firms. Lastly, the section presents an overview of studies linking small business planning practices and growth.

#### **Theoretical Foundations of Strategic Planning**

A review of the literature leads to the categorization of strategic planning perspectives into both normative and descriptive theories. Normative theory, which is prescriptive, is derived from the principles and processes school and from the field of management science (Still, 1974). Descriptive theory, on the contrary, is typically a more data-driven approach that has evolved from a larger body of empirical work including human problem solving behavior and decision making behavior in the firm (Still, 1974).

Normative theories, which have generally relied on information economics of strategic fit, suggest firms should seek to align policies internally and externally based on potential growth benefits. Such theories maintain that small business owners, for example, have access to a formidable analytical armory to assist them in making

decisions (Brownlie & Spender, 1995). Economic theories are normative in nature and relate to behavior of the firm under various assumptions about (1) the firm's production transformation process and (2) the nature of information available to the decision-maker about prices, demand, and technology (Still 1974). These models rely heavily on input-output decisions with an overriding goal of profit maximization.

Descriptive theories, on the contrary, are often referred to as the human information-processing approach which employs deductive and empirical methods of information production and use (Hilton, 1980). These theories tend to focus on behavioral or managerial models. However, they are often devoid of normative content and fail to deal explicitly with strategic decisions (Still 1974).

Recent studies have made progress in combining descriptive and normative theories relative to strategic planning. For instance, in their Normative-Descriptive (N-D) modeling approach, Kleinman and Serfaty (1998) assert that theory of the firm, a subset of decision-making theory, while originally conceived of as a normative theory (how firms should behave based on assumptions about competitive behavior) and game theory, is also capable of being a descriptive theory that explains the nature of the equilibrium. Furthermore, Kleinman and Serfaty maintain that a purely normative (or prescriptive) approach to develop a theory for team decision making would have the disadvantage of not representing actual human growth and that, on the other hand, a purely descriptive (or data-driven) approach would have the disadvantage of not providing a predictive capability for situations in which there is not directly applicable data.

In the United States, planning at the highest levels of management gained increasingly more attention in 1951 when William Newman described the planning process as "covering . . . a wide range of decisions, including the clarification of objectives, establishment of policies, mapping of programs and campaigns, determining specific methods and procedures, and fixing day-to-day schedules." This early contribution to management theory formed the body of literature normally classified as the "principles and processes" approach to management that included a high degree of planning theory at the general managerial level until the late 1950's and early 1960's.

During the 1960's and early 1970's significant developments in management theory resulted in the establishment of a distinct body of theory concerning strategic planning (Mockler, 1970; Wren, 1972). These developments coincided with the emergence of the disciplines of management science, behavioral science, and systems approach, and have incorporated ideas from each (Still, 1974).

While progress has been made in the integration of theory for business planning purposes, most of the theories and models, pertaining to formal business planning have historically focused on the arena of large business and corporate planning. For instance, Hofer (1975) suggests a contingency theory of business strategy formulation. Regarding small firms specifically, "no descriptive theory has been developed regarding rational behavior vis-à-vis strategic planning in the small business" (Still 1974).

A number of concerns have been consistently raised by scholarly researchers regarding the theoretical foundation of strategic planning: (1) lack of a formally established, empirically-based descriptive theory of strategic planning behavior in the business environment (Still, 1974); (2) dearth of empirical studies about strategic

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planning practices of the small business; (3) lack of an established theory on the actual differences regarding growth between firms with formalized versus non-formalized planning practices (Rue & Ibrahim, 1998) and; (4) low level of integration or synthesis among the various approaches (management science, behavioral science, and principles/processes schools of thought) to strategic planning (Still 1974).

#### **Evolution of Strategic Planning**

Strategic planning is rooted in military history. The Greek word "strategos" means "to plan the destruction of one's enemies through effective use of resources" (Bracker 1980). Sun Tzu acknowledged the importance of planning when he wrote *The Art of War* in 500 B.C. in which he stated,

The general who wins a battle makes many calculations in his temple . . . the general who losses a battle makes few calculations before hand. It is by attention to this point that I can see who is likely to win or lose (Philips, 1955).

Another historic application of strategic planning was provided by Socrates. He consoled Nichomachides, a Greek militarist, who lost an election to the position of general to a competing businessman. Socarates coached Nichomachides in the idea that both businessmen and generals plan the use of resources to meet objectives (George,

1972). Hence, the concept of planning is clearly not a new idea.

The need for formal business planning became more pronounced in the twentieth century as businesses transitioned from relatively stable conditions to an extremely dynamic environment. During this time, Henri Fayol, a French industrialist, examined the managerial functions in the business organization. Fayol suggested that all managers performed certain functions that set them apart from administrators. These functions included: planning, organizing, commanding, coordinating, and controlling (Fayol, 1949). Many of the functions outlined by Fayol were short-term and tactical in scope and ultimately became the nucleus of the management process school of thought.

Later, Ralph C. Davis (1951) further defined essential management functions to be: planning, organizing, and controlling. Additional researchers suggested several other management functions such as staffing (McFarland, 1979) and motivating (Newman, Warren and Schnee (1982). Nevertheless, planning remained an integral function for the process school of thought.

Over the past 30 years, strategic planning has received considerable attention. A list of the major publications on the concepts of strategic planning and organizational growth, over the past fifty years, is presented in Table 1. This listing is, by no means, an exhaustive one. As mentioned, the majority of empirical studies on strategic planning and growth have focused on large businesses. However, concerted effort has been made to include as many scholarly small business planning and growth studies as appropriate. The table presents the studies beginning with the most recent works and ends with the earliest contributions.

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# Table 1

| Author(s)<br>Byers<br>(2001) | <u>Theme</u><br>Small Business<br>Empirical | <u>Contribution</u><br>Strategic planning in Leisure<br>Industry                             |
|------------------------------|---|--|
| Crusoe<br>(2000)             | Small Business<br>Empirical                 | Extent and effect of planning  |
| Ogunmokum et al. (1999)      | Small Business<br>Conceptual                | Owner perceptions of rewards of<br>planning as a predictor of level of<br>planning practices |
| Rue & Ibrahim<br>(1998)      | Small Business<br>Empirical                 | Planning associated with sales growth  |
| Berman<br>(1997)             | Small Business<br>Empirical                 | Benefits of sophisticated versus<br>less sophisticated planning<br>techniques                |
| Castrogiovanni<br>(1996)     | Small Business<br>Conceptual                | Pre-startup planning facilitates survival  |
| Matthews<br>(1995)           | Small Business<br>Empirical                 | Impact of environmental issues on strategic planning   |
| Mintzberg<br>(1994)          | Conceptual<br>Exploratory                   | Fallacies of strategic planning and new roles for planners                                   |
| Ansoff<br>(1994)             | Conceptual<br>Exploratory                   | Linkage between strategic planning and environment   |
| Knight<br>(1993)             | Small Business<br>Empirical                 | Planning key to family-owned business success  |
| Schwenk & Shrader (1993)     | Small Business<br>Empirical                 | Meta-analysis of effects of strategic planning on small firms                                |

# Major Works on Strategic Planning and Organizational Growth

# Table 1: Continued

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| <u>Author(s)</u><br>Bernstein<br>(1991) | <u>Theme</u><br>Empirical<br>Model | <u>Contribution</u><br>Integration of theories of<br>population ecology and strategic<br>management |
|---|------------------------------------|---|
| Aram & Cowan<br>(1990)                  | Small Business<br>Empirical        | Planning improves profitability   |
| Shrader<br>(1989)                       | Small Business<br>Empirical        | Strategic versus operational planning   |
| Bracker, et al. (1988)                  | Small Business<br>Empirical        | Planning and financial growth   |
| Robinson & Pearce<br>(1988)             | Small Business<br>Empirical        | Content and strategic typologies  |
| Ramanujan, et al.<br>(1986)             | Large Business<br>Empirical        | Evaluation of strategic planning systems  |
| Richardson<br>(1986)                    | Large Business<br>Empirical        | Strategic planning and financial performance  |
| Robinson & Pearce<br>(1984)             | Small Business<br>Exploratory      | Categories of strategic planning  |
| Robinson & Pearce (1983)                | Small Business<br>Empirical        | Impact of strategic<br>planning on financial<br>performance   |
| Hatten<br>(1983)                        | Large Business<br>Empirical        | Strategic models in the brewing industry  |
| Robinson<br>(1982)                      | Small Business<br>Empirical        | Importance of outsiders in strategic planning   |
| Jones<br>(1982)                         | Small Business<br>Empirical        | Characteristics of planning   |

# Table 1: Continued

| <u>Author(s)</u><br>Bracker<br>(1980) | <u>Theme</u><br>General Business<br>Conceptual | <u>Contribution</u><br>Strategic management<br>concept     |
|---------------------------------------|--|--|
| Porter<br>(1980)                      | General Business<br>Exploratory                | Strategic techniques for analyzing industries              |
| Pennington<br>(1979)                  | Small Business<br>Empirical                    | Application of Input-Output model                          |
| Hong<br>(1978)                        | Large Business<br>Empirical                    | Planning models of multinational corporations              |
| Hofer<br>(1976)                       | Large Business<br>Exploratory                  | Content of strategic plans                                 |
| Grinyer & Norbum<br>(1974)            | Large Business<br>Empirical                    | Strategic planning in the U.K.                             |
| Rue<br>(1973)                         | Large Business<br>Empirical                    | Long-range planning and performance                        |
| Herold<br>(1972)                      | Small Business<br>Empirical                    | Performance of formal planners versus informal planners    |
| Ansoff<br>(1970)                      | Large Business<br>Empirical                    | Effect of planning on success                              |
| Thune & House<br>(1970)               | Small Business<br>Empirical                    | Distinction between formal and informal planning process   |
| Keusch<br>(1969)                      | General Business<br>Empirical                  | Planning policies and practices of Florida-based companies |
| Ringbakk<br>(1968)                    | Large Business<br>Empirical                    | Planning practices   |
| Steiner<br>(1966)                     | Large Business<br>Exploratory                  | Role of top management in planning                         |

# Table 1: Continued

| Author(s)          | Theme                         | <b>Contribution</b>    |
|--------------------|-------------------------------|------------------------|
| Chandler<br>(1962) | Large Business<br>Empirical   | Strategy and structure |
| Lindblom<br>(1959) | Small Business<br>Exploratory | Process process        |
| Fayol<br>(1949)    | Large Business<br>Exploratory | Planning function      |

Studies such as those conducted by Ringbakk (1968), Grinyer and Norburn (1974) and Naylor and Gattis (1976) indicate that strategic planning is widely accepted and practiced among large corporations. This general acceptance and use of strategic planning contributes to the overriding industry perspective that corporate growth is enhanced by strategic planning. Steiner (1966) suggested that planning is a major requirement for organizational growth. In later years, Glueck (1980) concluded that formal business planning is a major determinant of organizational growth.

In *An Investigation of Strategic Planning and Financial Performance of Selected U.S. Businesses*, Woodrow David Richardson explored four characteristics (formality, participation, time and complexity) of strategic planning processes of U.S. corporations and their relationship to financial growth. The findings of the study included data that showed that approximately 90% of the firms surveyed use written strategic plans. Nevertheless, the study did not show significant differences in the formality of strategic planning for low, medium, and high business performers based on financial data. Moreover, the data did not support a clear relationship between strategic planning and financial growth. This was referenced as an important issue for large businesses either contemplating or employing formal business planning techniques.

Richardson (1986) developed and proposed a model of strategic planning during his investigation of strategic planning and financial performance of U.S. businesses. The model consisted of eight steps of the strategic planning process. (See Figure 1).

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Richardson's Strategic Planning Process Model



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Richardson designed the model of strategic planning based on analysis of available literature. The theory suggests that the eight components of the strategic planning process are of equal importance in affecting business growth. The eight components are described as: (1) establishment of a mission statement (Bernard 1938; Godiwalla, Meinhard and Warde, 1980; Leavitt, 1960); (2) identification of goals and objectives (Glueck, 1980; Lin, 1979); (3) analysis of the external environment (Denning, 1971; Mazzolini, 1975; Stevenson, 1985); (4) identification of strengths and weaknesses (Buijs, 1979; Rosenkranz, 1979); (5) development of alternative strategies (Glueck, 1980; Krijnen, 1977); (6) selection of a course of action (King and Cleland, 1978; Thompson and Strickland, 1980); (7) implementation of the selected strategy (Steiner, 1979); and (8) evaluation and control of the strategic planning process (Anthony, 1964; Glueck, 1980; Steiner, 1979). Based on this multidimensional approach to strategic planning for large businesses, it is expected that this perspective might also prove appropriate, applicable, and beneficial to small firms.

A number of researchers have compared and contrasted the business planning practices of small firms versus large businesses. A well accepted premise is the notion that small firm strategic orientations (i.e., strategy formulation, planning, and decisionmaking) are different from those adopted by large organizations. Specifically, small firms tend to engage in adaptive modes of decision-making (Mintzberg 1973) or a process of "muddling through" (Lindblom, 1959), and do not usually follow the traditional, rational and linear form of business planning which entail formal, written plans (Ansoff, 1965; Chandler, 1962) as is more common in large organizations.

#### Elements of the Strategic Planning Process

All serious discussions of the strategic planning process include a number of essential elements for rational decision making including goals, environmental alignment and matching capabilities with opportunities (Kramarczuk, 1987). It is important to note that, based on a review of the literature, the elements of strategic planning have not changed dramatically when applied to small firms versus large corporations. Dimensions of the similar planning elements have been applied to a variety of businesses. For example, many of the same planning aspects applied in empirical studies of large businesses and multinational corporations (Hong, 1978; Kramarczuk, 1987) have also been utilized for studies with small business respondents (Jones, 1982; Shrader, Mulford & Blackburn, 1989; Stoner, 1982;).

In addition to Richardson's (1986) eight planning elements (mission, objectives, external analysis, internal analysis, alternative strategies, strategy selection, implementation, and control), numerous researchers such as Steiner (1979) began to study strategic planning initially by the determination of the mission of the firm. Similar to Richardson, Glueck (1980) also recognized the importance of implementation and evaluation in the strategic planning process.

Other scholarly researchers have offered additional planning dimensions. For instance, Chandler (1962) offered "long-term goals and objectives" in recommended planning processes. Ansoff (1965), Hofer and Schendel (1979) and others have included the dimension of time as a key element of the business planning process, while Denning (1971) viewed strategic planning as a process consisting of: (1) an environmental appraisal of threats and opportunities, (2) an analysis of operating strengths and
weaknesses that lead to (3) the generation of strategic alternatives, (4) the evaluation of alternatives, and (5) decisions concerning the strategies and programs of the firm.

Still (1974) recommends the following essential aspects of a rational planning process: (1) a decision maker; (2) the existence, recognition, understanding, and application of organizational values and goals; (3) a set of relevant alternatives; (4) information and knowledge, and; (5) analysis and synthesis with which the decision maker can discriminate among alternatives.

### Strategic Planning Models

The literature of strategic planning is filled with many different models of the strategic planning process. In 1962, Rapoport and Drew advocated a mathematical approach to long-range planning. The following year, the Stanford Research Institute (SRI) developed the SRI approach to long-range planning which has consequently been used by many major U.S.-based multinational corporations. The SRI model, which encourages all levels of management to participate in the strategic planning process, has a reputation for being easy to introduce throughout an organization and effective in the integration of functional areas (Hong 1978).

Most of the models, pertaining to formal business planning have historically focused on the arena of large business and corporate planning. For instance, Hofer (1975) suggests a contingency theory of business strategy formulation and, later, Richardson (1986) developed and proposed an eight-step model of strategic planning for selected U.S. businesses.

Allio and Pennington (1979) suggest a number of corporate planning models such as the Input-Output Model that is utilized in forecasting for general corporate opportunity searches. The Input-Output planning model portrays planning as an iterative, step-by-step process of interrelated thinking and action. Each phase transitions logically from the previous one and proceeds into the next as the planning process unfolds.

A number of researchers have explored ways to apply strategic planning theories and models to the small business market. For instance, Van Auken and Ireland (1980) propose a small business planning tool that, similar to the Allio and Pennington study, centers on the Input-Output approach as a model. The authors suggest that "the key asset of the Input-Output model is its sensitivity to the unique planning needs of small businesses by emphasizing informality and flexibility. However, empirical research application of this model to the small business market is not explored in the study. The authors simply make references to the importance of the business owner or manager incorporating both personal and professional goals into the process and ultimately comparing the firms' actual results with those that were desired.

### **Importance of Strategic Planning**

Most of the literature pertaining to the topic of small business planning is generally more prescriptive than descriptive. There are numerous practical, "how to" books targeting small business owners and operators. These manuals are consistent in their emphasis on the importance of developing and implementing a formal business plan. There is also a plethora of consultants, seminars, conferences, software programs,

videos and audiotapes available to guide small business owners and operators through the formal business planning process.

The literature, in both academic publications and in practitioner-oriented journals, overwhelmingly acknowledges and supports the importance of the planning process in small business growth. Empirical research supports the argument that, for small businesses, planning is an extremely important and a necessary process. For example, Wren and Voich (1976) state that "the profitability of the business, and hence its survival depends on soundly conceived plans." Sexton (1985) conducted a longitudinal study of strategic planning among 357 small businesses and classified the firms into 5 categories of strategic planning based on the owners' (or operators') knowledge or lack of knowledge of formal business planning. A comparison of the results from the 1981 and 1984 studies found that the highest percentage of business failures occurred at the lowest strategy level. Furthermore, 20% of firms that had no strategic planning failed, but only 8% of firms with high-level planning failed. A few years later, Castrogiovanni (1996) investigated the ways in which pre-startup planning can facilitate small business survival.

### Small Business Planning Practices

With regards to scholarly research, in *Formalized Planning in Small Business*. *Increasing Strategic Choices*, the authors state that the "typical approach has been to: a) define the planning system elements; b) measure the formality of the elements; c) develop a formality scale; and d) categorize firms based on their scores on the formality scale." Formality has been assessed by numerous researchers employing a myriad of measurements including the existence of written plans and specific schedules for formulating plans (Fredrickson, 1984; Grinyer, Al-Bazzas and Yasai-Ardekani, 1986; Ramanujan and Venkatraman, 1987; Rhyne, 1986; Wood and LaForge, 1981).

Previous research on small business planning has concentrated more on identifying broad, formal business planning categories as opposed to measuring minor elements on a formality scale. For instance, Bracker and Pearson (1988) identified eight planning components: objective setting, environmental analysis; strengths, weaknesses, opportunities, threats (SWOT) analysis; strategy formulation; financial projections; functional budgets; operating growth measurement; and control procedures. Based on the presence of these components in the small business planning process, they developed four levels of planning sophistication including structured strategic planning, structured operational planning, intuitive planning, and unstructured planning. Subsequently, they compared financial growth between structured (i.e., formal) strategic planners and the other groups. Similarly, Robinson and Pearce (1983) categorized small businesses into broad planning categories based on the extent of written documentation and the inclusion of various planning steps.

One of the most extensive studies on small business planning practices was conducted by Richard Buckingham Keusch (1969) on long-range planning in Floridabased companies. The study was primarily concerned with the aspects of formality (i.e., procedure, frequency, regularity, organization structure, forecasting, planning resource utilization, planning coverage, plan content, and timing of the formulation of objectives). Evaluations were made of relationships between these variables and firm size in addition

to industry classification. Parametric and non-parametric data analysis of ninety-three firms resulted in the following conclusions:

- (1) Regularity and formality of procedures for long-range planning are positively correlated with company size, at the .05 level.
- (2) The more regularity with which long-range planning is practiced, the earlier in the process are objectives established, at the .01 level.
- (3) Length of long-range planning period is correlated positively with company size, at the .02 level.
- (4) Greater regularity of long-range planning is accompanied by greater frequency of control oriented meetings, at the .02 level
- (5) Larger companies are more likely to have made a recent decision to take action with long-range implications.
- (6) Firms performing long-range planning on a regular basis are more likely to have a recent decision with long-range implications.

The scope adopted by Keusch is significant in that it considered a broader range of planning activity than most of the studies conducted at the time.

The exploration of business planning practices in the small business arena became more pronounced when Robinson and Pearce (1984) called for increased study of the relationship among planning formality, strategy content, and firm performance, thereby encouraging a complex view of the strategic management processes and results in small firms. The formal review of over 50 planning-related studies concluded that the strategic planning processes of small firms may be categorized into four major areas: 1) strategic planning practices, 2) value of strategic planning, 3) specific features of the planning process, and 4) the content of strategies.

With regards to the area of strategic planning practices specifically, several studies have been conducted for purposes of understanding the methods employed by small businesses that practice formal business planning. For instance, Jones (1982) conducted a study of small firms in the state of Virginia, identifying characteristics that differentiate "planners" from "non-planners" and determining the usefulness of planning in the small firm. Jones found the overall view of the planning firm to be that of "a dynamic firm engaged in scanning the environment for opportunities, identifying the future through research, and involving a number of organizational members in the planning process." Non-planning firms, on the other hand, "tend to be reactive to changes they have not anticipated and to make adjustments based on the knowledge and intuition of a single planner or a limited group of them." In a similar study, Berman, Gordon and Sussman (1997) investigated benefits that small firms derive from utilizing "sophisticated" versus "less sophisticated" planning techniques and found a positive correlation between sophisticated planning techniques and growth represented by growth in sales volume.

Stoner (1983) examined the presence and nature of short-term objectives and long-range plans within small manufacturing firms and found nearly 21% of the firms surveyed prepared long-range plans. In addition, over 51% of the firms surveyed prepared short-term objectives. However, nearly half of these firms failed to present their objectives in written form. The author states that "such evidence confirms a well-

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recognized problem in small firm planning - - all too often, plans exists only in the mind of the owner/manager."

Research in the area of formal business planning practices of small businesses was also supplemented by the Ogunmoken, Shaw, and FitzRoy (1999) study which found owners' perceptions of the rewards of planning to be an important predictor of the level of planning practices among small firms.

Igniting controversy in the field, Mintzberg (1990) published *The Design School: Reconsidering the Basic Premises of Strategy Formation*, in which he calls into question some of the most deep-seated beliefs in the field of strategic management such as issues with the conscious assessment of strengths and weaknesses, of the need to make strategies explicit, and of the separation between formulation and implementation. Reacting to the Mintzberg study, Ansoff (1991) fires off a response in Critique of Henry *Mintzberg's 'The Design School: Reconsider'* in which he describes Mintzberg's critique as "deficient " on the criteria of "methodological soundness and factual veracity."

Several years later, Mintzberg and Ansoff pursue round two of their debate when Mintzberg (1994), in a two-part study, delineates the "fallacies" of strategic planning, introduces a new strategy model, and concludes that "strategic planning is an oxymoron." Again, Ansoff returns with a retort in *Comment on Henry Mintzberg's Rethinking Strategic Planning* (Ansoff, 1994) in which he states that "an aspect of the current reality which makes it difficult for Mintzberg to claim universal validity for his emerging strategy model is that in today's environment, different environmental challenges require different strategic responses and, as a consequence, different planning approaches." The saga continues.

#### Small Business Growth Measurements

Many studies have used quantitative, objective financial measures to determine planning effectiveness, thereby excluding important qualitative measures such as stakeholder satisfaction, new product/service developments (Greeley 1986). Ramanujam, Venkatraman, and Camillus (1986a; 1986b) suggest that the effectiveness of planning must be measured according to how well the planning system helps the organization achieve its business objectives. Nevertheless, a major weakness in the research on small business planning continues to be the operationalization and measurement of performance (Venkatraman and Ramanujam 1986).

Previous researchers have suggested that commercial growth should be determined by using both objective and subjective criteria. For instance, Ramanujam, Venkatraman, and Camillus (1986a; 1986b) and Tosi and Gomez-Meija (1994) recommended that growth should be measured with both financial and non-financial criteria because multiple measures allow for comparisons across criteria. These measures describe small business growth relative to industry averages, growth in sales, and return on investment (Dalton and Kesner, 1985; Hambrick and Lei, 1985; Venkatraman and Ramanujam, 1987).

### Small Business Planning and Growth Linkage

Over the past 40 years, much of the research conducted on the relationship between planning and organizational growth has focused on two areas of interest: 1) the relationship between commercial growth and the content of plans, and; 2) the relationship between the planning process and growth. Both have led to controversial results (Schwenk and Shrader 1993).

Analysis of the content of business plans began with case studies, mostly of large businesses (Hofer 1976), followed by industry-specific studies (Hatten 1983). Subsequently, large businesses, across various industries, were studied to enhance understanding of general business strategies applicable to all industries (Abell and Hammond 1979; Miles and Snow 1978; Porter 1980). Findings from these studies proved instrumental in the identification of a common set of business strategies from which firms may select the most appropriate strategy. However, the generalizability of the findings has been challenged (Abernathy and Wayne 1974); Harrigan 1983; Hofer 1975).

The earliest studies investigating the link between planning and growth categorized small businesses according to the formality of the planning process. Thune and House (1970) led the way in exploring the performance of firms classified as "formal planners" versus "informal planners. Herold (1972) subsequently extended the Thune and House study by introducing a new independent variable, profit, in comparing the growth of small businesses based on the thoroughness of the planning process.

Providing one of the earliest industry-specific studies, Rue (1973) analyzed the planning practices of 386 manufacturing and service firms incorporating the term "planning sophistication," to refer to the completeness of the planning process adopted by the organization. Small businesses were classified as either "impoverished," "programmed," or "progressive." Subsequent studies attempted to expound upon this

classification scheme using from two to five categories (Bracker and Pearson, 1986; Kudla, 1980; Rhyne, 1986; Robinson and Pearce, 1983).

Several studies have attempted to determine the effect of the planning process on a firm's financial growth. Most of the research falls within two main categorical perspectives. The first contends that planning improves profitability in particular (Aram and Cowen, 1990) and the second perspective maintains that effective planning is one of the keys to business success in general (Branch, 1991; Brokaw, 1992; Hillidge, 1990; Knight, 1993).

A number of researchers have investigated firms with and without formal planning processes and subsequently compared them relative to financial growth measurements (Fulmer and Rue, 1974; Kudla, 1980; Pearce, Freeman and Robinson, 1987; Wood and LaForge, 1979). These studies were based on the assumptions that formal planning leads to enhanced financial growth and that the effectiveness of the planning process could be determined by looking at the financial returns of the firm. This theory has not been supported strongly by empirical testing.

For both large and small firms, the results have been mixed when planning formality has been related to financial growth (Kudla, 1980; Wood and LaForge, 1979). Consequently, researchers have taken a more contingent/stratified view toward the planning-performance relationship and have begun to control for firm size, industry segment, entrepreneurial/managerial characteristics, etc. (Grinyer, Al-Bazzaz and Yasai-Ardekani, 1986).

Robinson and Pearce (1983) have authored some of the most comprehensive reviews of strategic planning and performance linkages in the small business market.

They contend that strategic planning has not generally been practiced by small firms because they often do not have the staff, nor time to engage in strategic planning. Hence, high level managers in small firms must be concerned more with daily, operational functions. These arguments are supported by research studies. For instance, in their survey of small banks, Robinson and Pearce (1983) found no significant performance differences between formal and non-formal small business planners. They concluded that formal business planning is not necessary for strong small business growth in the banking industry because small firms appear to enhance their effectiveness by information and application of basic, strategic decision-making processes.

Additionally, Robinson, Logan, and Salem (1986) found that strategic planning was not related to improved financial performance of small firms. However, they found that operational planning was positively related to performance. Najar (1981), in a study of 118 small manufacturing companies, found that top manager judgement was a more important determinant of performance than strategic planning and that few small businesses engage in strategic planning.

This does not mean, however, that strategic planning has no potential benefit for small businesses. On the contrary, a number of researchers have found that firms with formal (structured) planning procedures outperform firms with informal (non-structured) planning procedures. Formal business planning has been found to increase the success rate of firms (Jones 1982). For instance, the results of a meta-analysis conducted by Schwenk and Shrader (1993) identified the presence of moderating variables on the effect of strategic planning on performance in small firms.

Additionally, Bracker, Keats, and Pearson (1988) found that structured strategic planners among small firms in a growth industry outperformed all other types of planners on financial growth measures. It has also been found that formal business planning processes are associated with improved performance as measured by growth in sales (Lyles, Baird, Orris and Kuratko, 1993).

A number of researchers maintain that although planning improves business growth, mere formalization of the plan does not affect growth (Ackelsberg and Arlow, 1985). Hence, the plan must be effectively implemented. Moreover, Hofer (1976) suggested that the inconsistencies found in the research may be an indication that growth depends more on the content of the plan than on the formality of the planning process.

Bernstein (1991) enters the debate on the concept of organizational strategy and growth by offering an integrated model and approach. According to Bernstein, the population ecology perspective asserts that performance is environmentally determined. On the contrary, the strategic management perspective argues that organizational growth is determined by managerial control. To address this area of controversy, Bernstein introduces a model that recognizes the simultaneous effects of environmentally determined conditions and of managerial choice. The integrated model shows that both sets of theories contribute to understanding industry phenomena. Additional analysis of environmental uncertainty and planning in small firms was later conducted by Watson and Scott (1995).

Nevertheless, while most academicians and practitioners continue to acknowledge and support the concept of formal business planning for small business development, the results regarding the linkage between formal business planning and small business

growth remain mixed. Despite cited studies and the importance of small businesses to the U.S. economy, there is surprisingly limited empirical research examining organizational linkages between small business planning and growth. The present study is designed to fill this gap by exploring the relationship between strategic planning and growth in small businesses.

### Summary

Based on the review of the literature, the concept of planning has been evolving for many years and today it is well accepted as an appropriate discipline by both the business and academic communities. The importance of strategic planning to the business arena is evident by the resources (e.g., departments, budgets, manuals, software, consultants, etc.) devoted to the planning function. Likewise, academia has also acknowledged the significance of formal business planning as evident in the emergence of scholarly journals (e.g., *Strategic Management Journal, Journal of Business Strategy, Long Range Planning*, etc.) and empirical studies devoted to the topic.

The theoretical foundations and framework for strategic planning may be segmented into three broad categories: 1) normative theories, 2) descriptive theories, and 3) a combination of both normative and descriptive theories. While progress has been made in the integration of various theories for strategic planning purposes, no formally established, empirically based theory of strategic planning behavior in the small business environment has been discovered to date.

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Most scholarly business planning studies (Naylor and Gattis, 1976; Steiner, 1966); Richardson, 1986) have focused on large businesses. However, over the past 20 years, a number of researchers have begun investigating formal business planning practices of small firms (Bracker and Pearson, 1988; Robinson and Pearce, 1983; Wood and LaForge, 1981). Hence, the introduction of a number of journals, such as the *Journal of Small Business Strategy* and the *Journal of Small Business Management*, supporting small firms in the planning process.

To understand the linkage between small business planning and growth, several studies have explored the formality of the planning process (Thune and House, 1970) relative to both quantitative and qualitative growth measurements. However, the results of these studies remain mixed relative to the linkage between strategic planning and small business growth. This study attempts to explore this relationship further and to enhance the body of knowledge regarding this topic.

# CHAPTER 3

### RESEARCH METHODOLOGY

### Introduction

A review of the research done to date reveals a number of dimensions and variables underlying strategic planning and growth models and methodologies. This chapter addresses the methodology of the research study and incorporates sections including: research questions, hypotheses, predictions, instrumentation, variables, pilot study results, survey design and schedule.

### Purpose

The primary purpose of the research methodology is to facilitate achievement of the overall intent of the study, which is to contribute to the existing knowledge of the relationship between planning and growth. The study supports both practitioners and academicians in understanding that relationship relative to the small business arena. A goal of the research methodology is to advance the process of forecasting and to establish generalizations for the overall population of interest which, in this case, is the small business market.

#### **Concepts and Substantive Market**

Planning and growth represent the two major concepts to be explored in the study. Specifically, they relate to strategic planning and business growth. The substantive market is the U.S. small business arena in general and, small firms within the Atlanta, Georgia Metropolitan Statistical Area (MSA) in particular.

### **Research Questions**

The fundamental research question focuses on exploring the relationship between strategic planning activities and business growth of small firms. What is the relationship between strategic planning and growth in small businesses? Do firms that practice strategic planning also have strong growth results? Are certain strategic planning activities, such as the establishment of a corporate mission statement, goals, objectives, strategies, evaluation measures and implementation procedures, associated with firms achieving high growth levels? Furthermore, are specific growth variables, such as increases in sales/revenue, customers/clients, new locations/sites and staff, indicative of firms that practice formal business planning techniques?

### Strategic Planning and Growth Model

To link Richardson's eight strategic planning activities with four growth dimensions for small firms, the following Strategic Planning and Growth Model is proposed (see Figure 3.1):

### Figure 3.1

### Strategic Planning and Growth Model



The Strategic Planning and Growth Model depicts the influence of strategic planning activities on growth. The dimension of planning includes a total of eight (8) indicators, while the concept of growth is comprised of four (4) variables.

#### Hypotheses

A review of the literature has identified the importance of the small business market to the U.S. economy and the issue of the limited number of empirical studies pertaining to strategic planning and growth relative to the small business arena. Therefore, hypotheses and predictions have been developed to enhance the body of knowledge in this area by providing a link between empirical findings and theoretical predictions concerning planning and growth:

- H01: There is no significant positive correlation between strategic planning and growth in small businesses.
- H1: There is a significant positive correlation between strategic planning and growth in small businesses.
- H02: There is no significant positive correlation between the length of time a small business has employed written strategic plans and its business growth.
- H2: There is a significant positive correlation between the length of time a small business has employed written strategic plans and its business growth.
- H03: There is no significant positive correlation between the level of strategic planning activities and length of time in business.
- H3: There is a significant positive correlation between the level of strategic planning activities of a small business and length of time in business.
- H04: There is no significant difference in growth between those small businesses that use consultants in strategic planning and those that do not.
- H4: There is a significant difference in growth between those small businesses that use consultants in strategic planning and those that do not.

With regards to the Strategic Planning and Growth Model, various aspects of each hypothesis are depicted in the model. For example, the essence of hypothesis one (H1) is shown by the model in its totality, including the arrows indicating overall influence of planning on growth and, thus, suggesting some degree of correlation. Additionally, hypothesis three (H3) refers to the level of strategic planning which equates to the degree to which a firm is engaged in some or all of the eight (8) planning activities. Both hypothesis two (H2) and hypothesis four (H4) draw heavily on the four growth indicators correlated with demographic information gleaned from the survey instrument.

#### Survey Design

Survey research constituted the research methodology for this study. The proposed research design included a cross-sectional, field-based study of small businesses within the metropolitan Atlanta, Georgia area. Descriptive statistics, that may be generalizable to the small business at large, were generated from the study. For purposes of this study, the SBA definition of a small business, as a firm with less than 500 employees, was adopted. This definition was chosen due to its adaptability across numerous and varied industries.

The Metro Atlanta Chamber of Commerce (MACOC) boasts a membership comprised of primarily small business owners and operators. To this end, MACOC offers a number of resources and initiatives to support small firms. The Small Business Council (SBC) that offers advocacy services and their Small Business Central informational website are just two examples. Additionally, MACOC has instituted the Small Business Person of the Year award , Breakfast Roundtable Series, Emerging Biz

Workshop Series, and a host of seminars, luncheons and receptions to recognize the importance of small businesses and facilitate networking between proprietors.

Written approval was obtained from MACOC, in September 2002, to conduct surveys with their members who are small business owners and operators during MACOC events. A total of three MACOC events served as the data collection forums: two new member orientation sessions and one breakfast meeting. Data collection was conducted between December 2002 and February 2003.

Copies of the survey instrument were placed on top of informational packets in the all of the chairs in the ballrooms in which the events are held. Information about the purpose of the research and related incentives was shared through either verbal communications such as formal announcements and one-one-on dialogue, or through written communications such as flyers. Information dissemination tactics were determined by the formality of the given event and appropriateness as directed by MACOC officials. Efforts were made to obtain most of the completed surveys during the day of the event as opposed to faxing or mailing them post-event.

Lottery incentives have been identified as being effective in increasing survey response rates (Jones, 1995). Therefore, an incentive in the form of a drawing for one \$50 American Express Gift Certificate was offered at the two new member orientation meetings. A brief announcement was made to explain the purpose of the research, encourage participation, describe the prize, and indicate that the drawing would immediately follow adjournment of the session. Respondents were asked to complete the questionnaire and to drop it into a large shopping bag to enter, and to be eligible for, the drawing for the \$50 gift certificate officially.

### Measurement of Variables

The survey instrument for the study was a revised version of the original Richardson (1986) Survey of Strategic Planning Activities (see Appendix A). This questionnaire was utilized in Richardson's study entitled *An Investigation of Strategic Planning and Financial Growth of Selected U.S. Businesses* (1986). The purpose of this study was "to identify and explore certain characteristics of strategic planning process associated with various levels of financial growth within selected business organizations." Richardson surveyed large business respondents who were members of the Planning Executives Institute (PEI), the largest professional association for corporate planners. Growth data for the study was extracted from the Standard and Poor's Industrial Compustat Tapes. Richardson concluded that approximately 90% of the firms surveyed use written strategic plans, however, the study did not support a clear relationship between strategic planning and financial growth (1986).

Richardson offers the Strategic Planning Process Model (Richardson, 1986) consisting of eight critical, equally important steps of the strategic planning process including:

- Mission: Establishment of a mission statement
- Objectives: Identification of goals and objectives
- External Analysis: Analysis of the external environment including opportunities and threats
- Internal Analysis: Analysis of the internal environment including strengths and weaknesses

- Develop Alternative Strategies: Establishment of alternative strategies
- Strategy Selection: Identification of a particular course of action

• Implementation: Execution of the selected strategy

• Control: Evaluation and monitoring of the strategic planning process

Richardson's questionnaire was chosen because of 1) its clear and concise incorporation of critical steps in the strategic planning process for survey purposes and 2) the opportunity to apply it to a different population to determine if the results he found with large businesses might also be applicable to small firms. Richardson also utilized the instrument to examine the characteristics of formality, complexity, time, and participation in his study on the corporate planning process.

Richardson found that approximately 90% of the firms surveyed use written strategic plans. However, the data did not support a clear relationship between strategic planning and financial growth. The study also did not show significant differences in the formality of strategic planning for low, medium, and high business performers based on financial data. However, an examination of formality characteristics falls outside of the parameters and scope of this research project and will therefore not be addressed.

### **Reliability and Validity**

Richardson completed several steps to help insure the validity and reliability of the instrument. He reports that a review of the literature identified the most common elements relative to planning practices and that these common elements served as the basis for the questionnaire. Only the most common business terms were used to avoid confusion among respondents relative to industry or business jargon.

Moreover, Richardson employed two academicians who were familiar with business planning literature, to provide a content analysis of the questionnaire to avoid any duplication or ambiguity. This, according to Richardson, resulted in some questions being reworded, and others being combined or eliminated. The use of common elements from the literature and the content analysis of the instrument added to its content validity.

With regards to reliability, Richardson computed Cronbach's alpha as a basic method of estimating internal reliability for each characteristic of strategic planning. Richardson reported that reliability estimates for formality, participation, time, and complexity (alpha values of .87, .88, .82, and .90 respectively) exceed the .7 recommended threshold for exploratory research.

Richardson conducted a pretest of the questionnaire including follow-up interviews. The sample for the pretest consisted of twenty-five members of the Planning Executives Institute selected by the organization's Executive Vice President. Each individual was asked to participate in the pretest. Subsequently, each of the respondents was telephoned to obtain information regarding the wording of each question. The respondents were also asked about the model of the strategic planning process used to design the questionnaire (Richardson, 1986). Richardson maintains that the respondents

exhibited widespread agreement on the appropriateness of the model. Based on conversations with the respondents, minor revisions were made in the wording of some of the questions. In summary, Richardson utilized a literature search, content analysis, pretests and telephone interviews as a means of providing a basis for the validity and reliability of the survey instrument.

### Pilot Study Design

A pilot study was conducted to insure relevance of the survey instrument in particular and effectiveness of the research study in general. The questionnaire (see Appendix B) was pre-tested with a total of 69 respondents. Thirty-eight of these respondents were small business owners and operators, who are currently members of the Metro Atlanta Chamber of Commerce (MACOC) and thirty-one (31) of these respondents were adult members of the general public who were not necessarily small business owners, nor operators.

The pilot study with small business respondents was conducted at the Emerging Business Trends Workshop on September 10, 2002 and at the New Member Orientation meeting on September 11, 2002. The instrument was placed on top of informational packets in the all of the chairs in the ballrooms in which the events were held.

A formal drawing for one American Express Gift Certificate for \$50 was incorporated in the pilot study as an incentive. Signs were posted and flyers were stapled to the questionnaires, explaining the purpose of the research, encouraging participation, describing the prize, and indicating that the drawing would immediately follow adjournment of the session.

All small business respondents completing the survey in the pilot study were eligible to win the gift certificate. Each participant was asked to complete the questionnaire and drop it into a large, red shopping bag to enter the drawing for the \$50 gift certificate. Many respondents were quite excited about the drawing and generally reacted positively to the survey and the opportunity to support a graduate student conducting research that may benefit small firms. A total of 43 questionnaires were submitted. However, five questionnaires were discarded due to non-small business respondent participation and incomplete questionnaires, thus, a total of 38 questionnaires were usable from the pilot study with small firm respondents.

Following the initial pilot survey with small business respondents, the questionnaire was modified and distributed to a total of 33 adult members of the general population to probe for overall understanding of the content of the survey instrument. Two questionnaires were incomplete and consequently discarded. Hence, a total of 31 questionnaires, of those submitted to general population respondents, were actually useable.

#### Pilot Study Results

Data resulting from the pilot study was tabulated and analyzed with the assistance of the Statistical Package for the Social Sciences (SPSS) for Windows 11.0. The purpose of the pilot study was to insure that the proposed eight planning variables and five growth variables were reliable, valid, and relevant to the small business population. Strategic planning serves as the independent variable in the study. The literature suggests that strategic planning dimensions have not changed significantly when applied to small firms versus large businesses (Hong, 1978; Jones, 1982; Kramarczuk, 1987; Shrader, Mulford & Blackburn, 1989). The eight self-reported planning variables were culled directly from Richardson's Strategic Planning Process Model. Table 1 includes a description of each strategic planning variable.

| Variable                               | Description  |
|--|--|
| Mission (M)                            | Establishment of a mission statement                                     |
| Objectives(OB)                         | Identification of goals and objectives                                   |
| External Analysis (EA)                 | Analysis of the external environment including opportunities and threats |
| Internal Analysis (IA)                 | Analysis of the internal environment including strengths and weaknesses  |
| Develop Alternative<br>Strategies (AL) | Establishment of alternative strategies                                  |
| Strategy Selection (SS)                | Identification of a particular course of action                          |
| Implementation (I)                     | Execution of the selected strategy                                       |
| Control (CN)                           | Evaluation and monitoring of the strategic planning process              |
|  |  |

## **Description of Strategic Planning Variables – Survey Instrument**

Growth, relative to small businesses, constitutes the dependent variable in the study. Previous empirical studies of small businesses have incorporated both quantitative and qualitative growth dimensions (Dalton & Kesner, 1985; Tosi & Gomez-Meija, 1994; Venkatraman & Ramanujam, 1986). There is no generally accepted definition for small business growth. Furthermore, the formal growth reporting requirements for multinational corporations do not exist for small firms. Thus, growth measurements for small businesses tend to be numerous and varied. Development of an objective measure of growth continues to pose a challenge for scholars as few agree on how growth should be measured.

The growth dimension consisted of business growth variables based on selfreported responses to five initial growth dimensions of equal importance. These growth variables were selected due to their generalizability across numerous and varied industry segments. Table 2 provides a description of each growth variable.

| Variable                   | Description  |
|----------------------------|--|
| Sales / revenue (R)        | Business sales/revenue growth relative to key competitors              |
| Profit margin (P)          | Profit margin growth relative to key competitors                       |
| Customer / client base (C) | Customer / client base growth relative to key competitors              |
| New locations / sites (NS) | Rate of establishing new locations / sites relative to key competitors |
| Increasing staff (IS)      | Rate of increasing staff relative to key competitors                   |

### **Description of Growth Variables – Survey Instrument**

Following the pilot survey, reliability and factor analyses were run on planning and growth variables. To assess reliability in the study, the internal consistency method, as measured by Cronbach's alpha, was employed. Additionally, factor analyses were conducted for both the small business sample (N=38) and the general sample population (N=31) to assure unidimensionality of the scale and to reduce the number of items. Results are displayed in Tables 3, 4, 5 and 6.

| Name of Scale:     | # of Items                            | Sample Item              | Cronbach Alpha |
|--------------------|---------------------------------------|--------------------------|----------------|
| Strategic Planning | 28                                    | -                        | •              |
| Mission            | 2                                     | We have a formal         | .872           |
|                    |                                       | statement of our         |                |
|                    |                                       | organization's mission.  |                |
| Objectives         | 3                                     | We have a formal         | .851           |
|                    |                                       | statement of             |                |
|                    |                                       | organization goals and   |                |
| · · ·              |                                       | objectives.              |                |
| External           | 4                                     | The long range           | .838           |
| analysis           |                                       | implications of external |                |
|                    |                                       | environmental threats    |                |
|                    |                                       | and opportunities are    |                |
|                    |                                       | considered.              |                |
| Internal           | 3                                     | There is wide            | .777           |
| analysis           |                                       | management               |                |
|                    |                                       | participation in         |                |
|                    |                                       | determining our          |                |
|                    |                                       | organizational strengths |                |
|                    |                                       | and weaknesses.          |                |
| Develop            | 4                                     | There is wide            | .756           |
| alternative        |                                       | management               |                |
| strategies         |                                       | participation in the     |                |
|                    |                                       | development of strategic |                |
|                    |                                       | alternatives.            |                |
| Strategy           | 5                                     | Our organization has     | .913           |
| selection          |                                       | selected specific        |                |
|                    |                                       | strategies.              |                |
| Implementation     | 4                                     | Once a strategy has been | .792           |
|                    |                                       | selected it is           |                |
|                    | · · · · · · · · · · · · · · · · · · · | implemented.             |                |
| Control            | 3                                     | There is continuous      | .741           |
|                    |                                       | review and evaluation of | 1              |
|                    |                                       | the strategic plan.      |                |

### Pilot Study Results: Reliability – Strategic Planning Scale

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### Pilot Study Results: Factor Analysis – Strategic Planning Scale

| Name of Scale:     | # of Items | Eigenvalue | % of Variance |
|--------------------|------------|------------|---------------|
|                    |            |            | Accounted For |
| Strategic Planning | 28         | -          | -             |
| Mission            | 2          | 2.39       | 79.6          |
| Objectives         | 3          | 2.42       | 80.7          |
| External           | 4          | 2.71       | 67.7          |
| analysis           |            |            |               |
| Internal           | 3          | 2.22       | 74.0          |
| analysis           |            |            |               |
| Develop            | 4          | 2.41       | 60.3          |
| alternative        |            |            |               |
| strategies         |            |            |               |
| Strategy           | 5          | 3.78       | 75.6          |
| selection          |            |            |               |
| Implementation     | 4          | 2.50       | 62.5          |
| Control            | 3          | 2.03       | 67.5          |

#### Pilot Study Results: Reliability – Growth Scale

| Name of Scale: | # of Items | Sample Item             | Cronbach Alpha |
|----------------|------------|-------------------------|----------------|
| Growth         | 4          | The sales/revenue       | .860           |
|                |            | growth rate of my       |                |
|                |            | business is higher than |                |
|                |            | that of my key          |                |
|                |            | competitors.            |                |

### Table 7

#### **Pilot Study Results: Factor Analysis – Growth Scale**

| Name of Scale: | # of Items | Eigenvalue | % of Variance<br>Accounted For |
|----------------|------------|------------|--------------------------------|
| Growth         | 4          | 2.83       | 70.6                           |

### **Revised Survey Instrument**

Upon completion of the pilot survey, the survey instrument was again modified to insure relevancy to the small business population. General modifications to Richardson's original survey instrument included: 1) elimination of terminology pertaining to strategic business units (SBUs); 2) removal of references to mathematical models and simulations; 3) addition of an industry category question; 4) inclusion of growth measurement variables; 5) inclusion of qualifying questions pertaining to professional titles, location of business and total number of full-time employees; and 6) the elimination of some questions pertaining to formality participation, time and complexity.

Final revisions resulted in a 38-item questionnaire in which respondents were asked to indicate their agreement with each item on a six-point Likert-type scale (see Appendix C). The questionnaire consisted of two parts. The first part addressed specific demographics of the firm such as geographic location, length of time in business, number of employees, industry category, and the person responsible for developing strategic plans. This section also gathered information on the name of the company and the title of the respondent.

The second part of the questionnaire was based on the strategic planning process model (Richardson, 1986). Questions appeared for each of the eight steps of the planning process. Most of the questions were previously included on Richardson's original questionnaire. However, two main categories of new questions were added: 1) growth dimension questions were added as they were not part of Richardson's original study, and; 2) strategy selection questions were developed, tested during the pilot study, and added as the original strategy selection questions were not found to be reliable (Cronbach alpha = .51) when initially applied to the small business sample. Thus, new strategy selection questions were incorporated into the revised survey instrument.

Appendix D relates each question to the corresponding step in the strategic planning process or to one of the dimensions of growth. The questionnaire could be answered in ten minutes or less. This is important given research suggesting that small business respondents are unlikely to respond to lengthy surveys (Jones, 1995).

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### Independent Variable: Strategic Planning

For purposes of this study, the strategic planning variable was measured based on responses to eight self-reported planning dimensions that were extracted from Richardson's Strategic Planning Process Model. It is important to note that these activities are all considered to be steps in the strategic planning process and are of equal importance. The steps, starting with the establishment of a mission (step #1) and ending with the evaluation and control of the process (step #8) are as follows:

### **Operationalization of Strategic Planning:**

- 1. Mission (M)
- 2. Objectives (OB)
- 3. External analysis (EA)
- 4. Internal analysis (IA)
- 5. Develop alternative strategies (AL)
- 6. Strategy selection (SS)
- 7. Implementation (I)
- 8. Control (CN)

### Dependent Variable: Growth

For purposes of this study, growth was defined as the extent to which a small business is progressing relative to its primary competitors. As previously mentioned, analysis of data from the pilot study resulted in the elimination of one growth variable pertaining to profit margin (P). Therefore, in the final study, growth was measured based on responses to four self-reported dimensions of equal importance:

Operationalization of Growth:

- 1. Sales / revenue (R)
- 2. Customer / client base (C)
- 3. New locations / sites (NS)
- 4. Increasing staff (IS)

### Population and Sampling Frame

The population for the study consisted of small businesses with at least one physical location within the nine-county Atlanta, Georgia MSA (see Appendix E). It is assumed that this sample may be representative of the national small business population. Small business owners and operators served as the respondents and the sampling frame consisted of all small firms having a least one location or site within the metro Atlanta area. Given the complexity of the population and inherent challenges in efficiently and effectively reaching business owners and operators, a convenience sampling strategy approach was taken by leveraging the support of the Metro Atlanta Chamber of Commerce (MACOC).

With regards to sample size, the goal was a total of 10 respondents per variable. Hence, the target minimum sample size was 120 given 12 total variables: eight for strategic planning and four for growth. Routine MACOC meetings draw approximately 70 to 100 attendees. Hence, assuming an estimated 40 usable questionnaires would be obtained per event, it was therefore, postulated that the survey would be conducted at a minimum of three (3) events.

#### Statistical Data Analysis

An overriding goal of this research was to enhance understanding of the relationship between strategic planning and growth in small firms. The two primary variables were tested individually using Pearson correlation analysis and difference of means test to ascertain whether there is a relationship in addition to the direction and
magnitude as appropriate. Subsequently, results were linked with four initial hypotheses. Data analysis was tabulated and analyzed with the assistance of the Statistical Package for the Social Sciences (SPSS) for Windows 11.0.

### Schedule and Budget

All surveys were administered by the author. Data collection began in December 2002 and was completed by February 2003. Total estimated budget for miscellaneous items, such as incentives, photocopies, and MACOC gifts of appreciation, was less than \$500.00.

# CHAPTER 4 ANALYSIS AND FINDINGS

### Introduction

The purpose of this chapter is to present and describe the current findings of the survey conducted with 121 small business owners and operators of firms located in the metropolitan Atlanta area. The chapter begins with a discussion regarding scale reliability and factor analysis and includes a descriptive analysis of the respondent base. Additionally, this chapter includes general survey results with hypothesis tests that are assessed using correlation analysis and a difference of means test. This chapter will not present interpretation of the results. A discussion of the research conclusions and managerial implications will be presented in Chapter 5.

#### **Reliability and Factor Analysis**

Reliability and factor analyses were conducted for the complete sample (N=121) relative to planning and growth variables. To assess reliability in the study, the internal consistency method, as measured by Cronbach's alpha, was employed. The results are displayed in Tables 8 and 9. All items were factor analyzed for each scale and the scales were found to be unidimensional. For all these and all other statistical outputs, please refer to Appendix F: Statistical Outputs.

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# Table 8

| Name of Scale:                       | # of Items | Sample Item   | Cronbach Alpha |
|--------------------------------------|------------|---|----------------|
| Strategic Planning                   | 26         | -   | -              |
| Mission                              | 2          | We have a formal<br>statement of our<br>organization's mission.   | .754           |
| Objectives                           | 3          | We have a formal<br>statement of<br>organization goals and<br>objectives.   | .826           |
| External<br>analysis                 | 4          | The long-range<br>implications of external<br>environmental threats<br>and opportunities are<br>considered.       | .794           |
| Internal<br>analysis                 | 2          | There is wide<br>management<br>participation in<br>determining our<br>organizational strengths<br>and weaknesses. | .717           |
| Develop<br>alternative<br>strategies | 2          | There is wide<br>management<br>participation in the<br>development of strategic<br>alternatives.                  | .759           |
| Strategy selection                   | 5          | Our organization has<br>selected specific<br>strategies.  | .870           |
| Implementation                       | 4          | Once a strategy has been selected it is implemented.  | .781           |
| Control                              | 4          | There is continuous<br>review and evaluation of<br>the strategic plan.  | .763           |

# Final Study Results: Reliability – Strategic Planning Scale

## Table 9

### Final Study Results: Reliability – Growth Scale

| Name of Scale: | # of Items | Sample Item             | Cronbach Alpha |
|----------------|------------|-------------------------|----------------|
| Growth         | 4          | The sales/revenue       | .879           |
|                |            | growth rate of my       |                |
|                |            | business is higher than |                |
|                |            | that of my key          |                |
|                |            | competitors.            |                |

#### **Descriptive** Analysis

A total of 121 surveys (completed and partially completed) were received from small business owners and operators. Sixty-seven percent of respondents were business owners with titles such as owner, president, chief executive officer, and principal. The remaining 54% of respondents represented business operators with titles including vice president and assistant director.

The average length of time that the firms have been operational was an estimated 7 years. Over 60% percent of respondents represented firms employing less than five full time employees and 92% of firms surveyed represented the professional services industry.

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# Survey Results

Almost all respondents confirmed the use of written strategic plans as exhibited in Table 10. Seventy-one percent of small businesses surveyed confirmed that they utilize written strategic plans. Of those firms employing written strategic plans, approximately 37% developed plans that covered a one to two year time frame. As illustrated in Table 11, only an estimated 5 % of the firms responding developed written spanning time periods greater than seven years.

#### Table 10

## Written Strategic Plans

| Firm Uses Written<br>Strategic Plans | Frequency | Percentage |  |
|--------------------------------------|-----------|------------|--|
| Yes                                  | 86        | 71.1       |  |
| No                                   | 34        | 28.1       |  |
| Missing                              | 1         | .8         |  |
| Total                                | 121       | 100.0      |  |

## Table 11

### **Time Frame Covered by Written Strategic Plans**

| Time Frame Covered by<br>Written Strategic Plan | Frequency | Percentage |  |
|---|-----------|------------|--|
| 1-2 years                                       | 45        | 37.2       |  |
| 3-4 years                                       | 18        | 14.9       |  |
| 5-6 years                                       | 7         | 5.8        |  |
| 7 or more years                                 | 6         | 5.0        |  |
| Missing/not applicable                          | 33        | 27.3       |  |
| Total   | 88        | 100.0      |  |

These findings are comparable to Richardson's (1986) data in his study of strategic planning and growth of large businesses. For instance, Richardson reports that 89% of large business respondents confirmed use of written strategic plans. Moreover, Richardson found that, of those large businesses using written plans, approximately 30% developed plans covering a one to three year time frame. Richardson concludes that less then 10% of businesses responding developed written plans for time horizons of greater than seven years.

With regards to the person or unit that is primarily responsible for developing strategic plans for the firm, approximately 79% of respondents indicated that the chief executive officer (CEO) is the person primarily responsible for developing strategic plans in their organization. Table 12 presents details of these results.

#### Table 12

#### **Development of Strategic Plans**

| Person or Unit Responsible for  | Frequency | Percentage |  |
|---------------------------------|-----------|------------|--|
| Developing Strategic Plans      |           |            |  |
| Chief Executive Officer (CEO)   | 79        | 65.3       |  |
| Strategic Planning Committee    | 29        | 24.0       |  |
| Centralized Planning Department | 2         | 1.7        |  |
| Other                           | 11        | 9.1        |  |
| Total                           | 121       | 100.0      |  |

The findings regarding responsibility for strategic plan development in small firms contrast significantly with Richardson large business findings. For example, Richardson (1986) found that only 14% of CEOs were responsible for development of

strategic plans for their organization. However, for small firms, CEOs are primarily responsible for strategic planning. Additionally, Richardson concluded that approximately 48% of large businesses surveyed confirmed that a committee has primary responsibility for strategic planning committee as being primarily responsible for developing strategic plans.

When small business respondents were asked if their firm used outside consultants in developing strategic plans, only 36% responded positively. Similarly, Richardson (1986) found that only 28% of large business respondents employed outside consultants for development of strategic plans.

#### **Hypothesis** Testing

To maximize statistical power for quantitative variables, three options were considered for purposes of data analysis: 1) Pearson Correlation, 2) regression, and 3) structural equation modeling. Ultimately, all three would report similar findings. However, Pearson Correlation analysis was chosen and conducted to test the relationship between strategic planning and growth (H01); the correlation between length of time a small business has employed written strategic plans and growth (H02); and, the relationship between the level of strategic planning and length of time in business (H03). An independent sample difference of means test was used to analyze the relationship between use of outside consultants in strategic planning and growth (H04).

#### Strategic Planning Related to Growth in Small Businesses

- H01: There is no significant positive correlation between strategic planning and growth in small businesses.
- H1: There is a significant positive correlation between strategic planning and growth in small businesses.

There is a statistically significant positive correlation between the strategic planning (HYPLAN) and growth (HYPERF) variables of .437. It is statistically significant at the .000 level. Hence, the null hypothesis (H01) is rejected. A total of 18.6% of the variation was explained. These findings support the strategic planning and growth model that links the eight strategic planning activities with the four growth indicators.

The statistically significant positive correlation between planning and growth, found in this survey of small firms, is consistent with the findings of several previous researchers. For instance, the findings of the survey support the research conducted by Lyles et al. (1993) which concluded that formal business planning processes are associated with improved performance as measured by growth in sales.

The findings of this study also support the scholarly study conducted by Jones (1982) which concluded that formal business planning has been found to increase the success rate of firms. Additionally, findings reinforce the Bracker, Keats, and Pearson (1988) study which found that structured strategic planners among small firms in a growth industry outperformed all other types of planners on financial growth measures.

On the contrary, the statistically significant positive correlation between strategic planning and growth, found in this study, contradict the findings of a number of

researchers. For instance, in Richardson's (1986) investigation of strategic planning and financial performance of large businesses, the hypotheses that high stockholder returns were associated with greater formality and participation in strategic planning were not supported.

Additionally, Robinson and Pearce (1983) found no significant growth differences between formal and non-formal small business planners. Similar findings were reported by Najar (1981), in a study of 118 small manufacturing companies, that found top manager judgement to be a more important determinant of performance than strategic planning.

# Length of Time a Small Business has Employed Written Strategic Plans Not Related to Growth

- H02: There is no significant positive correlation between the length of time a small business has employed written strategic plans and its business growth.
- H2: There is a significant positive correlation between the length of time a small business has employed written strategic plans and its business growth.

The correlation between length of time a small business has employed written strategic plans (HYTM) and business growth (HYPERF) was not found to be statistically significant. The probability was found to be .967. Thus, the null hypothesis (H02) is accepted.

#### Level of Strategic Planning Activities Not Related to Length of Time in Business

H03: There is no significant positive correlation between the level of strategic planning activities and length of time in business.

H3: There is a significant positive correlation between the level of strategic planning activities of a small business and length of time in business.

The correlation between the level of strategic planning activities (HYPLAN) and length of time in business (HYYRS) was not found to be statistically significant. The probability was found to be .758. Therefore, the null hypothesis is accepted.

#### Use of Outside consultants in Strategic Planning Not Related to Growth

- H04: There is no significant difference in growth between those small businesses that use consultants in strategic planning and those that do not.
- H4: There is a significant difference in growth between those small businesses that use consultants in strategic planning and those that do not.

There was no significant difference on any of the variables between those small businesses that use consultants and those that did not.

#### **Summary**

The strategic planning practices and growth of small businesses have been examined through the analysis of responses to a survey conducted with 121 small business owners and operators by the researcher. The majority (71%) of small businesses surveyed confirmed that they utilize written strategic plans referenced the chief executive officer chief executive officer (CEO) as the person primarily responsible for developing strategic plans in their organization.

Of the four hypotheses tested, only one (H01) was found to be statistically significant. A direct correlation was found between strategic planning and growth in

small businesses. Thus, a strong relationship seems to exist between planning and growth variables relative to small businesses.

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#### CHAPTER 5

#### CONCLUSIONS, IMPLICATIONS AND SUMMARY

#### Introduction

Research objectives and a discussion of the interpretation of the findings are summarized in this chapter. Managerial and academic implications are reviewed in addition to limitations of the study and directions for future research opportunities.

#### **Research Objectives**

Small businesses play a critical role in the economy of the United States. However, the U. S. Small Business Administration (SBA) reports that approximately half of new small businesses fail within the first five years of operation. Given the significance of small businesses to the national economy, it is important to investigate the extent to which small firms practice strategic planning and to explore the linkage between strategic planning and growth. Hence, the purpose of this study was to contribute to the existing knowledge of planning and growth by supporting both practitioners and academicians in understanding the relationship between strategic planning and growth in the small business arena. The overall goals of the research were to: 1) identify key implications for small business success and longevity, and 2) ultimately support the economic progress of the nation.

A review of the literature revealed a wealth of empirical research on strategic planning and growth relative to large businesses, but a dearth of scholarly research on the

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topic as it pertains to small firms. Therefore, a strategic planning and growth model was designed by expanding Richardson's (1986) existing strategic planning model of eight planning activities and incorporating four growth indicators. The variables tested in this study were taken from previous research that was primarily conducted with large businesses. Richardson's (1986) existing questionnaire, that had been previously used to survey large businesses, was tested, revised, and applied to small businesses.

This survey resulted in a total of 121 respondents that included small business owners and operators in the metropolitan Atlanta area. The measurement scales were analyzed individually through factor analysis and reliability tests. Four hypotheses were tested using Pearson correlation analysis and a difference of means test. A statistically significant correlation was found between strategic planning and growth in small businesses.

#### Overview of Results

Based on survey results of the representative sample population of small businesses, the following insights emerged:

- 1. Strategic planning appears to be widely accepted and practiced by small businesses.
- 2. There appears to be a positive correlation between strategic planning and growth, thereby suggesting that enhanced planning may lead to stronger growth and greater success for small firms.

- 3. The owners or CEOs of small firms are primarily responsible for strategic planning of the organization and outside consultants are rarely brought in to offer strategic planning expertise.
- 4. Descriptive theories, which tend to focus on behavioral and managerial models (Hilton, 1980; Still, 1974) of strategic planning, are supported in this study.
- Small firms continue to index high in the professional services industry category, thus, implying industry-specific opportunities relative to business planning and growth.

#### Management Implications

Often the primary goal of small businesses is survival. This study confirms that formal business planning may lead to significant growth benefits such as an increase in sales, revenue, new sites or locations, staff, and customer or client base. A number of implications for business practitioners and managers emerge from the study:

- Commitment to and use of strategic planning are deemed as very important to small business growth as evident in the statistically significant correlation found between strategic planning and growth.
- A formal strategic planning process may be necessary for small firms to remain competitive in an increasingly global environment.
- Small business owner or CEO participation in the development of strategic plans may be a critical factor in effective planning processes. This is apparent given CEOs were found to be primarily responsible for the business planning efforts of their enterprises.

- Development and introduction of more innovative business planning products e.g., business planning software, books, videotapes, audiotapes, etc., may be increasingly required by small firms, particularly those in the services industry. This is evident by the fact that the majority of small business owners and operators confirmed use of written strategic plans. Moreover, most of these respondents represented firms within the professional services industry.
- Expansion of business planning support services, such as strategic planning consultants specializing in small firms, may be an opportunity niche.

## Academic Research Implications

The academic community is often interested in scholarly studies and instruction pertaining to various topics. With regards to the strategic planning survey conducted with small business owners and operators, a number of academic implications emerge:

- Most empirical strategic planning studies have focused on large corporations. Hence, there is a general need for more primary research studies pertaining to strategic planning and growth in the small business market specifically.
- Most of the literature on small business planning is more prescriptive than descriptive. Thus, an opportunity exists for more descriptive empirical studies.
- A major weakness of planning and growth studies with small firms is the operationalization and measurement of growth and performance (Venkatraman and Ramanujam, 1986). Therefore, a niche exists for additional studies with multiple operationalization approaches to the concepts of growth and performance.

 Given the propensity for more small firms to engage in formal business planning, colleges and universities might consider offering additional strategic planning classes in their business management curricula.

### Limitations

This research study has examined the linkage between strategic planning and growth in small businesses. However, several limitations to the research must be acknowledged and understood to avoid any misinterpretation of the findings:

- Survey results are heavily skewed by responses from the service industry. Thus, the planning practices of these firms may not be representative of firms belonging to other industries
- There is a danger of bias inherent in the self-evaluating and self-reporting of owners and operators. For example, given prevalent positive social predispositions toward corporate goal setting, planning, and management, respondents may feel somewhat compelled to report what is theoretically deemed as acceptable business planning practices as opposed to what may be actually practiced in their organizations.
- Data was collected in environments that were potentially distracting. Interest in networking, conducting business and enjoying the Metro Atlanta Chamber of Commerce events may have caused some respondents to complete their questionnaires hastily without more thorough consideration and contemplation.

• Operationalization of the growth variable was extremely limited in that it consisted of only four items. (sales/revenue, customer/client base, new locations/sites, and increasing staff).

Additionally, the findings of this study describe the current state of strategic planning and growth for the firms surveyed. However, there is a myriad of ways to examine the situation. For instance, are these companies successful because of strategic planning or did their success motivate them to employ formal business planning techniques? Moreover, some may argue that certain industries are more predisposed to strategic planning than others.

#### Future Research

This study explores the degree to which strategic planning is related to growth in small firms. It serves to fill a void in available research on the topic, however, there is substantial opportunity to conduct further empirical studies that:

- Target expanded geographic areas.
- Focus on the specific industries or incorporate greater representation from firms of other industries such as manufacturing, construction, agriculture, retail, etc.
- Incorporate a larger sample size.
- Incorporate multiple approaches for operationalizing the strategic planning process.
- Probe in depth about the nature of strategic planning techniques practiced.
- Incorporate additional growth measures such as return on investment, inventory turnover, return on assets, customer service index, cash flow, and employee turnover.

- Include both quantitative and qualitative growth indicators.
- Investigate the relationship between planning and growth over time through longitudinal design studies.
- Consider planning and growth linkage of for-profit versus not-for-profit organizations.
- Conduct content analyses of written strategic plans.
- Compare and contrast business planning techniques relative to both small and large businesses.
- Compare and contrast the strategic planning and growth linkage of domestic versus multinational firms.
- Consider the influence of external consultants on strategic planning efforts.

#### Summary

The significant correlation between strategic planning and growth linkage implies that small firms practicing successful formal business planning will enhance their growth. This is critical to the ultimate strengthening of the U.S. economy, improvement of the competitive stance of the U.S. in the global marketplace, and enhancement of the social and economic states of other allied nations.

This study represents a rare opportunity for both business and academia to benefit from empirical analysis. Academicians have the opportunity to study, research and teach on the subject of the relationship between planning and growth while business owners and operators have the opportunity to learn and practice strategic planning techniques that may prove to increase their chances for commercial success. In effect, this ultimately strengthens the foundation of entrepreneurship upon which the pillars of American economic growth stand.

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# APPENDICES

# APPENDIX A

# APPENDIX A ORIGINAL RICHARDSON INSTRUMENT

#### SURVEY OF STRATEGIC PLANNING ACTIVITIES

General Instructions: This questionnaire is designed to gather information concerning the nature and scope of strategic planning in your organization. Please describe the planning practices as you feel they truly exist in your organization, not as you believe they should exist.

Data gathered with this questionnaire will be treated confidentially and presented only in summary form without disclosing the name or affiliation of the respondent.

Company name

Title of person completing questionnaire\_\_\_\_\_

PARTI

- 1. Please indicate whether your answers on this questionnaire represent strategic planning in your organization at the
  - \_\_\_\_ corporate level involving the entire corporation
  - business level involving a business or operating unit
- 2. Please indicate the person or unit that develops strategic plans in your organization:
  - \_\_\_\_\_ The Chief Executive Officer (CEO)
  - A strategic planning committee made up of all or selected members of top management
  - A centralized planning department
  - Other (please identify)
- 3. Does your organization prepare written strategic plans?

\_\_\_\_\_ yes \_\_\_\_\_ no

- a) If yes, check the appropriate space concerning the time period covered by these strategic plans
  - less than one year \_\_\_\_\_4 6 years
  - \_\_\_\_\_1 3 years \_\_\_\_\_7 or more years
- b) How long have you been using written strategic plans?
  \_\_\_\_\_ years
- 4. Do you use outside consultants in developing strategic plans?
  - \_\_\_\_\_ yes \_\_\_\_ no
- 5. Does your organization use mathematical models or simulations to assist in strategic planning?

\_\_\_\_\_ yes \_\_\_\_\_ no

If yes, please complete parts a and b, otherwise, please proceed to Part II of the questionnaire.

#### 1. Continued -

- a) Are these mathematical models or simulations computer based?
- b) Mathematical models and simulations make significant contributions in the strategic decision making system of our organization.

\_\_\_\_\_ strongly disagree \_\_\_\_\_ somewhat agree

\_\_\_\_ disagree \_\_\_\_\_ agree

\_\_\_\_\_ somewhat disagree \_\_\_\_\_\_ strongly agree

#### PART II

Directions: For each of the statements below, please circle the number that best describes how much you agree or disagree with the statement:

Strongly Disagree Disagree Somewhat Disagree Strongly Agree Agree Strongly Agree

|            |  | SD | D | SD | SA | A | SA |
|------------|--|----|---|----|----|---|----|
| 1.         | There is wide participation by management in strategy selection.   | 1  | 2 | 3  | 4  | 5 | 6  |
| 2.         | We have a formal statement of organization goals and objectives.   | 1  | 2 | 3  | 4  | 5 | 6  |
| 3.         | There is wide participation by management in the review and evaluation of strategic plans.                                       | 1  | 2 | 3  | 4  | 5 | 6  |
| 4.         | Our organization has established both long-range and short-range goals and objectives.   | 1  | 2 | 3  | 4  | 5 | 6  |
| 5.         | Review and evaluation are important in our strategic planning process.   | 1  | 2 | 3  | 4  | 5 | 6  |
| 6.         | The long-range implications of external environmental (political, social, etc.) threats and opportunities are considered.        | 1  | 2 | 3  | 4  | 5 | 6  |
| 7.         | Our organization uses mathematical models or computer simulations in the determination of strengths and weaknesses.              | 1  | 2 | 3  | 4  | 5 | 6  |
| 8.         | Our organization developed formal procedures for determining strengths and weaknesses.   | 1  | 2 | 3  | 4  | 5 | 6  |
| <b>9</b> . | There is wide management participation in the development of strategic<br>alternatives.  | 1  | 2 | 3  | 4  | 5 | 6  |
| 10.        | When formulating strategy, we identify any external environmental (political, economic, social, etc.) threats and opportunities. | 1  | 2 | 3  | 4  | 5 | 6  |
| 11.        | Budgets for strategic plans are developed.   | 1  | 2 | 3  | 4  | 5 | 6  |
| 12.        | The results of our strategic planning process clearly spell out what will<br>be done, when and by whom.                          | 1  | 2 | 3  | 4  | 5 | 6  |
| 13.        | We attempt to project the outcome of strategic alternatives facing our organization.   | 1  | 2 | 3  | 4  | 5 | 6  |
| 14.        | Our organization uses mathematical models or computer simulations<br>in strategy selection.                                      | 1  | 2 | 3  | 4  | 5 | 6  |
| 15.        | We have a formal statement of our organization's mission.  | 1  | 2 | 3  | 4  | 5 | 6  |
| 16.        | Once a strategy has been selected it is implemented.   | 1  | 2 | 3  | 4  | 5 | 6  |
| 17.        | There is wide management participation in determining our organizational strengths and weaknesses.                               | 1  | 2 | 3  | 4  | 5 | 6  |

| Strongly Disagree Disagree Somewhat Disagree Stro | rongly Agree P | vgree a | Strongly P | ۱gree |
|---|----------------|---------|------------|-------|
|---|----------------|---------|------------|-------|

|             |  | SD | D | SD | SA | Α | SA  |
|-------------|--|----|---|----|----|---|-----|
| 18.         | Our organization uses mathematical models or computer simulations in developing strategic alternatives.  | 1  | 2 | 3  | 4  | 5 | 6   |
| 19.         | Our mission is long-term in nature.  | 1  | 2 | 3  | 4  | 5 | 6   |
| 20.         | We identify and monitor other companies providing products or services<br>similar to ours.   | 1  | 2 | 3  | 4  | 5 | 6   |
| 21.         | When selecting a strategy, our organization is concerned with long-term implications.  | 1  | 2 | 3  | 4  | 5 | 6   |
| 22.         | Our organization has formal procedures for strategy selection.   | 1  | 2 | 3  | 4  | 5 | 6   |
| 23.         | We develop budgets for all strategic alternatives.   | 1  | 2 | 3  | 4  | 5 | 6   |
| 24.         | Our organization uses mathematical models or computer simulations<br>in the implementation of strategic plans.   | 1  | 2 | 3  | 4  | 5 | 6   |
| 25.         | Our organization develops goals and objectives.  | 1  | 2 | 3  | 4  | 5 | 6   |
| 26.         | There is a wide dispersion of management responsibility for the implementation of strategic plans.   | 1  | 2 | 3  | 4  | 5 | 6   |
| 27.         | Our organization uses mathematical models or computer simulations<br>In the formulation of goals and objectives.   | 1  | 2 | 3  | 4  | 5 | 6   |
| 28.         | Our organization has formal procedures for reviewing and evaluating<br>strategies.   | 1  | 2 | 3  | 4  | 5 | 6   |
| 29.         | Our organization has developed a statement of mission.   | 1  | 2 | 3  | 4  | 5 | 6   |
| 30.         | Our organization has formal procedures for evaluating external environmental (political, social, etc.) threats and opportunities.  | 1  | 2 | 3  | 4  | 5 | 6   |
| 31.         | Our organization has a strategic plan.   | 1  | 2 | 3  | 4  | 5 | 6   |
| 32.         | There is wide management participation in identifying external<br>environmental (political, economic, social, etc.) threats and<br>opportunities.                                | 1  | 2 | 3  | 4  | 5 | 6   |
| 33.         | There is continuous review and evaluation of the strategic plan.   | 1  | 2 | 3  | 4  | 5 | 6   |
| 34.         | Our organization allocates adequate resources for carrying out strategic plans.  | 1  | 2 | 3  | 4  | 5 | 6   |
| 35.         | The long-term impacts of organizational strengths and weaknesses are evaluated.  | 1  | 2 | 3  | 4  | 5 | 6   |
| 36.         | Our organization uses mathematical models or computer<br>simulations in the analysis of external environmental<br>(political, economic, social, etc.) threats and opportunities. | 1  | 2 | 3  | 4  |   | 56  |
| 37.         | Alternatives are developed before a strategic plan is adopted.   | 1  | 2 | 3  | 4  |   | 56  |
| 38.         | Our organization has no formal procedures for identifying strategic alternatives.  | 1  | 2 | 3  |    | 4 | ō 6 |
| 39.         | When formulating strategy, we identify strengths and weaknesses of our organization.   | 1  | 2 | 3  |    | 4 | 56  |
| 40.         | In developing alternative strategies, long-range<br>considerations are important.  | 1  | 2 | 3  |    | 4 | 56  |
| 41.         | Long-range factors are important when implementing strategy.   | 1  | 2 | 3  |    | 4 | 56  |
| <b>42</b> . | Our organization uses mathematical models or computer<br>simulations in the review and evaluation of strategic plans.  | 1  | 2 | 3  | ,  | 4 | 56  |
| 43.         | There is wide management participation in establishing goals<br>and objectives.  | 1  | 2 | 3  |    | 4 | 56  |
Strongly Disagree Disagree Somewhat Disagree Strongly Agree Agree Strongly Agree SD D SD SA A SA As a planning executive, I am very satisfied with the: participation of personnel in the strategic planning a) effort goal achievement of our organization b) c) morale of organization personnel financial status of the organization d) 4 5 equipment and facilities of the organization e) planning process in our organization. f)

We appreciate your cooperation in filling out this questionnaire and welcome your comments on the bottom of this page. Thank you.

COMMENTS:

44.

# APPENDIX B

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### APPENDIX B

### PILOT STUDY INSTRUMENT

#### SURVEY OF STRATEGIC PLANNING ACTIVITIES

General Instructions: This questionnaire is designed to gather information concerning the nature and scope of strategic planning in your organization. Please describe the planning practices as you feel they truly exist in your organization, not as you believe they should exist.

Data gathered with this questionnaire will be treated confidentially and presented only in summary form without disclosing the name or affiliation of the respondent.

Company name

Title of person completing questionnaire\_

PART I

| 1. | Please indicate the person or unit that develops strategic plans in your organization:          The Chief Executive Officer (CEO)          A strategic planning committee made up of all or selected members of top          A centralized planning department          Other (please identify) |  |
|----|---|--|
| 2. | Does your organization prepare written strategic plans?   |  |
|    | <ul> <li>a) If yes, check the appropriate space concerning the time period covered by these strategic plans</li> <li>less than one year</li> <li>4 – 6 years</li> </ul>   |  |
|    | 1 – 3 years7 or more years  |  |
|    | b) How long have you been using written strategic plans?<br>years   |  |
| 3. | Do you use outside consultants in developing strategic plans?   |  |
| 4. | Does your organization use mathematical models or simulations to assist in strategic  |  |
|    | planning? yes no  |  |

If yes, please complete parts a and b, otherwise, please proceed to Part II of the questionnaire.

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- 4. Continued
  - a) Are these mathematical models or simulations computer based?
  - b) Mathematical models and simulations make significant contributions in the strategic decision making system of our organization.

strongly agree

\_\_\_\_\_ strongly disagree \_\_\_\_\_\_ somewhat agree

disagree \_\_\_\_\_agree

\_\_\_\_ somewhat disagree

5. Please indicate the industry category that best describes your company (check one).

- \_\_\_\_\_ Manufacturing
- Wholesaling
- \_\_\_\_\_ Services
- \_\_\_\_ Retail
- Construction
- Agriculture
- Other

#### PART II

Directions: For each of the statements below, please circle the number that best describes how much you agree or disagree with the statement:

Strongly Disagree Disagree Somewhat Disagree Strongly Agree Agree Strongly Agree

|    |   | SD  | D | SD  | SA | Α | SA |
|----|---|-----|---|-----|----|---|----|
| 1. | There is wide participation by management in strategy selection.  | 1   | 2 | 3   | 4  | 5 | 6  |
| 2. | We have a formal statement of organization goals and objectives.  | 1   | 2 | 3   | 4  | 5 | 6  |
| 3. | There is wide participation by management in the review and<br>evaluation of strategic plans.                             | 1   | 2 | 3   | 4  | 5 | 6  |
| 4. | Our organization has established both long-range and short-range goals and objectives.                                    | 1   | 2 | 3   | 4  | 5 | 6  |
| 5. | Review and evaluation are important in our strategic planning process.  | 1   | 2 | 3   | 4  | 5 | 6  |
| 6. | The long-range implications of external environmental (political, social, etc.) threats and opportunities are considered. | 1   | 2 | 3   | 4  | 5 | 6  |
| 7. | Our organization uses mathematical models or computer simulations in<br>the determination of strengths and weaknesses.    | . 1 | 2 | 3   | 4  | 5 | 6  |
| 8. | Our organization developed formal procedures for determining strengths<br>and weaknesses.                                 | 1   | 2 | : 3 | 4  | 5 | 6  |
| 9. | There is wide management participation in the development of strategic<br>alternatives.                                   | 1   | 2 | 3   | 4  | 5 | 6  |

| Strongly Disagree | Disagree | Somewhat Disagree | Stronaly Aaree | Aaree | Stronaly A | \aree |
|-------------------|----------|-------------------|----------------|-------|------------|-------|
|-------------------|----------|-------------------|----------------|-------|------------|-------|

|             |  | SD | D | SD     | SA | A      | SA       |
|-------------|--|----|---|--------|----|--------|----------|
| 10          | When formulating strategy, we identify any external environmental  |    |   |        |    |        |          |
| 10.         | (political, economic, social, etc.) threats and opportunities.   | 1  | 2 | 3      | 4  | 5      | 6        |
| 11.         | Budgets for strategic plans are developed.   | 1  | 2 | 3      | 4  | 5      | 6        |
| 12.         | The results of our strategic planning process clearly spell out what will<br>be done, when and by whom.  | 1  | 2 | 3      | 4  | 5      | 6        |
| 13.         | We attempt to project the outcome of strategic alternatives facing our<br>organization.  | 1  | 2 | 3      | 4  | 5      | 6        |
| 14.         | Our organization uses mathematical models or computer simulations<br>in strategy selection.  | 1  | 2 | 3      | 4  | 5      | 6        |
| 15.         | We have a formal statement of our organization's mission.  | 1  | 2 | 3      | 4  | 5      | 6        |
| 16.         | Once a strategy has been selected it is implemented.   | 1  | 2 | 3      | 4  | 5      | 6        |
| 17.         | There is wide management participation in determining our organizational<br>strengths and weaknesses.  | 1  | 2 | 3      | 4  | 5      | 6        |
| 18.         | Our organization uses mathematical models or computer simulations in<br>developing strategic alternatives.   | 1  | 2 | 3      | 4  | 5      | 6        |
| <b>19</b> . | Our mission is long-term in nature.  | 1  | 2 | 3      | 4  | 5      | 6        |
| 20.         | We identify and monitor other companies providing products or services<br>similar to ours.   | 1  | 2 | 3      | 4  | 5      | 6        |
| 21.         | When selecting a strategy, our organization is concerned with long-term<br>implications.   | 1  | 2 | 3      | 4  | 5      | 6        |
| 22.         | Our organization has formal procedures for strategy selection.   | 1  | 2 | 3      | 4  | 5      | 6        |
| 23.         | We develop budgets for all strategic alternatives.   | 1  | 2 | 3      | 4  | 5      | 6        |
| 24.         | Our organization uses mathematical models or computer simulations<br>in the implementation of strategic plans.   | 1  | 2 | : 3    | 4  | 5      | 6        |
| 25.         | Our organization develops goals and objectives.  | 1  | 2 | 2 3    | 4  | 5      | 6        |
| 26.         | There is a wide dispersion of management responsibility for the<br>implementation of strategic plans.  | 1  | 2 | 2 3    | 4  | 5      | 6        |
| <b>27</b> . | Our organization uses mathematical models or computer simulations<br>In the formulation of goals and objectives.   | 1  | 2 | 2 3    | 4  | 5      | 6        |
| 28.         | Our organization has formal procedures for reviewing and evaluating<br>strategies.   | 1  | 2 | 3      | 4  | 5      | 6        |
| 29.         | Our organization has developed a statement of mission.   | 1  | 2 | 3      | 4  | 5      | 6        |
| 30.         | Our organization has formal procedures for evaluating external environmental (political, social, etc.) threats and opportunities.  | 1  | 2 | 3      | 4  | 5      | 6        |
| 31.         | Our organization has a strategic plan.   | 1  | 2 | 3      | 4  | 5      | 6        |
| 32.         | There is wide management participation in identifying external environmental (political, economic, social, etc.) threats and   | 4  | - | 2      |    | E      | <u>^</u> |
| 22          | opportunities.   | 1  | 2 | ა<br>ა | 4  | 5<br>5 | 0        |
| 33.<br>24   | Our organization allocates adequate resources for careving out   | 1  | 2 | 3      | 4  | 5      | b        |
| 34.         | strategic plans.   | 1  | 2 | 3      | 4  | 5      | 6        |
| 35.         | The long-term impacts of organizational strengths and weaknesses are evaluated.  | 1  | 2 | 2 3    | 4  | 5      | 6        |
| 36.         | Our organization uses mathematical models or computer<br>simulations in the analysis of external environmental<br>(political, economic, social, etc.) threats and opportunities. | 1  | 2 | 23     | 4  | 5      | 6        |
| 37.         | Alternatives are developed before a strategic plan is adopted.   | 1  | 2 | 2 3    | 4  | 5      | 6        |
| 38.         | Our organization has no formal procedures for identifying strategic<br>alternatives.   | 1  | 2 | 2 3    | 4  | 5      | 6        |

Strongly Disagree Disagree Somewhat Disagree Strongly Agree Agree Strongly Agree

|             |   | SD  | D | SD | SA | A | SA |
|-------------|---|-----|---|----|----|---|----|
| 39.         | When formulating strategy, we identify strengths and<br>weaknesses of our organization.                               | 1   | 2 | 3  | 4  | 5 | 6  |
| 40.         | In developing alternative strategies, long-range<br>considerations are important.                                     | 1   | 2 | 3  | 4  | 5 | 6  |
| 41.         | Long-range factors are important when implementing strategy.  | 1   | 2 | 3  | 4  | 5 | 6  |
| 42.         | Our organization uses mathematical models or computer<br>simulations in the review and evaluation of strategic plans. | 1   | 2 | 3  | 4  | 5 | 6  |
| 43.         | There is wide management participation in establishing goals<br>and objectives.                                       | 1   | 2 | 3  | 4  | 5 | 6  |
| <b>4</b> 4. | As a planning executive, I am very satisfied with the:  |     |   |    |    |   |    |
|             | <ul> <li>participation of personnel in the strategic planning<br/>effort</li> </ul>                                   | 1   | 2 | 3  | 4  | 5 | 6  |
|             | d) goal achievement of our organization   | 1   | 2 | 3  | 4  | 5 | 6  |
|             | e) morale of organization personnel   | · 1 | 2 | 3  | 4  | 5 | 6  |
|             | f) financial status of the organization   | 1   | 2 | 3  | 4  | 5 | 6  |
|             | g) equipment and facilities of the organization   | 1   | 2 | 3  | 4  | 5 | 6  |
|             | h) planning process in our organization.  | 1   | 2 | 3  | 4  | 5 | 6  |
| <b>4</b> 5. | The sales/revenue growth rate of my business is higher than that of my key competitors.                               | 1   | 2 | 3  | 4  | 5 | 6  |
| <b>46</b> . | The sales/revenue growth rate of my business is higher than that of my key competitors.                               | 1   | 2 | 3  | 4  | 5 | 6  |
| 47.         | The profit margin growth rate of my business is higher than that of my key competitors.                               | 1   | 2 | 3  | 4  | 5 | 6  |
| 48.         | The profit margin growth rate of my business is lower than that of my key competitors.                                | 1   | 2 | 3  | 4  | 5 | 6  |
| 49.         | My company is establishing new sites/locations at a faster<br>rate than that of my key competitors.                   | 1   | 2 | 3  | 4  | 5 | 6  |
| 50.         | My company is establishing new sites/locations at a slower<br>Rate than that of my key competitors.                   | 1   | 2 | 3  | 4  | 5 | 6  |
| 51.         | The customer/client base of my business is growing at a<br>faster rate than that of my key competitors.               | 1   | 2 | 3  | 4  | 5 | 6  |
| 52.         | The customer / client base of my business is growing at a<br>slower rate than that of my key competitors.             | 1   | 2 | 3  | 4  | 5 | 6  |
| 53.         | My company is increasing its staff at a faster rate than that of my key competitors.                                  | 1   | 2 | 3  | 4  | 5 | 6  |
| 54.         | My company is increasing its staff at a faster rate than that of my key competitors.                                  | 1   | 2 | 3  | 4  | 5 | 6  |
|             |   |     |   |    |    |   |    |

We appreciate your cooperation in completing this questionnaire and welcome any comments, pertaining to strategic planning, on the bottom of this page. Thank you for your consideration.

COMMENTS:

# APPENDIX C

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#### APPENDIX C SURVEY OF STRATEGIC PLANNING ACTIVITIES

General Instructions: This questionnaire is designed to gather information concerning the nature and scope of strategic planning in small businesses (i.e., firms with less than 500 employees). If you are a small business owner and/or operator, please describe the planning practices as you feel they truly exist in your organization, not as you believe they should exist. Please complete and submit this survey one time only.

Data gathered with this questionnaire will be treated confidentially and presented only in summary form without disclosing the name or affiliation of the respondent.

Com

1.

2.

3.

4.

5.

6.

7.

8.

|                     | PARTI   |
|---------------------|---|
| Whic                | ch best describes your current professional title ( <i>check one</i> )?<br>Owner / President / Chief Executive Officer / Principal / Partner<br>Operator / Vice President / Assistant Director  |
|                     | Manager / Administrator / Assistant   |
| Does                | s your company have a location(s) in the metro Atlanta, GA area?  |
| <u> </u>            | Yes No  |
| How                 | long has your company been operating?<br>_ Years  |
| Appr                | oximately how many individuals does your company currently employ full-time?  |
| Plea                | se indicate the industry category that best describes your company (check one).   |
|                     | Manufacturing   |
|                     | _ Wholesaling   |
|                     | _ Services  |
|                     |   |
| ·                   |   |
|                     | _ Agriculture   |
|                     | _ Other   |
| Plea                | se indicate the person or unit that is primarily responsible for developing strategic plans in your organ   |
| (che                | CK ONE):  |
|                     | _ I ne Chief Executive Officer (CEO)  |
|                     | A strategic planning committee made up of all or selected members of top management   |
|                     | _ A centralized planning department   |
|                     |   |
| _                   |   |
| Doe                 | s your organization prepare written strategic plans?  |
| Doe                 | s your organization prepare written strategic plans?<br>Yes No  |
| Doe<br><br>a)       | s your organization prepare written strategic plans?<br>Yes Yes No<br>If yes, check the appropriate space concerning the time period covered by these strategic plans:<br>Less than one year 3 - 4 years 7 or more years  |
| Doe<br><br>a)       | s your organization prepare written strategic plans?<br>Yes No<br>If yes, check the appropriate space concerning the time period covered by these strategic plans:<br>Less than one year 3 – 4 years 7 or more years<br>1 – 2 years 5 - 6 years   |
| Doe<br><br>a)<br>b) | s your organization prepare written strategic plans?<br>Yes No<br>If yes, check the appropriate space concerning the time period covered by these strategic plans:<br>Less than one year 3 – 4 years 7 or more years<br>1 – 2 years 5 - 6 years<br>How long have you been using written strategic plans?  |
| Doe<br><br>a)<br>b) | s your organization prepare written strategic plans?<br>Yes No<br>If yes, check the appropriate space concerning the time period covered by these strategic plans:<br>Less than one year 3 - 4 years 7 or more years<br>1 - 2 years 5 - 6 years<br>How long have you been using written strategic plans?<br>Less than one year 3 - 4 years 7 or more years                            |
| Doe<br>a)<br>b)     | s your organization prepare written strategic plans?<br>Yes No<br>If yes, check the appropriate space concerning the time period covered by these strategic plans:<br>Less than one year 3 – 4 years 7 or more years<br>1 – 2 years 5 - 6 years<br>How long have you been using written strategic plans?<br>Less than one year 3 – 4 years 7 or more years<br>1 – 2 years 5 - 6 years |

#### PART II

Directions: For each of the statements below, please circle the number that best describes how much you agree or disagree with the statement:

Strongly Disagree \* Disagree \* Somewhat Disagree \* Somewhat Agree \* Agree \* Strongly Agree

|   | Strongly Disagree | Disagree | Somewhat Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|-------------------|----------|-------------------|----------------|-------|----------------|
| 1. There is wide participation by management in strategy selection.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 2. We have a formal statement of organization goals and objectives.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 3. There is wide participation by management in the review and evaluation of strategic plans.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 4. Our organization has established both long-range and short-range strategies.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 5. The long-range implications of external environmental (political, social, etc.) threats and opportunities are considered.                              | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 6. Our organization uses mathematical models or computer simulations in the determination of strengths and weaknesses.                                    | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 7. There is wide management participation in the development of strategic alternatives.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 8. Our organization follows a formal process for selecting strategies.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 9. Budgets for strategic plans are developed.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 10. The results of our strategic planning process clearly spell out what will be done, when and by whom.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 11. Our final strategies are selected after reviewing all feasible alternative strategies.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 12. Our organization uses mathematical models or computer simulations in strategy selection.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 13. We have a formal statement of our organization's mission.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 14. Once a strategy has been selected it is implemented.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 15. There is wide management participation in determining our organizational strengths and weaknesses.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 16. Our organization uses mathematical models or computer simulations in developing strategic alternatives.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 17. There is wide managerial participation in selecting our organizational strategies.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 18. Our organization has selected specific strategies.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 19. When selecting a strategy, our organization is concerned with long-term implications.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 20. Our organization has formal procedures for strategy selection.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 21. We develop budgets for all strategic alternatives.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 22. Our organization develops goals and objectives.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 23. Our organization has developed a statement of mission.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| <ol> <li>Our organization has formal procedures for evaluating external environmental (political, social, etc.) threats and<br/>opportunities.</li> </ol> | 1                 | 2        | 3                 | 4              | 5     | 6              |

|             |  | Strongly Disagree | Disagree | Somewhat Disagree | Somewhat Agree | Agree | Strongly Agree |
|-------------|--|-------------------|----------|-------------------|----------------|-------|----------------|
| 25.         | Our organization has a strategic plan.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 26.         | There is wide management participation in identifying external environmental (political, economic, social, etc.) threats<br>and opportunities.                             | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 27.         | There is continuous review and evaluation of the strategic plan.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 28.         | Our organization allocates adequate resources for carrying out strategic plans.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| <b>2</b> 9. | The long-term impacts of organizational strengths and weaknesses are evaluated.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 30.         | Our organization uses mathematical models or computer simulations in the analysis of external environmental (political, economic, social, etc.) threats and opportunities. | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 31.         | In developing alternative strategies, long-range considerations are important.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 32.         | Long-range factors are important when implementing strategy.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 33.         | Our organization uses mathematical models or computer simulations in the review and evaluation of strategic plans.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 34.         | There is wide management participation in establishing goals and objectives.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 35.         | The sales/revenue growth rate of my business is higher than that of my key competitors.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 36.         | My company is establishing new sites / locations at a faster rate than that of my key competitors.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 37.         | The customer / client base of my business is growing at a faster rate than that of my key competitors.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 38.         | My company is increasing its staff at a faster rate than that of my key competitors.   | 1                 | 2        | 3                 | 4              | 5     | 6              |

Strongly Disagree \* Disagree \* Somewhat Disagree \* Somewhat Agree \* Agree \* Strongly Agree

We appreciate your cooperation in completing this questionnaire and welcome any comments, pertaining to strategic planning, on the bottom of this page. Thank you for your consideration.

COMMENTS:

# APPENDIX D

# APPENDIX D

# QUESTIONS AND DIMENSIONS MATRIX

| Dimension                      | Survey Question No:                 |
|--------------------------------|-------------------------------------|
| Strategic Planning             |                                     |
| Mission                        | 13, 23                              |
| Objectives                     | 2, 22, 34                           |
| External Analysis              | 5, 24, 26, 30                       |
| Internal Analysis              | 6, 15, 29                           |
| Develop Alternative Strategies | 7, 16, 21, 31                       |
| Strategy Selection             | 1, 4, 8, 11, 12, 17, 18, 19, 20, 25 |
| Implementation                 | 10, 14, 28, 32                      |
| Control                        | 3, 9, 27, 33                        |
| Growth                         |                                     |
| Sales / Revenue                | 35                                  |
| Customer / Client Base         | 37                                  |
| New Sites / Locations          | 36                                  |
| Staff                          | 38                                  |

# APPENDIX E

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# APPENDIX E

# TWENTY COUNTY ATLANTA METROPOLITAN STATISTICAL AREA (MSA)

| Barrow   | Cobb    | Forsyth  | Paulding |
|----------|---------|----------|----------|
| Bartow   | Coweta  | Fulton   | Pickens  |
| Carroll  | DeKalb  | Gwinnett | Rockdale |
| Cherokee | Douglas | Henry    | Spalding |
| Clayton  | Fayette | Newton   | Walton   |

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# APPENDIX F

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### APPENDIX F

### STATISTICAL OUTPUTS

# Strategic Planning Activities Survey Pre-Test Results September 2002

# 1. Mission Variable

| Total Variance E | d     |          | Extraction |         |          |           |
|------------------|-------|----------|------------|---------|----------|-----------|
| Fige             |       |          | Sums of    |         |          |           |
| Ligo             | S     |          |            | Squared |          |           |
| Componen         | Total | % of     | Cumulativ  | Total   | % of     | Cumulativ |
| t                | rotai | Variance | e %        | Total   | Variance | e %       |
| 1                | 2.389 | 79.636   | 79.636     | 2.389   | 79.636   | 79.636    |
| 2                | .427  | 14.246   | 93.881     |         |          |           |
| 3                | .184  | 6.119    | 100.000    |         |          |           |

Extraction Method: Principal Component Analysis. Note: One-factor solution (only 1 component w/ Eigenvalue over 1.0 (i.e., 2.389); No rotated component matrix.

Component Matrix

| Co | Compone |  |  |  |  |
|----|---------|--|--|--|--|
|    | nt      |  |  |  |  |
|    | 1       |  |  |  |  |
| M1 | .930    |  |  |  |  |
| M2 | .838    |  |  |  |  |
| MЗ | .907    |  |  |  |  |

Extraction Method: Principal Component Analysis.

a 1 components extracted.

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*

----

RELIABILITY ANALYSIS - SCALE (AL PHA)

#### Item-total Statistics

|    | Scale<br>Mean<br>if Item | Scale<br>Variance<br>if Item | Corrected<br>Item-<br>Total | Alpha<br>if Item |
|----|--------------------------|------------------------------|-----------------------------|------------------|
| M1 | 8.4857                   | 8.0218                       | .8254                       | .7521            |
| M2 | 8.4286                   | 9.6639                       | .6657                       | .8957            |
| M3 | 8.6286                   | 8.3580                       | .7795                       | .7963            |

#### Reliability Coefficients

N of Cases = 35.0 N of Items = 3

Alpha = .8720

Note: Keep M1 and M3 and dump M2 (because alpha if M2 is deleted would still be very high i.e., .8957).

# 2. Objective Variable

| <b>Total Varian</b> | ce Explained | ł        |           |            |          |           |
|---------------------|--------------|----------|-----------|------------|----------|-----------|
| Initial             |              |          |           | Extraction |          |           |
| E                   | Eigenvalue   |          |           | Sums of    |          |           |
|                     | s            |          |           | Squared    |          |           |
|                     |              |          |           | Loadings   |          |           |
| Componen            | Total        | % of     | Cumulativ | Total      | % of     | Cumulativ |
| t                   |              | Variance | e %       |            | Variance | е%        |
| 1                   | 2.420        | 80.676   | 80.676    | 2.420      | 80.676   | 80.676    |
| 2                   | .477         | 15.912   | 96.588    |            |          |           |
| 3                   | .102         | 3.412    | 100.000   |            |          |           |

Extraction Method: Principal Component Analysis. Note: One-factor solution.

Component Matrix

| Componen |      |  |
|----------|------|--|
|          | t    |  |
| ,        | 1    |  |
| OB1      | .812 |  |
| OB3      | .954 |  |
| OB5      | .923 |  |

Extraction Method: Principal Component Analysis. a 1 components extracted.

Note: Keep OB1, OB3, and OB5 and dump OB2, and Ob4. Run reliability with all variables: \*\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*\* RELIABILITY ANALYSIS -SCALE (A L P H A)Item-total Statistics Scale Scale Corrected Mean Variance Item-Alpha if Item Total if Item if Item Deleted Deleted Deleted Correlation OB1 9.1143 7.2807 .7112 .7996 OB2 9.1429 8.1849 .7354 .7910 OB3 9.3429 6.3496 .7389 .7824 Reliability Coefficients N of Cases = 35.0 N of Items = 3

Alpha = .8505 Final Note: Keep OB1, OB3, and OB5 and dump OB2, and Ob4.

#### 3. External Analysis Variable **Total Variance Explained** Initial Extraction Sums of Eigenvalue Squared s Loadings Componen Total % of Cumulativ Total % of Cumulativ e % Variance e % Variance t 67.663 2.707 67.663 2.707 1 67.663 67.663 2 81.996 .573 14.332 3 .466 11.644 93.640 .254 6.360 4 100.000 Extraction Method: Principal Component Analysis. Note: One-factor solution.

Component Score Coefficient Matrix

| Co  | mponen |
|-----|--------|
|     | t      |
|     | 1      |
| EA1 | .281   |
| EA4 | .330   |
| EA5 | .302   |
| EA6 | .299   |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Component Scores.

Note: Run Reliability with all variables:

RELIABILITY ANALYSIS - SCALE (ALPHA)

**Item-total Statistics** 

|     | Scale   | Scale    | Corrected | l    |         |
|-----|---------|----------|-----------|------|---------|
|     | Mean    | Variance | Item-     |      | Alpha   |
|     | if Item | if Item  | Total     | if   | Item    |
|     | Deleted | Deleted  | Correlat  | tion | Deleted |
| EA1 | 20.4706 | 24.55    | .6        | 228  | .7278   |
| EA2 | 20.4118 | 28.24    | .96       | 482  | .7857   |
| EA3 | 20.1176 | 29.92    | .251 .2   | 148  | .8095   |
| EA4 | 21.1176 | 19.37    | .7 .7     | 453  | .6832   |
| EA5 | 20.6765 | 23.19    | .6        | 456  | .7182   |
| EA6 | 21.4706 | 22.07    | .6 /49    | 067  | .7273   |
|     |         |          |           |      |         |

#### **Reliability Coefficients**

N of Cases = 34.0

N of Items = 6

Alpha = .7808

Note: EA2 and EA3 have the highest scores for reliability if Alpha is deleted so dump them.

Note: Re-run Reliability with just EA1, EA4, EA5, EA6:

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\* -RELIABILITY ANALYSIS - SCALE (ALPHA)

Item-total Statistics

|     | Scale<br>Mean<br>if Item<br>Deleted | Scale<br>Variance<br>if Item<br>Deleted | Corrected<br>Item-<br>Total<br>Correlation | Alpha<br>if Item<br>Deleted |
|-----|-------------------------------------|---|--|-----------------------------|
| EA1 | 11.2941                             | 17.0018                                 | .5980                                      | .8274                       |
| EA4 | 11.9412                             | 12.1783                                 | .7831                                      | .7423                       |
| EA5 | 11.5000                             | 15.4091                                 | .6714                                      | .7959                       |
| EA6 | 12.2941                             | 14.1533                                 | .6594                                      | .8012                       |

#### Reliability Coefficients

N of Cases = 34.0

N of Items = 4

Alpha = .8381

Final Note: Keep EA 1, EA 4, EA5, EA6 and dump EA2 and EA3.

#### 4. Internal Analysis Variable

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\* RELIABILITY ANALYSIS -SCALE (ALPHA) Mean Std Dev Cases 3.2667 1.7991 30.0 1. IA1 2. IA3 4.7667 .9714 30.0 30.0 3. IA4 4.2333 1.3566 IA5 4.5000 .9377 30.0 4. Item-total Statistics Scale Scale Corrected Mean Variance Item-Alpha if Item if Item Total if Item Correlation Deleted Deleted Deleted IA1 13.5000 6.9483 .5235 .7092 .7681 .5680 12.0000 9.5862 IA3 IA4 12.5333 8.1885 .6597 .5731 12.2667 12.4782 .2707 .7763 IA5 Reliability Coefficients N of Cases = 30.0 N of Items = 4.7261 Alpha =

Dump IA5 and keep all the other variables. Re-run:

RELIABILITY ANALYSIS - SCALE (ALPHA)

#### Item-total Statistics

|     | Scale<br>Mean<br>if Item<br>Deleted | Scale<br>Variance<br>if Item<br>Deleted | Corrected<br>Item-<br>Total<br>Correlation | Alpha<br>if Item<br>Deleted |
|-----|-------------------------------------|---|--|-----------------------------|
| IA1 | 9.0909                              | 4.4602                                  | .5873                                      | .8187                       |
| IA3 | 7.6364                              | 7.3011                                  | .7279                                      | .6651                       |
| IA4 | 8.2424                              | 6.1269                                  | .6611                                      | .6522                       |

Reliability Coefficients

N of Cases = 33.0 N of Items = 3 Alpha = .7769

Final note: Dump IA5 and keep all of the other variables.

#### 5. Alternative Strategies Variable

| Total Varian | ce Explaine | d        |           |          |          |           |
|--------------|-------------|----------|-----------|----------|----------|-----------|
|              | Extraction  |          |           | Rotation |          |           |
|              | Sums of     |          |           | Sums of  |          |           |
|              | Squared     |          |           | Squared  |          |           |
|              | Loadings    |          |           | Loadings |          |           |
| Componen     | Total       | % of     | Cumulativ | Total    | % of     | Cumulativ |
| t            |             | Variance | e %       |          | Variance | е%        |
| 1            | 2.989       | 42.695   | 42.695    | 2.782    | 39.745   | 39.745    |
| 2            | 1.514       | 21.633   | 64.328    | 1.721    | 24.583   | 64.328    |
|              |             | 1.1.0    |           | •_       |          |           |

Extraction Method: Principal Component Analysis.

#### Rotated Component Matrix

| Co  |      |           |
|-----|------|-----------|
|     | t    |           |
|     | 1    | 2         |
| AL1 | .803 | .349      |
| AL3 | .565 | .553      |
| AL2 | .730 | 208       |
| AL4 | .819 | .140      |
| AL5 | .248 | .764      |
| AL6 | 292  | .805      |
| AL7 | .684 | 2.868E-03 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 3 iterations.

Note: Al1, Al2, and Al4 and Al7 are highest; keep these and dump all others; and run reliability test with them.

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*

RELIABILITY ANALYSIS - SCALE (ALPHA) Item-total Statistics

|     | Scale<br>Mean<br>if Item<br>Deleted | Scale<br>Variance<br>if Item<br>Deleted | Corrected<br>Item-<br>Total<br>Correlation | Alpha<br>if Item<br>Deleted |
|-----|-------------------------------------|---|--|-----------------------------|
| AL1 | 11.9655                             | 12.6059                                 | .6716                                      | .6550                       |
| AL2 | 13.0690                             | 9.7094                                  | .5416                                      | .7363                       |
| AL4 | 12.8621                             | 10.6232                                 | .6471                                      | .6434                       |
| AL7 | 11.8621                             | 14.7660                                 | .4526                                      | .7531                       |

Reliability Coefficients

N of Cases = 29.0 N of Items = 4

Alpha = .7562

Note: Keep Al1, Al2, and Al4 Al7 and dump Al3, Al5, and Al6.

6. Strategy Selection Variable

| Total Va  | riance Explair | ned      |           |            |          |            |          |          |           |
|-----------|----------------|----------|-----------|------------|----------|------------|----------|----------|-----------|
|           | Initial        |          |           | Extraction |          |            | Rotation |          |           |
|           | Eigenvalue     |          |           | Sums of    |          |            | Sums of  |          |           |
|           | s              |          |           | Squared    |          |            | Squared  |          |           |
|           |                |          |           | Loadings   |          |            | Loadings |          |           |
| Component | Total          | % of     | Cumulativ | Total      | % of     | Cumulative | Total    | % of     | Cumulativ |
| •         |                | Variance | е%        | ۰<br>۱     | Variance | %          | ١        | Variance | е%        |
| 1         | 1.753          | 43.818   | 43.818    | 1.753      | 43.818   | 43.818     | 1.508    | 37.709   | 37.709    |
| 2         | 1.001          | 25.028   | 68.846    | 1.001      | 25.028   | 68.846     | 1.245    | 31.137   | 68.846    |
| 3         | .747           | 18.682   | 87.527    |            |          |            |          |          |           |
| 4         | .499           | 12.473   | 100.000   |            |          |            |          |          |           |

Extraction Method: Principal Component Analysis.

Note: Two-factor solution.

Rotated Component Matrix

| Cor     | nponen |      |
|---------|--------|------|
|         | t t    |      |
|         | 1      | 2    |
| SS1-6.5 | 40E-02 | .884 |
| SS2     | .757   | .360 |
| SS3     | .868   | 117  |
| SS4     | .422   | .566 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 3 iterations.

Note: SS2 and SS3 are the highest, so keep them and dump all others. Run reliability test with all variables:

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*

RELIABILITY ANALYSIS - SCALE (ALPHA)

Item-total Statistics

|              | Scale        | Scale    | Corrected    |         |
|--------------|--------------|----------|--------------|---------|
|              | Mean         | Variance | Item-        | Alpha   |
|              | if Item      | if Item  | Total        | if Item |
|              | Deleted      | Deleted  | Correlation  | Deleted |
| SS3          | 12.3871      | 10.5118  | .3451        | .5079   |
| SS1          | 11.8065      | 11.1613  | .2313        | .5656   |
| SS2          | 13.7742      | 5.4473   | .5092        | .3233   |
| SS4          | 13.3226      | 7.6925   | .3734        | .4630   |
| Reliability  | Coefficients |          |              |         |
| N of Cases = | 31.0         |          | N of Items = | 4       |
| Alpha = .    | 5592         |          |              |         |

Note: Alpha is low. Run reliability with just two highest variables (SS2 and SS3):

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\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*\* RELIABILITY ANALYSIS -SCALE (ALPHA) Item-total Statistics Scale Scale Corrected Mean Variance Item-Alpha Total if Item if Item if Item Deleted Correlation Deleted Deleted .8538 4.7188 .4312 SS2 . SS3 3.4063 3.6683 .4312 Reliability Coefficients 32.0 N of Cases = N of Items = 2Alpha = .5047

Note: Alpha is low. Add additional variables/questions to this scale. Develop 5 or 6 items worded differently but test the same concept (sample size: 30-50 respondents for testing purposes).

### 7. Implementation Variable

| Total Variance  | Explaine  | d          |             |            |          |           |
|-----------------|-----------|------------|-------------|------------|----------|-----------|
|                 | Initial   |            |             | Extraction |          |           |
| Eiae            | envalue   |            |             | Sums of    |          |           |
| Ŭ               | s         |            |             | Squared    |          |           |
|                 |           |            |             | Loadings   |          |           |
| Componen        | Total     | % of       | Cumulativ   | Total      | % of     | Cumulativ |
| · t             |           | Variance   | е %         |            | Variance | e %       |
| 1               | 3.420     | 57.003     | 57.003      | 3.420      | 57.003   | 57.003    |
| 2               | .865      | 14.414     | 71.417      |            |          |           |
| 3               | .636      | 10.606     | 82.024      |            |          |           |
| 4               | .531      | 8.855      | 90.879      |            |          |           |
| 5               | .312      | 5.195      | 96.074      |            |          |           |
| 6               | .236      | 3.926      | 100.000     |            |          |           |
| Extraction Meth | od: Princ | cipal Comp | onent Analy | vsis.      |          |           |

Note: One-factor component.

#### Component Matrix

| Componen |      |  |  |  |  |
|----------|------|--|--|--|--|
|          | t    |  |  |  |  |
|          | 1    |  |  |  |  |
| 11       | .817 |  |  |  |  |
| 13       | .796 |  |  |  |  |
| 14       | .769 |  |  |  |  |
| 15       | .524 |  |  |  |  |
| 16       | .835 |  |  |  |  |
| 17       | .744 |  |  |  |  |

Extraction Method: Principal Component Analysis. a 1 components extracted.

**Rotated Component Matrix** 

a Only one component was extracted. The solution cannot be rotated.

Note: 11, 13, 14, 16, and 17 are highest; keep these and dump 15.

Note: Run reliability with all variables:

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*\* RELIABILITY ANALYSIS - SCALE (ALPHA)

Item-total Statistics

|          | Scale            | Scale    | Corrected   |         |
|----------|------------------|----------|-------------|---------|
|          | Mean             | Variance | Item-       | Alpha   |
|          | if Item          | if Item  | Total       | if Item |
|          | Deleted          | Deleted  | Correlation | Deleted |
| I1       | 20.4000          | 26.1793  | .7155       | .7716   |
| I3       | 20.3000          | 29.9414  | .6671       | .7924   |
| I4       | 21.4000          | 23.6966  | .6413       | .7943   |
| I5       | 20.9000          | 30.0931  | .3971       | .8389   |
| I6       | 20.3667          | 29.4816  | .7189       | .7847   |
| I7       | 20.3000          | 27.1138  | .5783       | .8020   |
| Reliabil | ity Coefficients |          |             |         |

Reliability Coefficients

N of Cases = 30.0

N of Items = 6

Alpha = .8258

Note: Run reliability with just I1, I3, I4, I6, I7 (dumping I5):

\*\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\* RELIABILITY ANALYSIS - SCALE (ALPHA) Item-total Statistics

| Scale   | Scale  | Corrected  |   |
|---------|--|--|---|
| Mean    | Variance   | Item-  | Alpha   |
| if Item | if Item  | Total  | if Item   |
| Deleted | Deleted  | Correlation  | Deleted   |
| 16.6250 | 18.0484  | .6706  | .7413   |
| 16.6563 | 21.4587  | .5313  | .7866   |
| 17.5000 | 16.1935  | .5691  | .7923   |
| 16.5625 | 20.7702  | .6698  | .7578   |
| 16.5313 | 18.2571  | .6151  | .7590   |
|         | Scale<br>Mean<br>if Item<br>Deleted<br>16.6250<br>16.6563<br>17.5000<br>16.5625<br>16.5313 | ScaleScaleMeanVarianceif Itemif ItemDeletedDeleted16.625018.048416.656321.458717.500016.193516.562520.770216.531318.2571 | Scale         Scale         Corrected           Mean         Variance         Item-           if Item         if Item         Total           Deleted         Deleted         Correlation           16.6250         18.0484         .6706           16.6563         21.4587         .5313           17.5000         16.1935         .5691           16.5625         20.7702         .6698           16.5313         18.2571         .6151 |

Reliability Coefficients

\_ . .

N of Cases = 32.0 N of Items = 5

Alpha = .8048 Final Note: Keep I1, I3, I4, I6, I7 and dump I5.

8. – Control Variable

\_ . . . . .

| Total Varia | ance Explai | ined     |           |            |          |           |          |          |          |
|-------------|-------------|----------|-----------|------------|----------|-----------|----------|----------|----------|
|             | Initial     |          |           | Extraction |          |           | Rotation |          |          |
| Eig         | envalues    | ·        |           | Sums of    |          |           | Sums of  |          |          |
|             |             |          |           | Squared    |          |           | Squared  |          |          |
|             |             |          |           | Loadings   |          |           | Loadings |          |          |
| Compone     | Total       | % of     | Cumulativ | Total      | % of     | Cumulativ | Total    | % ofC    | umulativ |
| nt          |             | Variance | e %       |            | Variance | е %       | ١        | /ariance | e %      |
| 1           | 2.343       | 39.049   | 39.049    | 2.343      | 39.049   | 39.049    | 2.033    | 33.882   | 33.882   |
| 2           | 1.388       | 23.130   | 62.179    | 1.388      | 23.130   | 62.179    | 1.683    | 28.053   | 61.935   |
| 3           | 1.029       | 17.146   | 79.325    | 1.029      | 17.146   | 79.325    | 1.043    | 17.390   | 79.325   |
| 4           | .539        | 8.983    | 88.307    |            |          |           |          |          |          |
| 5           | .387        | 6.457    | 94.764    |            |          |           |          |          |          |
| 6           | .314        | 5.236    | 100.000   |            |          |           |          |          |          |

Extraction Method: Principal Component Analysis.

Note: Three-factor solution.

#### Rotated Component Matrix

| (    | Componen   |            |            |
|------|------------|------------|------------|
|      | t          |            |            |
|      | 1          | 2          | 3          |
| CN1  | .228       | .864       | .139       |
| CN3  | .830       | 1.912E-02  | -7.721E-02 |
| CN2- | -2.007E-02 | .911       | 130        |
| CN4  | 1.931E-02- | -3.145E-03 | .989       |
| CN5  | .796       | .325       | -2.526E-02 |
| CN6  | .811-      | -5.737E-03 | .152       |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 4 iterations.

Note: CN3, CN5, CN6 are the highest, so keep these and dump CN1, CN2, and CN4.

Note: Run Reliability test with all variables:

RELIABILITY ANALYSIS - SCALE (ALPHA)

**Item-total Statistics** 

|     | Scale   | Scale    | Correct | ed     |         |
|-----|---------|----------|---------|--------|---------|
|     | Mean    | Variance | Iten    | n-     | Alpha   |
|     | if Item | if Item  | Total   |        | if Item |
|     | Deleted | Deleted  | Corre   | lation | Deleted |
| CN1 | 20.3571 | 18.38    | 362     | .4707  | .5286   |
| CN2 | 20.2500 | 20.63    | 389     | .2053  | .6153   |
| CN3 | 20.6429 | 17.27    | 751     | .4233  | .5343   |
| CN4 | 22.2857 | 21.39    | 968     | .0394  | .6916   |
| CN5 | 21.0000 | 16.60    | 567     | .6132  | .4688   |
| CN6 | 21.5357 | 14.85    | 505     | .4460  | .5211   |

Reliability Coefficients

N of Cases = 28.0 N of Items = 6

Alpha = .6117

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*

RELIABILITY ANALYSIS - SCALE (ALPHA)

Item-total Statistics

|          | Scale            | Scale    | Corrected   |         |
|----------|------------------|----------|-------------|---------|
|          | Mean             | Variance | Item-       | Alpha   |
|          | if Item          | if Item  | Total       | if Item |
|          | Deleted          | Deleted  | Correlation | Deleted |
| CN3      | 7.8929           | 7.1362   | .5614       | .6628   |
| CN5      | 8.2500           | 7.6759   | .6260       | .6204   |
| CN6      | 8.7857           | 5.4339   | .5635       | .6972   |
| Reliabil | ity Coefficients |          |             |         |

N of Cases = 28.0 N of Items = 3

Alpha = .7409

Note: CN2 and CN4 have highest Alphas if item deleted. Dump them and keep CN3, CN5, and CN6

Note: Run Reliability test with only CN3, CN5, and CN6 variables:

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*\* RELIABILITY ANALYSIS - SCALE (ALPHA) Item-total Statistics

|                   | Scale<br>Mean<br>if Item<br>Deleted | Scale<br>Variance<br>if Item<br>Deleted | Corrected<br>Item-<br>Total<br>Correlation | Alpha<br>if Item<br>Deleted |
|-------------------|-------------------------------------|---|--|-----------------------------|
| CN5<br>CN3<br>CN6 | 8.2500<br>7.8929<br>8.7857          | 7.6759<br>7.1362<br>5.4339              | .6260<br>.5614<br>.5635                    | .6204<br>.6628<br>.6972     |
| Reliability (     | Coefficients                        |   |  |                             |
| N of Cases =      | 28.0                                |   | N of Items =                               | 3                           |

Alpha = .7409

Final Note: Alpha is high. Keep CN3, CN5, and CN6 and dump CN2 and CN4.

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### 9. Growth Variable

| Total Variar | nce Explaii | ned      |           |            |          |           |          |          |           |
|--------------|-------------|----------|-----------|------------|----------|-----------|----------|----------|-----------|
|              | Initial     |          |           | Extraction |          |           | Rotation |          |           |
| Ei           | genvalue    |          |           | Sums of    |          |           | Sums of  |          |           |
| ·            | Š S         |          |           | Squared    |          |           | Squared  |          |           |
|              |             |          |           | Loadings   |          |           | Loadings |          |           |
| Compone      | Total       | % of C   | Cumulativ | Total      | % of     | Cumulativ | Total    | % of     | Cumulativ |
| nt           |             | Variance | e %       |            | Variance | е%        |          | Variance | е%        |
| 1            | 3.092       | 30.918   | 30.918    | 3.092      | 30.918   | 30.918    | 3.069    | 30.686   | 30.686    |
| 2            | 2.869       | 28.690   | 59.607    | 2.869      | 28.690   | 59.607    | 2.548    | 25.482   | 56.168    |
| 3            | 1.816       | 18.156   | 77.763    | 1.816      | 18.156   | 77.763    | 2.160    | 21.595   | 77.763    |
| 4            | .847        | 8.472    | 86.236    |            |          |           |          |          |           |
| 5            | .641        | 6.406    | 92.642    |            |          |           |          |          |           |
| 6            | .256        | 2.564    | 95.206    |            |          |           |          |          |           |
| 7            | .218        | 2.175    | 97.381    |            |          |           |          |          |           |
| 8            | .138        | 1.381    | 98.762    |            |          |           |          |          |           |
| 99           | .022E-02    | .902     | 99.664    |            |          |           |          |          |           |
| 10 3         | .359E-02    | .336     | 100.000   |            |          |           |          |          |           |

Extraction Method: Principal Component Analysis.

### Rotated Component Matrix

| Co      | mponen  |          |         |
|---------|---------|----------|---------|
|         | t       |          |         |
|         | 1       | 2        | 3       |
| RH      | .880    | 219 4.7  | 81E-02  |
| RL-2.7  | 759E-03 | .812     | .219    |
| PH      | .474    | 516      | .642    |
| PL      | .106    | .937-5.6 | 04E-03  |
| NSF     | .790    | .218     | .198    |
| NSS 1.8 | 353E-02 | .562     | .325    |
| CF      | .881    | 105-8.8  | 875E-02 |
| CS      | 182     | .399     | .817    |
| ISF     | .791    | .359     | 207     |
| ISS 1.1 | 745E-02 | .185     | .914    |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 6 iterations.

Note: Run factor analysis using rh, nsf, cf and isf

| Total Variance E                                     | Explaine<br>Initial<br>nvalue<br>s                  | d  |  |   | Extr<br>Su<br>So<br>Loa | action<br>ums of<br>juared<br>adings |            |                       |            |                        |         |    |    |
|--|---|--|--|---|-------------------------|--------------------------------------|------------|-----------------------|------------|------------------------|---------|----|----|
| Componen<br>t<br>1<br>2<br>3<br>4<br>Extraction Meth | Total<br>2.825<br>.664<br>.280<br>.230<br>od: Pring | % of<br>Variance<br>70.632<br>16.609<br>7.010<br>5.749<br>cipal Comp | Cum<br>70<br>87<br>94<br>100<br>ponent | ulativ<br>e %<br>).632<br>7.241<br>I.251<br>).000<br>Anal | vsis.                   | Total<br>2.825                       | Vari<br>7( | % of<br>ance<br>).632 | Cumi<br>70 | ulativ<br>e %<br>).632 |         |    |    |
| ***** Metho  | od 1 (s   | space sa   | ver)                                   | will  | be                      | used                                 | for        | this                  | s ana      | lysi                   | .s **** | ** |    |
|  |   |  |  |   |                         |                                      |            |                       |            |                        |         |    |    |
| RELIA  | BIL   | ΙΤΥ  | ΑN                                     | A L   | ΥS                      | ΙS                                   | -          | SC                    | CAI        | ιE                     | (A L    | РН | A) |
| Item-total S   | Statist   | cics   |  |   |                         |                                      |            |                       |            |                        |         |    |    |
|  | Sca   | ale  |  | Scal  | е                       | Co                                   | orre       | cted                  |            |                        |         |    |    |
|  | Mea   | an<br>Stom   | Va                                     | rian  | ice                     |                                      | Iter       | n–                    |            |                        | Alpha   | -  |    |
|  | Dele  | eted   | L                                      | )elet   | .em<br>.ed              | Соз                                  | rrela      | ⊐⊥<br>atior           | r          |                        | Delete  | d  |    |
|  |   |  |  |   |                         |                                      | _          |                       |            |                        |         |    |    |
| RH   | 10.3  | 3333   | 1                                      | .0.40   | )58                     |                                      | .7         | 205                   |            |                        | .8163   |    |    |
| NSE  | 10 3  | 2417<br>2222   | 1                                      | .0.05   | 30                      |                                      | .0         | 030<br>252            |            |                        | .0319   |    |    |
| TSF  | 10.0  | 5667   | 1                                      | 1.44  | 93                      |                                      | .7         | 013                   |            |                        | .8255   |    |    |
|  |   |  | -                                      |   |                         |                                      | - /        |                       |            |                        |         |    |    |
| Reliability  | Coeff   | icients  |  |   |                         |                                      |            |                       |            |                        |         |    |    |
| N of Cases =   | = 2   | 24.0   |  |   |                         | N                                    | of         | Item                  | s =        | 4                      |         |    |    |
| Alpha =  | .8603   |  |  |   |                         |                                      |            |                       |            |                        |         |    |    |

Final Note: Keep variables RH, NSF, CF, and ISF (lowest values); dump all others with the higher values (RL, PH, PL, NSS, CS, ISS).

# Strategic Planning Activities Survey SECOND PRE-TEST November 2002

#### FOR STRATEGY SELECTION VARIABLE

| <b>Total Variance</b> | Explaine  | d          |             |            |          |           |
|-----------------------|-----------|------------|-------------|------------|----------|-----------|
|                       | Initial   |            |             | Extraction |          |           |
| Eig                   | envalue   |            |             | Sums of    |          |           |
|                       | S         |            |             | Squared    |          |           |
|                       |           |            |             | Loadings   |          |           |
| Componen              | Total     | % of       | Cumulativ   | Total      | % of     | Cumulativ |
| . t                   |           | Variance   | e %         |            | Variance | е %       |
| 1                     | 4.190     | 69.827     | 69.827      | 4.190      | 69.827   | 69.827    |
| 2                     | .622      | 10.366     | 80.194      |            |          |           |
| 3                     | .437      | 7.290      | 87.484      |            |          |           |
| 4                     | .356      | 5.937      | 93.421      |            |          |           |
| 5                     | .274      | 4.574      | 97.994      |            |          |           |
| 6                     | .120      | 2.006      | 100.000     |            |          |           |
| Extraction Mot        | had Dring | ninal Comr | onont Analy | veie       |          |           |

Extraction Method: Principal Component Analysis.

Note: One-factor solution (only 1 component w/ Eigenvalue over 1.0 (i.e., 4.190). No rotated component matrix.

#### Component Matrix

| Componen |      |  |  |  |
|----------|------|--|--|--|
|          | t    |  |  |  |
|          | 1    |  |  |  |
| SS5      | .689 |  |  |  |
| SS6      | .798 |  |  |  |
| SS7      | .894 |  |  |  |
| SS8      | .865 |  |  |  |
| SS9      | .878 |  |  |  |
| SS10     | .871 |  |  |  |

Extraction Method: Principal Component Analysis. a 1 components extracted.

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*\* RELIABILITY ANALYSIS -SCALE (A L P H A)Item-total Statistics Scale Scale Corrected Mean Variance Item-Alpha if Item if Item Total if Item Deleted Deleted Deleted Correlation .5834 21.3226 27.8925 .9126 SS5 20.9355 27.1957 .7100 .8947 SS6 21.5161 22.9247 .8270 .8786 SS7 21.3548 25.5032 .7864 .8833 SS8 24.9183 .8184 SS9 21.5806 .8782 SS10 21.0323 28.5656 .8026 .8889 Reliability Coefficients N of Cases = 31.0 N of Items = 6 Alpha = .9066

Note: Dump variable with highest alpha ratings. Re-run with remaining variables:

| otal Variance Explained                          |         |          |           |            |          |           |  |
|--|---------|----------|-----------|------------|----------|-----------|--|
| Initial Ex                                       |         |          |           | Extraction |          |           |  |
| Eige   | envalue |          |           | Sums of    |          |           |  |
| -  | S       |          |           | Squared    |          |           |  |
|  |         |          |           | Loadings   |          |           |  |
| Componen   | Total   | % of     | Cumulativ | Total      | % of     | Cumulativ |  |
| t  |         | Variance | е %       |            | Variance | e %       |  |
| 1  | 3.782   | 75.635   | 75.635    | 3.782      | 75.635   | 75.635    |  |
| 2  | .460    | 9.201    | 84.837    |            |          |           |  |
| 3  | .356    | 7.124    | 91.961    |            |          |           |  |
| 4  | .275    | 5.493    | 97.454    |            |          |           |  |
| 5  | .127    | 2.546    | 100.000   |            |          |           |  |
| Extraction Method: Principal Component Analysis. |         |          |           |            |          |           |  |

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*

RELIABILITY ANALYSIS - SCALE (ALPHA) Item-total Statistics

| Scale   | Scale  | Corrected   |   |
|---------|--|---|---|
| Mean    | Variance   | Item-   | Alpha   |
| if Item | if Item  | Total   | if Item   |
| Deleted | Deleted  | Correlation   | Deleted   |
| 16.7097 | 19.3462  | .7180   | .9048   |
| 17.2903 | 15.6129  | .8510   | .8810   |
| 17.1290 | 17.9828  | .7878   | .8909   |
| 17.3548 | 17.6366  | .8036   | .8875   |
| 16.8065 | 20.6280  | .8010   | .8978   |
|         | Scale<br>Mean<br>if Item<br>Deleted<br>16.7097<br>17.2903<br>17.1290<br>17.3548<br>16.8065 | Scale         Scale           Mean         Variance           if Item         if Item           Deleted         Deleted           16.7097         19.3462           17.2903         15.6129           17.1290         17.9828           17.3548         17.6366           16.8065         20.6280 | Scale         Scale         Corrected           Mean         Variance         Item-           if Item         if Item         Total           Deleted         Deleted         Correlation           16.7097         19.3462         .7180           17.2903         15.6129         .8510           17.1290         17.9828         .7878           17.3548         17.6366         .8036           16.8065         20.6280         .8010 |

### Reliability Coefficients

N of Cases = 31.0

#### N of Items = 5

Alpha = .9126

Final Note: Alpha is high. Dump SS5 and keep remaining five variables (i.e., SS6, SS7, SS8, SS9, SS10).

### Final Strategic Planning Activities Survey Factor Analysis & Reliability Tests February 2003

#### 1. Mission Variable

| Total Varia | otal Variance Explained |            |            |            |          |           |  |  |
|-------------|-------------------------|------------|------------|------------|----------|-----------|--|--|
|             | Initial                 |            |            | Extraction |          |           |  |  |
| Eigenvalue  |                         |            |            | Sums of    |          |           |  |  |
|             | s                       |            |            | Squared    |          |           |  |  |
|             |                         |            |            | Loadings   |          |           |  |  |
| Componen    | i Total                 | % of       | Cumulativ  | Total      | % of     | Cumulativ |  |  |
| . 1         | t                       | Variance   | е %        |            | Variance | е %       |  |  |
| 1           | 1.610                   | 80.479     | 80.479     | 1.610      | 80.479   | 80.479    |  |  |
| 2           | .390                    | 19.521     | 100.000    |            |          |           |  |  |
| Extraction  | Method: Prind           | cipal Comp | onent Anal | ysis.      |          |           |  |  |

Note: One factor solution (only 1 component w/ Eigenvalue over 1.0 (i.e., 1.610). No rotated component matrix.

Component Matrix

Componen t 1 M1 .897 M2 .897

Extraction Method: Principal Component Analysis. a 1 components extracted.

\*\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*\*

| RELIABILI   | TY ANALYS:<br>Mean                             | IS - SCAI<br>Std Dev (                     | LE (ALPHA)<br>Cases         |
|---|--|--|-----------------------------|
| 1. M1<br>2. M2  | 4.2544<br>4.6228                               | 1.7740<br>1.5707                           | 114.0<br>114.0              |
| Item-total Statistic<br>Scale<br>Mean<br>if Ite<br>Delete | s Scale<br>Variance<br>m if Item<br>ed Deleted | Corrected<br>Item-<br>Total<br>Correlation | Alpha<br>if Item<br>Deleted |
| M1 4.622<br>M2 4.254                                      | 8 2.4671<br>4 3.1471                           | .6096                                      | :                           |
| Reliability Coeffici                                      | ents   |  |                             |
| N of Cases = 114.   | 0  | N of Items =                               | 2                           |
| Alpha = .7540   |  |  |                             |

Final Note: Alpha is high (.7540). Keep the two items.

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### 2. Objective Variable

| Total Variance<br>Ei | e Explaine<br>Initial<br>genvalue | d        |           | Extraction<br>Sums of |          |           |
|----------------------|-----------------------------------|----------|-----------|-----------------------|----------|-----------|
|                      | S                                 |          |           | Squared               |          |           |
|                      |                                   |          |           | Loadings              |          |           |
| Componen             | Total                             | % of     | Cumulativ | Total                 | % of     | Cumulativ |
| · t                  |                                   | Variance | е%        |                       | Variance | е %       |
| 1                    | 2.235                             | 74.490   | 74.490    | 2.235                 | 74.490   | 74.490    |
| 2                    | .442                              | 14.731   | 89.221    |                       |          |           |
| 3                    | .323                              | 10.779   | 100.000   |                       |          |           |
|                      |                                   |          |           |                       |          |           |

Extraction Method: Principal Component Analysis.

Note: One factor solution (only 1 component w/ Eigenvalue over 1.0 (i.e., 2.235). No rotated component matrix.

Component Matrix

| Componen |      |  |  |
|----------|------|--|--|
|          | t    |  |  |
|          | 1    |  |  |
| OB1      | .834 |  |  |
| OB2      | .875 |  |  |
| OB3      | .879 |  |  |

Extraction Method: Principal Component Analysis.

a 1 components extracted.

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*

-

RELIABILITY ANALYSIS - SCALE (ALPHA)

Item-total Statistics

|     | Scale   | Scale    | Corrected   |         |
|-----|---------|----------|-------------|---------|
|     | Mean    | Variance | Item-       | Alpha   |
|     | if Item | if Item  | Total       | if Item |
|     | Deleted | Deleted  | Correlation | Deleted |
| OB1 | 9.1748  | 7.3809   | .6413       | .8065   |
| OB2 | 8.9709  | 7.8913   | .7036       | .7422   |
| OB3 | 9.3301  | 7.5174   | .7096       | .7330   |

Reliability Coefficients N of Cases = 103.0

N of Items = 3

Alpha = .8261

Note: Keep OB2 and OB3 and OB1.

#### 3. External Analysis Variable

**Total Variance Explained** Extraction Initial Eigenvalue Sums of Squared s Loadings Total % of Cumulativ Componen Total % of Cumulativ Variance e % Variance e % t 61.856 2.474 61.856 61.856 1 2.474 61.856 2 78.339 .659 16.483 3 .520 12.998 91.337 4 .347 8.663 100.000 Extraction Method: Principal Component Analysis. **Component Matrix** Componen t 1 EA1 .682 EA2 .827 EA3 .777 EA4 .850 Extraction Method: Principal Component Analysis.

a 1 components extracted.

Note: One factor solution (only 1 component w/ Eigenvalue over 1.0 (i.e., 2.474); no rotated component matrix.

\*\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\* RELIABILITY ANALYSIS - SCALE (ALPH A)

|     | Scale   | Scale    | Corrected   |         |
|-----|---------|----------|-------------|---------|
|     | Mean    | Variance | Item-       | Alpha   |
|     | if Item | if Item  | Total       | if Item |
|     | Deleted | Deleted  | Correlation | Deleted |
| EA1 | 10.8142 | 19.0098  | .4856       | .7965   |
| EA2 | 11.6903 | 15.1979  | .6587       | .7149   |
| EA3 | 11.4248 | 17.2287  | .5923       | .7494   |
| EA4 | 12.0796 | 14.7525  | .6918       | .6964   |
|     |         |          |             |         |

Reliability Coefficients

N of Cases = 113.0

N of Items = 4

Alpha = .7942

Note: Keep all variables (EA1, EA2, EA3, EA4.
### 4. Internal Analysis Variable

| Total Variance | e Explained | d        |           |            |          |           |
|----------------|-------------|----------|-----------|------------|----------|-----------|
|                | Initial     |          |           | Extraction |          |           |
| Ei             | genvalue    |          |           | Sums of    |          |           |
|                | s           |          |           | Squared    |          |           |
|                |             |          |           | Loadings   |          |           |
| Componen       | Total       | % of     | Cumulativ | Total      | % of     | Cumulativ |
| t              |             | Variance | e %       |            | Variance | е %       |
| 1              | 1.754       | 58.465   | 58.465    | 1.754      | 58.465   | 58.465    |
| 2              | .844        | 28.120   | 86.585    |            |          |           |
| 3              | .402        | 13.415   | 100.000   |            |          |           |

Extraction Method: Principal Component Analysis.

Component Matrix

| Co  | mponen |
|-----|--------|
|     | t      |
|     | 1      |
| IA1 | .603   |
| IA2 | .789   |
| IA3 | .876   |

Extraction Method: Principal Component Analysis. a 1 components extracted.

Note: Oone factor solution (only 1 component w/ Eigenvalue over 1.0 (i.e., 1.754); no rotated component matrix.

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\* RELIABILITY ANALYSIS - SCALE (ALPHA)

Item-total Statistics

|             | Scale        | Scale    | Corrected    |         |
|-------------|--------------|----------|--------------|---------|
|             | Mean         | Variance | Item-        | Alpha   |
|             | if Item      | if Item  | Total        | if Item |
|             | Deleted      | Deleted  | Correlation  | Deleted |
| ተ አ 1       | 0 2014       | 6 7606   | 2016         | 7175    |
|             | 0.5214       | 0.7606   | .3016        | ./1/5   |
| IA2         | 7.2321       | 6.6663   | .4263        | .5278   |
| IA3         | 7.7500       | 5.9369   | .5941        | .2942   |
| Reliability | Coefficients |          |              |         |
| N of Cases  | = 112.0      |          | N of Items = | 3       |

Alpha = .6213

Note: Alpha is low (.6213), dump IA1 and keep IA2 and IA3.

Note: Re-run:

| ***** Metho  | od 1 (space sa   | aver) will be    | used for this a | analysis ***** |
|--------------|------------------|------------------|-----------------|----------------|
| _ R E L I A  | ВІЬІТҮ           | ANALYS           | IS - SC         | АLЕ (АLРНА)    |
| Item-total S | Statistics       |                  |                 |                |
|              | Scale            | Scale            | Corrected       |                |
|              | Mean             | Variance         | Item-           | Alpha          |
|              | if Item          | if Item          | Total           | if Item        |
|              | Deleted          | Deleted          | Correlation     | Deleted        |
| IA2<br>IA3   | 3.9027<br>4.4248 | 2.0708<br>2.2287 | .5597           | •              |
| Reliability  | Coefficients     |                  |                 |                |
| N of Cases   | = 113.0          |                  | N of Items      | = 2            |
| Alpha =      | .7174            |                  |                 |                |

Final Note: Alpha is high (.7174. Keep IA2 and IA3 and dump IA1.

## 5. Alternative Strategies Variable

| Total Varianc | e Explaine<br>Initial<br>igenvalue | d        |           | Extraction<br>Sums of |          |           |
|---------------|------------------------------------|----------|-----------|-----------------------|----------|-----------|
|               | s                                  |          |           | Squared               |          |           |
| •             |                                    |          | <b>.</b>  | Loaungs               |          |           |
| Componen      | Total                              | % of     | Cumulativ | Total                 | % of     | Cumulativ |
| t             |                                    | Variance | e %       |                       | Variance | e %       |
| 1             | 2.043                              | 51.083   | 51.083    | 2.043                 | 51.083   | 51.083    |
| 2             | .880                               | 22.001   | 73.084    |                       |          |           |
| 3             | .737                               | 18.414   | 91.498    |                       |          |           |
| 4             | .340                               | 8.502    | 100.000   |                       |          |           |

Extraction Method: Principal Component Analysis.

Component Matrix

| Coi | mponen |
|-----|--------|
|     | t      |
|     | 1      |
| AL1 | .630   |
| AL2 | .780   |
| AL3 | .862   |
| AL4 | .542   |

Extraction Method: Principal Component Analysis. a 1 components extracted.

Note: One factor solution (only 1 component w/ Eigenvalue over 1.0 (i.e., 2.043); no rotated component matrix.

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\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*\* RELIABILITY ANALYSIS - SCALE (ALPHA) Item-total Statistics Scale Scale Corrected Variance Item-Alpha Mean if Item if Item Total if Item Deleted Deleted Correlation Deleted .3801 .6519 14.7506 AL111.4587 12.0574 .5739 .5007 AL2 12.1284 .4673 AL3 11.5963 12.2244 .6506 AL4 11.0826 16.7802 .3081 .6871 Reliability Coefficients N of Items = 4N of Cases = 109.0 Alpha = .6715 Note: Alpha is low (.6715) so dump AL4 and re-run. \*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\* RELIABILITY ANALYSIS SCALE (ALPHA) -Item-total Statistics Corrected Scale Scale Variance Item-Alpha Mean if Item if Item if Item Total Deleted Deleted Correlation Deleted .3472 .7687 AL1 7.0885 10.1171 .5456 AL2 7.8053 7.3010 .5323 7.2655 .4244 AL3 8.0182 .6344 Reliability Coefficients N of Cases = 113.0 N of Items = 3Alpha = .6855 Note: Alpha is still low so dump AL1 and re-run.

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\* RELIABILITY ANALYSIS - SCALE (ALPH A)

Item-total Statistics

|     | Scale<br>Mean<br>if Item<br>Deleted | Scale<br>Variance<br>if Item<br>Deleted | Corrected<br>Item-<br>Total<br>Correlation | Alpha<br>if Item<br>Deleted |
|-----|-------------------------------------|---|--|-----------------------------|
| AL2 | 3.8246                              | 2.6238                                  | .6187                                      |                             |
| AL3 | 3.2544                              | 3.6073                                  | .6187                                      |                             |

Reliability Coefficients

N of Cases = 114.0 N of Items = 2

Alpha = .7585

Note: Alpha is highest (.7585). Keep only AL2 and AL3 and dump all others.

6. Strategy Selection Variable

| Total Variance                                   | Explaine | d        |           |            |          |           |
|--|----------|----------|-----------|------------|----------|-----------|
| Initial  |          |          |           | Extraction |          |           |
| Eig  | envalue  |          |           | Sums of    |          |           |
|  | S        |          |           | Squared    |          |           |
|  |          |          |           | Loadings   |          |           |
| Componen   | Total    | % of     | Cumulativ | Total      | % of     | Cumulativ |
| t  |          | Variance | е %       |            | Variance | e %       |
| 1  | 3.312    | 66.237   | 66.237    | 3.312      | 66.237   | 66.237    |
| 2  | .615     | 12.294   | 78.532    |            |          |           |
| 3  | .455     | 9.099    | 87.630    |            |          |           |
| 4  | .350     | 7.004    | 94.634    |            |          |           |
| 5  | .268     | 5.366    | 100.000   |            |          |           |
| Extraction Method: Principal Component Analysis. |          |          |           |            |          |           |

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*\*

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### RELIABILITY ANALYSIS - SCALE (ALPHA)

Item-total Statistics

|     | Scale   | Scale    | Corrected   |         |
|-----|---------|----------|-------------|---------|
|     | Mean    | Variance | Item-       | Alpha   |
|     | if Item | if Item  | Total       | if Item |
|     | Deleted | Deleted  | Correlation | Deleted |
| SS1 | 17.2389 | 21.9870  | .6777       | .8459   |
| SS2 | 17.6195 | 21.8807  | .6855       | .8440   |
| SS6 | 18.1239 | 21.1809  | .7279       | .8334   |
| SS7 | 17.8938 | 21.7565  | .7862       | .8216   |
| SS8 | 17.9027 | 22.2315  | .6069       | .8645   |

Reliability Coefficients

N of Cases = 113.0

N of Items = 5

Alpha = .8695

Final Note : Keep ss1 ss2 ss6 ss7 ss8.

7. Implementation Variable

| Total Varian | ce Explaine | d        |           |            |          |           |
|--------------|-------------|----------|-----------|------------|----------|-----------|
|              | Initial     |          |           | Extraction |          |           |
| I            | Eigenvalue  |          |           | Sums of    |          |           |
|              | s           |          |           | Squared    |          |           |
|              |             |          |           | Loadings   |          |           |
| Componen     | Total       | % of     | Cumulativ | Total      | % of     | Cumulativ |
| t            |             | Variance | e %       |            | Variance | е %       |
| 1            | 2.426       | 60.643   | 60.643    | 2.426      | 60.643   | 60.643    |
| 2            | .670        | 16.754   | 77.397    |            |          |           |
| 3            | .543        | 13.583   | 90.981    |            |          |           |
| 4            | .361        | 9.019    | 100.000   |            |          |           |
|              |             |          |           |            |          |           |

Extraction Method: Principal Component Analysis.

Note: One factor solution (only 1 component w/ Eigenvalue over 1.0 (i.e., 2.426). No rotated component matrix.

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*\* RELIABILITY ANALYSIS - SCALE (ALPHA) Item-total Statistics Scale Scale Corrected Item-Mean Variance Alpha if Item if Item Total if Item Deleted Deleted Correlation Deleted Ι1 13.0270 10.6811 .6270 .7084 12 12.7027 13.1017 .5437 .7491 I3 13.1171 11.4316 .6840 .6766 Ι4 12.6396 13.0508 .5047 .7672 Reliability Coefficients N of Cases = 111.0 N of Items = 4Alpha = .7810

Final Note: Alpha is highest. Keep all variables.

### 8. Control Variable

| Explaine | d   |  |  |  |  |
|----------|---|--|--|--|--|
| Initial  |   |  | Extraction   |  |  |
| nvalue   |   |  | Sums of  |  |  |
| S        |   |  | Squared  |  |  |
|          |   |  | Loadings   |  |  |
| Total    | % of  | Cumulativ  | Total  | % of   | Cumulativ  |
|          | Variance  | е%   |  | Variance   | е%   |
| 2.363    | 59.087  | 59.087   | 2.363  | 59.087   | 59.087   |
| .700     | 17.507  | 76.594   |  |  |  |
| .545     | 13.624  | 90.218   |  |  |  |
| .391     | 9.782   | 100.000  |  |  |  |
|          | Explaine<br>Initial<br>Invalue<br>S<br>Total<br>2.363<br>700<br>545<br>.391 | Explained<br>Initial<br>solue<br>5<br>Total % of<br>Variance<br>2.363 59.087<br>.700 17.507<br>.545 13.624<br>.391 9.782 | Explained<br>Initial<br>solution<br>S<br>Total % of Cumulativ<br>Variance e %<br>2.363 59.087 59.087<br>.700 17.507 76.594<br>.545 13.624 90.218<br>.391 9.782 100.000 | Explained Extraction   Initial Extraction   Initial Sums of   Initial Sums of   Initial Sums of   S Squared   Loadings Total   Variance e %   2.363 59.087 59.087   .700 17.507 76.594   .545 13.624 90.218   .391 9.782 100.000 | Explained Extraction   Initial Extraction   Initial Sums of   Initial Sums of   Initial Sums of   Sums of Squared   Loadings Loadings   Total % of Cumulativ   Variance e % Variance   2.363 59.087 59.087   700 17.507 76.594   .545 13.624 90.218   .391 9.782 100.000 |

Extraction Method: Principal Component Analysis. Component Matrix

| Co  | mponen |
|-----|--------|
|     | t      |
|     | 1      |
| CN1 | .787   |
| CN2 | .741   |
| CN3 | .805   |
| CN4 | .740   |

Extraction Method: Principal Component Analysis. a 1 components extracted.

Note: One factor solution (only 1 component w/ Eigenvalue over 1.0 (i.e., 2.363). No rotated component matrix.

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*\* RELIABILITY ANALYSIS - SCALE (ALPHA)

Item-total Statistics

|     | Scale<br>Mean<br>if Item<br>Deleted | Scale<br>Variance<br>if Item<br>Deleted | Corrected<br>Item-<br>Total<br>Correlation | Alpha<br>if Item<br>Deleted |
|-----|-------------------------------------|---|--|-----------------------------|
| CN1 | 11.2752                             | 15.6087                                 | .5766                                      | .7007                       |
| CN2 | 12.1101                             | 15.0618                                 | .5438                                      | .7168                       |
| CN3 | 11.8257                             | 15.6082                                 | .6062                                      | .6877                       |
| CN4 | 12.6239                             | 13.9591                                 | .5401                                      | .7253                       |

### Reliability Coefficients

N of Cases = 109.0

N of Items = 4

Alpha = .7629

Final Note: Alpha is highest. Keep all items.

### 9. Growth Variable

| Total Varianc | e Explaine | d        |           |            |          |           |
|---------------|------------|----------|-----------|------------|----------|-----------|
| Initial       |            |          |           | Extraction |          |           |
| E             | igenvalue  |          |           | Sums of    |          |           |
|               | s          |          |           | Squared    |          |           |
|               |            |          |           | Loadings   |          |           |
| Componen      | Total      | % of     | Cumulativ | Total      | % of     | Cumulativ |
| · t           |            | Variance | e %       |            | Variance | e %       |
| 1             | 2.937      | 73.420   | 73.420    | 2.937      | 73.420   | 73.420    |
| 2             | .525       | 13.117   | 86.537    |            |          |           |
| 3             | .286       | 7.151    | 93.688    |            |          |           |
| 4             | .252       | 6.312    | 100.000   |            |          |           |

Extraction Method: Principal Component Analysis.

Component Matrix

| Co  | Componen |  |  |
|-----|----------|--|--|
|     | t        |  |  |
|     | 1        |  |  |
| R1  | .814     |  |  |
| NS1 | .847     |  |  |
| C1  | .896     |  |  |
| IS1 | .868     |  |  |

Extraction Method: Principal Component Analysis.

a 1 components extracted.

Note: One factor solution (only 1 component w/ Eigenvalue over 1.0 (i.e., 2.937); no rotated component matrix.

\*\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\* \_ R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Item-total Statistics

|             | Scale<br>Mean<br>if Item<br>Deleted | Scale<br>Variance<br>if Item<br>Deleted | Corrected<br>Item-<br>Total<br>Correlation | Alpha<br>if Item<br>Deleted |
|-------------|-------------------------------------|---|--|-----------------------------|
| R1          | 9.5577                              | 16.5792                                 | . 6759                                     | .8683                       |
| C1          | 9.8558                              | 15.1732                                 | . 7233                                     | .8507                       |
| IS1         | 10.2404                             | 15.5048                                 | .7554                                      | .8380                       |
| Reliability | Coefficients                        |   |  |                             |
| N of Cases  | = 104.0                             |   | N of Items =                               | 4                           |

Alpha = .8789

Final Note: Alpha is highest. Keep all items.

### Strategic Planning Activities Survey Descriptive Statistics for Dissertation Chapter 4 February 2003

### 1. Title

### Statistics

| TITLE      |         |        |
|------------|---------|--------|
| Ν          | Valid   | 121    |
|            | Missing | 0      |
| Mean       | -       | 1.4463 |
| Std.       |         | .49917 |
| Deviation  |         |        |
| Variance   |         | .24917 |
| Range      |         | 1.00   |
| Sum        |         | 175.00 |
| Percentile | 25      | 1.0000 |
|            | 50      | 1.0000 |
|            | 75      | 2.0000 |
|            |         |        |

### TITLE

|   | Frequency | Percent | Valid<br>Percent | Cumulativ<br>e Percent |
|---|-----------|---------|------------------|------------------------|
| Valid Owner/Pre<br>s/CEO/Pri<br>ncipal/Part   | 67        | 55.4    | 55.4             | 55.4                   |
| ner<br>Operator/V<br>P/Assistan<br>t Director | 54        | 44.6    | 44.6             | 100.0                  |
| Total   | 121       | 100.0   | 100.0            |                        |

## 2. Years Operating

| Statistics<br>YRSOP |         |         |
|---------------------|---------|---------|
| Ν                   | Valid   | 121     |
|                     | Missing | 0       |
| Mean                | -       | 7.0413  |
| Std.                |         | 9.80000 |
| Deviation           |         |         |
| Range               |         | 50.00   |
| Percentile          | 25      | 1.0000  |
| ,                   | 50      | 3.0000  |
|                     | 75      | 8.0000  |
|                     |         |         |

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## 3. Employee

| Statist | tics |
|---------|------|
| EMPL    | OYEE |

| N          | Valid   | 121      |
|------------|---------|----------|
|            | Missing | 0        |
| Mean       |         | 30.7025  |
| Std.       |         | 86.47732 |
| Deviation  |         |          |
| Range      |         | 449.00   |
| Percentile | 25      | 1.0000   |
|            | 50      | 3.0000   |
|            | 75      | 10.0000  |

## 4. Industry INDUSTRY

ς.

|         |                  | Frequency   | Percent | Valid<br>Percent | Cumulativ<br>e Percent |
|---------|------------------|-------------|---------|------------------|------------------------|
| Valid N | Anufactu<br>ring | 2           | 1.7     | 1.8              | 1.8                    |
| V       | /holesalin<br>q  | 1           | .8      | .9               | 2.6                    |
|         | Services         | 92          | 76.0    | 80.7             | 83.3                   |
|         | Retail           | 7           | 5.8     | 6.1              | 89.5                   |
|         | Other            | 12          | 9.9     | 10.5             | 100.0                  |
|         | Total            | 114         | 94.2    | 100.0            |                        |
| Missing | System           | 7           | 5.8     |                  |                        |
| Total   |                  | <b>12</b> 1 | 100.0   |                  |                        |

# 5. Responsible for Developing Plans

# Statistics

| RE | :52 | O | 10 | в |  |
|----|-----|---|----|---|--|
|    |     |   |    |   |  |

| Ν          | Valid   | 121    |
|------------|---------|--------|
|            | Missing | 0      |
| Mean       | -       | 1.5455 |
| Std.       |         | .91287 |
| Deviation  |         |        |
| Range      |         | 3.00   |
| Percentile | 25      | 1.0000 |
|            | 50      | 1.0000 |
|            | 75      | 2.0000 |
|            |         |        |

### RESPONSB

|             | F          | requency | Percent | Valid<br>Percent | Cumulativ<br>e Percent |
|-------------|------------|----------|---------|------------------|------------------------|
| Valid       | CEO        | 79       | 65.3    | 65.3             | 65.3                   |
| v and       | Strategic  | 29       | 24.0    | 24.0             | 89.3                   |
|             | Planning   |          |         |                  |                        |
| C           | Committee  |          |         |                  |                        |
|             | Centralize | 2        | 1.7     | 1.7              | 90.9                   |
| C           | d Planning |          |         |                  |                        |
| C           | Departmen  |          |         |                  |                        |
| ÷           | t          |          |         |                  |                        |
|             | Other      | 11       | 9.1     | 9.1              | 100.0                  |
|             | Total      | 121      | 100.0   | 100.0            |                        |
| Statistics  |            |          |         |                  |                        |
| PLAN        |            |          |         |                  |                        |
| Ν           | Valid      | 120      |         |                  |                        |
|             | Missing    | 1        |         |                  |                        |
| Mean        |            | .7167    |         |                  |                        |
| Std.        |            | .45251   |         |                  |                        |
| Deviation   |            |          |         |                  |                        |
| Range       |            | 1.00     |         |                  |                        |
| Percentiles | 25         | .0000    |         |                  |                        |
|             | 50         | 1.0000   |         |                  |                        |
|             | 75         | 1.0000   |         |                  |                        |
| 6. Plan     |            |          |         |                  |                        |
| PLAN        | _          |          | -       |                  | • • •                  |
|             | F          | requency | Percent | Valid            | Cumulativ              |
| Valid       | No         | 34       | 28.1    | 28.3             | 28.3                   |
| v and       | Yes        | 86       | 71.1    | 71.7             | 100.0                  |
|             | Total      | 120      | 99.2    | 100.0            |                        |
| Missina     | System     | •        | .8      |                  |                        |
| Total       | -,         | 121      | 100.0   |                  |                        |

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## 7. For those who utilize a plan - - time covered by plan

. . . . . . . . . . . . . .

# Statistics COVER

| N          | Valid   | 88      |
|------------|---------|---------|
|            | Missing | 33      |
| Mean       | -       | 2.4318  |
| Std.       |         | 1.04821 |
| Deviation  |         |         |
| Range      |         | 4.00    |
| Percentile | 25      | 2.0000  |
|            | 50      | 2.0000  |
|            |         |         |

### COVER

|         |                    | Frequency | Percent | Valid   | Cumulativ |  |
|---------|--------------------|-----------|---------|---------|-----------|--|
|         |                    |           |         | Percent | e Percent |  |
| Valid   | Less than one year | 12        | 9.9     | 13.6    | 13.6      |  |
|         | 1 - 2 years        | 45        | . 37.2  | 51.1    | 64.8      |  |
| :       | 3 - 4 years        | 18        | 14.9    | 20.5    | 85.2      |  |
| :       | 5 - 6 years        | 7         | 5.8     | 8.0     | 93.2      |  |
|         | 7 or more          | 6         | 5.0     | 6.8     | 100.0     |  |
|         | years              |           |         |         |           |  |
|         | Tota               | 88        | 72.7    | 100.0   |           |  |
| Missing | System             | 33        | 27.3    |         |           |  |
| Total   | -                  | 121       | 100.0   |         |           |  |

8. For those who utilize a plan - - how long they've been using strategic plans

| Statistics<br>USED |         |         |
|--------------------|---------|---------|
| N                  | Valid   | 83      |
|                    | Missing | 38      |
| Mean               | •       | 2.9277  |
| Std.               |         | 2.44342 |
| Deviation          |         |         |
| Range              |         | 19.00   |
| Percentile         | 25      | 1.0000  |
|                    | 50      | 2.0000  |
|                    | 75      | 5.0000  |
|                    |         |         |

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| USED    |           |           |         |         |           |
|---------|-----------|-----------|---------|---------|-----------|
|         |           | Frequency | Percent | Valid   | Cumulativ |
|         |           |           |         | Percent | e Percent |
| Valid   | Less than | 23        | 19.0    | 27.7    | 27.7      |
|         | one year  |           |         |         |           |
| 1       | - 2 years | 22        | 18.2    | 26.5    | 54.2      |
| . 3     | - 4 years | 13        | 10.7    | 15.7    | 69.9      |
| 5       | - 6 years | 3         | 2.5     | 3.6     | 73.5      |
|         | 7 or more | 21        | 17.4    | 25.3    | 98.8      |
|         | years     |           |         |         |           |
|         | 20.00     | 1         | .8      | 1.2     | 100.0     |
|         | Total     | 83        | 68.6    | 100.0   |           |
| Missing | System    | 38        | 31.4    |         |           |
| Total   | -         | 121       | 100.0   |         |           |

## 9. Consultants

### Statistics CONSULT

| JUNSULI     |         |        |
|-------------|---------|--------|
| N           | Valid   | 121    |
|             | Missing | 0      |
| Mean        | -       | .2975  |
| Std.        |         | .45907 |
| Deviation   |         |        |
| Range       |         | 1.00   |
| Percentiles | 25      | .0000  |
|             | 50      | .0000  |
|             | 75      | 1.0000 |

### CONSULT

|       | Fre   | quency | Percent | Valid   | Cumulativ |
|-------|-------|--------|---------|---------|-----------|
|       |       |        |         | Percent | e Percent |
| Valid | No    | 85     | 70.2    | 70.2    | 70.2      |
|       | Yes   | 36     | 29.8    | 29.8    | 100.0     |
|       | Total | 121    | 100.0   | 100.0   |           |

### Hypotheses & Correlations

H1: There is a direct correlation between strategic planning (hyplan) and growth (hyperf) in small businesses.

### Correlations

|             |              | HYPLAN | HYPERF |  |
|-------------|--------------|--------|--------|--|
| HYPLAN Pear | son          | 1      | .437   |  |
| Correla     | tion         |        |        |  |
| Sia         | (2-          |        | .000   |  |
| tai         | led)         |        |        |  |
|             | Ň            | 99     | 92     |  |
| HYPERE Pear | son          | 437    | 1      |  |
| Correla     | tion         | .401   | •      |  |
| Conteia     | (2)          | 000    |        |  |
| oiy.<br>toi | ( <b>2</b> - | .000   | •      |  |
| (a)         | iea)         | ~~~    | 404    |  |
|             | N            | 92     | 104    |  |

\*\* Correlation is significant at the 0.01 level (2-tailed).

H2: There is a direct correlation between the length of time a small business has employed written strategic plans and its business growth.

#### Correlations

|                |      | UVDEDE |
|----------------|------|--------|
|                |      | THELKE |
| HYTM Pearson   | 1    | 005    |
| Correlation    |      |        |
| Sig. (2-       |      | .967   |
| tailed)        |      |        |
| Ň              | 83   | 72     |
| HYPERF Pearson | 005  | 1      |
| Correlation    |      |        |
| Sig. (2-       | .967 | •      |
| tailed)        |      |        |
| Ň              | 72   | 104    |
|                |      |        |

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H3: There is a direct correlation between the level of strategic planning activities of a small business and length of time in business.

### Correlations

|                | HYPLAN | HYYRS |
|----------------|--------|-------|
| HYPLAN Pearson | 1      | 031   |
| Correlation    |        |       |
| Sia. (2-       |        | .758  |
| tailed)        |        |       |
| Ń              | 99     | 99    |
| HYYRS Pearson  | 031    | 1     |
| Correlation    |        |       |
| Sig. (2-       | .758   |       |
| tailed)        |        |       |
| Ň              | 99     | 121   |
|                |        |       |

H4: There is a difference in growth between those small businesses that use consultants and those that do not. (requires difference of means test)

## Group Statistics

| CC  | ONSULT | N  | Mean   | Std.      | Std. Error |
|-----|--------|----|--------|-----------|------------|
|     |        |    |        | Deviation | Mean       |
| R1  | No     | 75 | 3.6133 | 1.52363   | .17593     |
|     | Yes    | 32 | 3.9688 | 1.37921   | .24381     |
| NS1 | No     | 76 | 2.9605 | 1.55298   | .17814     |
|     | Yes    | 32 | 3.1563 | 1.52631   | .26982     |
| C1  | No     | 76 | 3.4342 | 1.49073   | .17100     |
|     | Yes    | 32 | 3.5625 | 1.54372   | .27289     |
| IS1 | No     | 75 | 2.9067 | 1.48117   | .17103     |
|     | Yes    | 32 | 3.5313 | 1.54470   | .27307     |

|   |                              |                        |                     |        | t-test for<br>Equality of<br>Means |      | les Test<br>Levene's<br>Test for<br>Equality of<br>Variances | pendent Samp                      | Inde |
|---|------------------------------|------------------------|---------------------|--------|------------------------------------|------|--|-----------------------------------|------|
| 95%<br>Confidence<br>Interval of<br>the<br>Difference | Std. Error<br>Differenc<br>e | Mean<br>Differenc<br>e | Sig. (2-<br>tailed) | df     | t                                  | Sig. | F  |                                   |      |
| 97607   | .31302                       | 3554                   | .259                | 105    | -1.135                             | .437 | .607   | Equal<br>variances<br>assumed     | R1   |
| 95599   | .30066                       | 3554                   | .242                | 64.376 | -1.182                             |      |  | Equal<br>variances not<br>assumed |      |
| 84132   | .32563                       | 1957                   | .549                | 106    | 601                                | .922 | .010   | Equal<br>variances<br>assumed     | NS1  |
| 84262   | .32332                       | 1957                   | .547                | 59.261 | 605                                |      |  | Equal<br>variances not<br>assumed |      |
| 75767   | .31745                       | 1283                   | .687                | 106    | 404                                | .775 | .082   | Equal<br>variances<br>assumed     | C1   |
| 77329   | .32204                       | 1283                   | .692                | 56.521 | 398                                |      |  | Equal<br>variances not<br>assumed |      |
| -1.25267  | .31677                       | 6246                   | .051                | 105    | -1.972                             | .783 | .076   | Equal<br>variances<br>assumed     | IS1  |
| -1.26993  | .32221                       | 6246                   | .058                | 56.454 | -1.938                             |      |  | Equal<br>variances not<br>assumed |      |
|   |                              |                        |                     |        |                                    |      |  |                                   |      |

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