INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI

films the text directly from the original or copy submitted. Thus, some

thesis and dissertation copies are in typewriter face, while others may be

from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the

copy submitted. Broken or indistinct print, colored or poor quality

illustrations and photographs, print bleedthrough, substandard margins,

and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete

manuscript and there are missing pages, these will be noted. Also, if

unauthorized copyright material had to be removed, a note will indicate

the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by

sectioning the original, beginning at the upper left-hand corner and

continuing from left to right in equal sections with small overlaps. Each

original is also photographed in one exposure and is included in reduced

form at the back of the book.

Photographs included in the original manuscript have been reproduced

xerographically in this copy. Higher quality 6" x 9" black and white

photographic prints are available for any photographs or illustrations

appearing in this copy for an additional charge. Contact UMI directly to

order.

UMI

A Bell & Howell Information Company 300 North Zeeb Road, Ann Arbor MI 48106-1346 USA

313/761-4700 800/521-0600



FIT AND ORGANIZATIONAL TURNAROUND:
AN EXAMINATION OF THE PERFORMANCE IMPLICATIONS OF
STRATEGY CONTENT AND PROCESS FIT
AND STRATEGY AND CAUSE OF DECLINE FIT

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

The Interdepartmental Program in Business Administration

by Christopher L. Shook B.S. University of Northern Colorado, 1984 M.B.A. University of Mississippi, 1989 May, 1997 UMI Number: 9736043

UMI Microform 9736043 Copyright 1997, by UMI Company. All rights reserved.

This microform edition is protected against unauthorized copying under Title 17, United States Code.

300 North Zeeb Road Ann Arbor, MI 48103

ACKNOWLEDGMENTS

There are many people whose assistance was invaluable to this study and my completion of a doctor of philosophy degree. I would like to thank the faculty, and staff in the Department of Management. They made my learning experience at Louisiana State University a memorable and pleasurable one. I would also like to thank my fellow students. Their support and friendship will always be remembered. I would like to specifically thank Stefanie Naumann. Her willingness to assist with errands in Baton Rouge is greatly appreciated.

With regard to this study, I would like to thank the committee members: Dr. Nathan Bennett, Dr. William Black, Dr. David Ketchen, Jr., Dr. Timothy Palmer, Dr. Sumit Sarkar. Their insights, support, and generosity with their time will not be forgotten. A special debt of gratitude is owed to my mentor, Dr. David Ketchen, Jr. I could not have finished this study without his advice, assistance, encouragement, and support. I thank him for his friendship.

On a more personal note, I would like to thank my Sovereign Lord and Saviour Jesus Christ, and his hands and feet here on earth, the members of Plains Presbyterian Church. Their emotional support was a great asset to me and my family during our time in Baton Rouge.

Finally, I wish to acknowledge the great debt of gratitude I owe to my wife, Linda Gail Shook, and my daughters, Meridith Hope and Caroline Faith Shook. My family sacrificed greatly so that I could follow my dream. I thank them not only for their emotional support and sacrifices but also for their willing and cheerfull attitudes in making the sacrifices. My wife's love and support were often the only constants during my time as a student at Louisiana State University. Accordingly, I express my never-ending love and gratitude to her.

TABLE OF CONTENTS

ACKN	OWLEDGMENTS
ABST	RACT
CHAP	TER
1) I	NTRODUCTION
	Statement of Problem
	Significance of Study
	Significance of Study
2)	LITERATURE REVIEW
-,	Strategy Content
	Strategy Process
	Information Usage
	Centralization of Decision Making 2
	Fit
	Cause of Declining Performance
	The Open-Systems Paradigm as a Basis for
	Classifying Causes
	Turnaround Performance
	Summary
	Summary
3)	MODEL DEVELOPMENT AND HYPOTHESES
	Fit and Turnaround Performance
	Strategy Content and Information Usage 41
	Strategy Content and Centralization of
	Decision Making 45
	Cause of Performance Decline: The Context of
	Turnaround
	Turnaround
	Internal Causes of Decline 50
	Output-Environmental Causes of Decline 51
	Summary
	Summary
4)	METHOD
	Sample and Data
	Measures
	Control Variables
	Strategy Content
	Strategy Process 60
	Cause of Decline 61
	Turnaround Performance 63
	Data Collection Procedures
	Hypotheses Testing
	Summary

5)	RESULTS	71
	Primary Data Collection	71
	Description of Respondents	72
	Test for Non-Response Bias	73
	Reliability & Variance Extracted	73
	Descriptive Statistics	78
	Testing of Hypotheses	78
	Summary	97
6)	DISCUSSION AND CONCLUSION	99
	Discussion of Results	99
		109
		115
	Conclusion	121
REFER	RENCES	124
Y DDEV	IDIXES	
A)		140
rs.)	COVER DELIER	L 4 0
B)	QUESTIONNAIRE	141
C)	REMINDER POSTCARD	147
D)	COVER LETTER FOR SECOND MAILING	148
Β,	COVER ESTITION FOR SECOND PARTITING	. 10
E)	FAX COVER SHEET FOR THIRD ITERATION	L49
F)	COVER LETTER FOR FOURTH MAILING	L50
L j	COVER DELIER FOR FOURTH PHILLING	٠,٠
VITA		151

ABSTRACT

Generally, extant turnaround research has been inductively based and has limited its conceptualization of strategy to strategy content. This study builds on past research by incorporating strategy process and theoretically deriving the causes of decline. In general terms, this study posits that fit (consistency) between strategy process and content is critical to an organization's ability to recover from poor performance. Specifically, the following are considered consistent responses: 1) an entrepreneurial strategy with decentralized decision making and expanded information usage; and, 2) an efficiency strategy with centralized decision making and constricted information usage. Additionally, organizations need to fit their strategy to the cause of decline to have superior turnaround performance.

This study examined the implications of strategy content/process fit and strategy/cause of decline fit in the hospital industry. Specifically, archival data for the years 1987-1994 was collected for the 131 Columbia/HCA hospitals identified as in decline during 1988-1991. Primary data was collected via questionnaire from 66 of these hospitals. Confirmatory factor analysis was used to assess the reliability, variance extracted, and discriminant validity of the measures collected by survey.

Moderated multiple regression failed to support the positive performance implications of either type of fit.

Potential explanations for the lack of support for the positive performance implications of fit were offered. These explanations include: 1) the choice of strategy is not crucial to turnaround performance; 2) the two types of fit are necessary but not sufficient for enhanced performance; 3) turnaround processes are too idiosyncratic to generalize; and, 4) a conceptualization of fit other than the one posited in this study is more appropriate. The limitations of this study include the number of respondents per organization, limited statistical power, limited generalizability of results, untested feedback loops, and potential retrospective and survival biases. This study concludes with suggestions for future research. These suggestions involve the role of the environment, organizational resources, and other strategy processes in organizational turnaround.

CHAPTER 1: INTRODUCTION

The desire to understand, predict and control organizational performance guides much of strategy research (Summer et al., 1990). Indeed, strategy can be distinguished from other related disciplines by its emphasis on organizational performance (Meyer, 1991). Historically, strategy and other organizational sciences have focused on positive performance, such as organizational growth (Whetten, 1980a).

The topic of negative performance (i.e., organizational decline) was ignored until the late 1970s (Meyer, 1988). However, organizational decline has become a widespread phenomenon (O'Neill, 1994); accordingly, the quest to understand organizational decline and predict the efficacy of strategic responses has become more urgent (McKinley, 1993). Consistent with this pursuit, this study focuses on organizations that have experienced declining performance and their efforts to reverse the decline.

Before proceeding, it is instructive to delineate this study's place within the organizational decline research domain. Organizational decline results from a deterioration of an organization's adaptation to its environment and refers to decreasing internal resources over time (Cameron, Sutton & Whetten, 1988). Although there is some research that overlaps among levels of

analysis (e.g., Staw, Sandelands & Dutton, 1981) or stages of decline (e.g., Whetten, 1980b), the organizational decline research domain can be classified along two dimensions: 1) focal unit of analysis (industry/population, organization or individuals); and, 2) stage of decline (antecedents or responses).

Illustrative references for this classification scheme are shown in Table 1-1.

The organizational decline research domain encompasses both antecedents and responses to organizational decline (Cameron, Sutton & Whetten, 1988). Included in this domain are responses common, but not limited, to declining organizations (e.g., downsizing -- D'Aveni, 1989). Responses to organizational decline can be further divided between descriptive responses (e.g., D'Aunno & Sutton, 1992; Staw, Sandelands & Dutton, 1981; Sutton & Callahan, 1987), and prescriptive responses (e.g., Hambrick & Schecter, 1983; Hardy, 1987; Hofer, 1980; Robbins & Pearce, 1992).

Turnaround research fits in the firm-level prescriptive-response category that can be further divided into two types of research: 1) turnaround (e.g., Hambrick & Schecter, 1983; Hofer, 1980; Robbins & Pearce, 1992; Schendel, Patton & Riggs, 1976); and, 2) downsizing (e.g., Cascio, 1993). Turnaround and downsizing research can be distinguished from each other in two ways. First,

Table 1-1
Illustrative References for Classification of Organizational Decline Research Domain

	Industry/ Population	Organization	Individual
Antecedents of Decline	Environmental Antecedents: Hannan & Freeman, 1984; Zammuto & Cameron, 1985	Organizational Antecedents: Starbuck & Hedberg, 1977; Whetten, 1980b	Individuals as Antecedents: Alexander, Fennell & Halpern, 1993; Staw, 1976
Responses to Decline: Descriptive Focus	Population Responses: Carroll & Delacroix, 1982	Organizational Responses: DeWitt, 1993; D'Aveni, 1989; Freeman & Cameron, 1993; Staw, Sandelands & Dutton, 1981	Individual Responses: Staw, Sandelands & Dutton, 1981; Sutton & Callahan, 1987; Brockner, Davey & Carter, 1985
Responses to Decline: Prescriptive Focus	<pre>Industry Prescriptions: Harrigan, 1980; Perry, 1986</pre>	Downsizing: Cascio, 1993; Turnaround: Hambrick & Schecter, 1983; Schendel, Patton & Riggs, 1976	Prescriptions for Managing Individuals: Brockner, 1988; Hardy, 1987; Rice & Dreilinger, 1991

turnaround research is the study of organizations' efforts to reverse performance decline. Thus, by definition, turnaround research is limited to companies that have experienced declining performance (Hambrick & Schecter, 1983). In contrast, downsizing research is not; downsizing is pursued by healthy and unhealthy companies alike (Sutton & D'Aunno, 1989; Tomasko, 1987).

The second distinguishing characteristic between downsizing and turnaround research is breadth of focus. Downsizing studies have a narrow focus; they are concerned with the impact of reducing the number of employees on firm performance (D'Aveni, 1989). In contrast, turnaround studies are concerned with reducing, increasing, or changing a firm's scope of operations (Hambrick & Schecter, 1983).

In summary, the present study is a turnaround study. Its focus is on the efforts of declining organizations to improve substandard performance.

Statement of Problem

Turnaround research generally has followed a pattern set by the first turnaround study: Schendel, Patton and Riggs (1976). It has focused solely on strategy content (the set of decisions regarding the goals, the range of businesses in which the firm chooses to operate, and competitive approaches used by these businesses -- Fahey & Christensen, 1986), and has followed an inductive approach

(based on observation of a particular sample rather than on theoretical underpinnings -- Camerer, 1985). The exclusive focus of turnaround studies on strategy content and the inductive nature of previous studies drives the need for a model of turnaround that incorporates strategy process (the activities leading to and supporting strategic decisions -- Huff & Reger, 1987) and is based on theory.

Despite an early recognition that strategy process factors might explain differences in organizations' abilities to improve declining performance (Hambrick & Schecter, 1983), past turnaround research has neglected process. Failing to investigate the impact of strategy process on a firm's ability to improve performance is a key omission; process acts both independently (Huff & Reger, 1987) and interacts with strategy content (Ketchen, Thomas & McDaniel, 1996) as an important determinant of firm performance.

Extant research has suggested that strategy process may play an integral role in turnaround. Indeed, it has been speculated that the difference between success and failure may be the means by which strategies are implemented (Hoffman, 1989). Research examining the relationship between turnaround and changes in top management group composition (e.g., Bibeault, 1982; Melin, 1985; O'Neill, 1986a; Zimmerman, 1986) has hinted at the

importance of strategy formulation and implementation in turnaround.

Although the main effects of strategy process would warrant investigation, the strongest driving force of this study is the interactive effects of strategy content and process. Generally, organizations that do not have consistency between strategy content and process exhibit lower performance than those organizations that do (Ketchen, Thomas & McDaniel, 1996; Miles, Snow, Meyer & Coleman, 1978). However, there are several organizational attributes associated with declining organizations (e.g., increases in conflict, secrecy, scapegoating, rigidity, and employee turnover -- Cameron, Whetten & Kim, 1987), and the cause and effect relationships of healthy organizations may not necessarily hold for declining organizations (McKinley, 1993). Thus, there is cause to examine whether the positive performance implications of achieving strategy content and process fit hold for organizations trying to recover from decline.

As noted previously, turnaround research has been of an inductive nature. Thus, there is also a need to base turnaround research on theory. Past turnaround research has shown that the strategy used in attempting to restore performance should be matched to the cause of declining performance (Robbins & Pearce, 1992). However, the inductive nature of turnaround studies has prevented

consistent conceptual treatment of the cause of decline in turnaround studies. Further, because their basis is not in theory, the existing treatments of decline causes may be inadequate. This study addresses this limitation by theoretically deriving the causes of decline with the open-systems paradigm (Katz & Kahn, 1966).

Significance of Study

This study's significance is that it examines the role strategy content and process fit plays in turnaround. As noted, most turnaround research has focused solely on the role of strategy content. This study extends prior work by building a model that incorporates strategy process and includes theoretically-derived causes of performance decline.

This study offers the following two primary contributions. First, the importance of strategy content and process fit to turnaround performance is tested. Research outside the organizational decline research domain has stressed the positive performance implications of fit between strategy process and content (Miles, Snow, Meyer & Coleman, 1978), yet this link remains untested in the turnaround literature.

A widely-accepted notion of the strategy discipline is that our research needs to have ultimate application to the problems facing practitioners (Montgomery, Wernerfelt & Balakrishnan, 1989; Summer et al., 1990). This study

ultimately could enhance the ability of practitioners to improve organizational effectiveness. If the positive performance implications of strategy content and process fit are supported by this study and future studies, the discipline can suggest to practitioners that having consistency between their strategy content and processes may improve turnaround performance. Failure to support the positive performance implications of strategy content and process fit may also assist practitioners by focusing future research and, ultimately, identifying the issues critical to improving organizational performance.

The study's second contribution is the potential reconciliation of the conflicting predictions of the efficacy of strategic responses. Some authors have suggested a company's road back to satisfactory performance requires becoming more efficient in its present operations (e.g., Zimmerman, 1986). However, others have suggested that stressing efficiency leads only to further deterioration (D'Aveni, 1989), and that strategic reorientations (i.e., relatively large changes in strategy and structure -- Tushman & Romanelli, 1985) are needed to restore a company's performance (Barker, 1992). As detailed below, these conflicting predictions may be reconciled by matching the cause of decline with the appropriate strategy.

Past research has treated causes of decline as either internal or external to the firm and has established the performance implications of linking strategy to the cause of decline (Robbins & Pearce, 1992). Specifically, internal causes have been linked with an efficiency strategy (i.e., becoming more efficient by focusing on production and management systems -- Hambrick & Schecter, 1983; Robbins & Pearce, 1992), and external causes have been linked with an entrepreneurial strategy (e.g., introducing new products, shifting to more desirable niches -- Hambrick & Schecter, 1983; entering new businesses -- Hofer, 1980). The present study posits that turnaround strategy should be matched with the cause of decline, but derives the causes of decline using the opensystems paradigm (Katz & Kahn, 1966). Using the opensystems paradigm as a theoretical basis, it would appear that external causes may be too broad of a classification (cf. Pearce & Robbins, 1993; Robbins & Pearce, 1992). Trying to resolve problems coming from the entire external environment (i.e., both input and output environments) with an entrepreneurial strategy would likely be ineffective. An entrepreneurial strategy focuses on bringing the organization back into alignment solely with the output environment. Misalignment with the input environment would not be corrected by an entrepreneurial strategy. Hence, our understanding of an organization's

ability to restore performance may be enhanced by relating theoretically-derived causes of decline to the efficacy of turnaround strategies.

Summary of Remaining Chapters

Chapter 1 has laid the foundation for this study by:

1) placing this study within the broader research domain
of organizational decline; 2) outlining the shortcomings
of existing turnaround research; and, 3) underscoring the
potential contributions of this study. Specifically, the
present study improves on existing turnaround research by
incorporating strategy process and theoretically-derived
causes of decline into a model of turnaround performance.

Chapter 2 reviews extant literature on all the building blocks of this study's model of turnaround. In the first section, previous turnaround studies are surveyed for their treatment of strategy content. In the second section, the literature on two important aspects of strategy process (i.e., information usage and centralization of decision making) are reviewed. Relevant literature on fit between strategy process and content is highlighted in the third section. In the fourth section, the treatment of the causes of declining performance in extant turnaround research is reviewed, and the opensystems paradigm (Katz & Kahn, 1966) is offered as a theoretical basis for classifying causes. Literature on turnaround performance is reviewed in the final section.

Chapter 3 (Model Development and Hypotheses) develops a model depicting the positive performance implications of: 1) achieving fit between strategy content and process; and, 2) achieving fit between strategy and cause of decline. Hypotheses are developed for this model and offered for testing. Chapter 4 (Method) describes the sample, sources of data, measures, method of data collection, and statistical analyses used to test the hypotheses. Chapter 5 (Results) presents the results of primary data collection, descriptive statistics for all variables in the study, and results of the analyses used to test the hypotheses developed in Chapter 4. The final chapter (Chapter 6 -- Discussion and Conclusion) reviews the study's results, acknowledges this study's limitations, and discusses avenues for future research.

CHAPTER 2: LITERATURE REVIEW

In this chapter, the extant literature on all the constructs and the concept used to build a model of organizational turnaround are reviewed. The first section of this chapter reviews, from a content perspective, the conceptualizations of strategy used in previous turnaround studies. Next, attention turns to a review of strategy process. The literature on two important aspects of strategy formulation (i.e., information usage and centralization of decision making) is reviewed. Because the central contribution of this study is the examination of the role of fit between strategy content and process in turnaround, the third section of this chapter specifies the type of fit examined in this study and reviews the relevant literature.

The efficacy of strategic responses is, in part, determined by matching the response to the cause of performance deterioration (Robbins & Pearce, 1992). Thus, the fourth section reviews the causes of performance decline. Because past turnaround research has used an inductive method (i.e., based on observation -- Camerer, 1985) for classifying causes of decline, the open-systems paradigm is discussed as a theoretical basis for a new classification scheme.

The objective of using recovery strategies is to improve firm performance. Thus, the last section reviews

literature on turnaround performance. In the next chapter, strategy content, strategy process, cause of performance decline, fit, and turnaround performance are related in a model that provides the basis for predicting turnaround performance.

Strategy Content

Strategy content is the set of decisions regarding the goals, range of businesses in which the firm chooses to operate, and competitive approaches used by these businesses (Fahey & Christensen, 1986). Strategy content is the primary means by which an organization aligns itself with its environment (Hrebiniak, Joyce & Snow, 1989), and thereby, enhances probability of survival.

Turnaround research has generally treated the content of turnaround strategies as either "entrepreneurial" or "efficiency" (Pearce & Robbins, 1993). An entrepreneurial strategy involves doing different things, whereas an efficiency strategy involves doing the same things more efficiently (Hambrick & Schecter, 1983). The basic distinction between these two types of strategies is whether changes are made in a company's products or target market; an efficiency strategy does not involve changes, whereas an entrepreneurial strategy does (Pearce & Robbins, 1993).

A brief history on this dichotomy is helpful in understanding strategy content's role in turnaround. Two

early studies (Hofer, 1980; Schendel, Patton & Riggs, 1976) established a dichotomy of responses to declining performance. This dichotomy was based on whether the responses were considered either strategic or operational. For example, changing marketing processes, entering new businesses (Hofer, 1980), vertically integrating, diversifying, divesting, and changing top management (Schendel, Patton & Riggs, 1976) were considered strategic responses. On the other hand, reducing costs, assets (Hofer, 1980), and plant expenditures, improving the operations of functional areas, and improving efficiency (Schendel, Patton & Riggs, 1976) were considered operational responses. The basic distinction between strategic and operating responses was whether the company attempted to reverse declining performance by implementing strategic changes or increasing efficiency. Hence, these strategies were named "entrepreneurial" and "efficiency" by Hambrick and Schecter (1983).

Although both types of strategies may enhance performance, companies experiencing decline are limited in their ability (e.g., managerial and financial resources) to respond to decline with both entrepreneurial and efficiency strategies (Green, 1992; Pearce & Robbins, 1993; Staw, Sandelands & Dutton, 1981). Instead, organizations stress either one or the other of the

strategies (Green, 1992; Pearce & Robbins, 1993; Robbins & Pearce, 1992).

In summary, extant literature has identified two types of strategies to reverse declining performance. An entrepreneurial strategy involves a change in a company's products and target market (Pearce & Robbins, 1993) and focuses on products and market-based activities (Hambrick & Schecter, 1983; Pearce & Robbins, 1993). An efficiency strategy does not involve a change in a company's products or target market (D'Aveni, 1989; Pearce & Robbins, 1993), and focuses on production and management systems (Hambrick & Schecter, 1983; Pearce & Robbins, 1993).

Strategy Process

The strategy process includes strategy formulation and implementation, and extant literature suggests that how a firm's strategic decisions are formulated and implemented may impact firm performance (e.g., Dean & Sharfman, 1996; Huff & Reger, 1987; Priem, Rasheed & Kotulic, 1985). Declining performance is thought to impact the formulation of strategies (Cameron, Whetten & Kim, 1987; Staw, Sandelands & Dutton, 1981). Thus, this study focuses on strategy formulation because it not only is an important determinant of organizational performance, but also is affected by declining performance.

Strategy formulation is a sequence of behaviors where decision makers scan the environment and gather

information about important trends and events (Mintzberg, 1987). This definition is the basis for selecting the two aspects of strategy formulation for examination in this study (i.e., centralization of decision making and information usage). Centralization refers to the level(s) at which decisions are made for the organization (Pugh, Hickson, Hinings & Turner, 1968). Centralization was selected for examination because it fundamentally reflects "who" makes the strategic decisions. Information usage, which refers to the quantity of data that organizations gather and process in addressing strategic decisions (Daft & Macintosh, 1981; Thomas, Clark & Gioia, 1993; Thomas & McDaniel, 1990), was selected because it fundamentally reflects how comprehensive an organization's information gathering was during strategy formulation.

The selection of centralization of decision making and information usage for further examination is supported by the convergence of strategy research in general, extant turnaround research, and organizational decline literature. The importance of information usage and centralization of decision making to strategy formulation has been supported by general strategy literature (e.g., information usage -- Daft & Lengel, 1986; Govindarajan, 1988; Ketchen, Thomas & McDaniel, 1996; Thomas, Clark & Gioia, 1993; Thomas & McDaniel, 1990; centralization --

Chandler, 1962; Govindarajan, 1988; Rumelt, 1974; Vancil, 1980).

Although turnaround research involving strategy formulation has been quite limited, it reiterates the same two key aspects: 1) the decision makers; and, 2) the role of information. More specifically, research examining changes in top management groups has shown that strategy formulation is positively influenced by the new and multiple perspectives of decision makers (Bibeault, 1982; Hofer, 1980; O'Neill, 1986a). Additionally, case studies have highlighted the role of gathering large amounts of information to interpret a changed environment (Zimmerman, 1986).

Organizational decline literature has also highlighted the same two aspects of strategy formulation (i.e., centralization of decision making and information usage). Organizational processes are posited to be influenced by negative performance; more specifically, information usage may decrease and decision making may become more centralized in response to perceptions of poor performance (Staw, Sandelands & Dutton, 1981). However, the responses of organizations may vary because top managers in different organizations often construct differing interpretations of the same strategic issue (Meyer, 1982). Based on these varying interpretations, decision making may not become more centralized, and

information usage may not decrease. Clearly, a better understanding of both information usage and centralization of decision making is warranted.

Information usage. Information usage is a vital component of information processing (Thomas & McDaniel, 1990), and information processing plays an integral role in allowing an organization to accomplish internal tasks, coordinate diverse activities, and interpret the external environment (Daft & Lengel, 1986). This section begins by reviewing research that highlights the role of information usage in a firm's adaptation to its environment. Then, literature discussing the contingency nature of information usage is summarized.

Managers gather information about the external environment so that they can mediate between the external environment and the organization to bring about fit among strategy, structure and environment (Andrews, 1971; Mintzberg, 1978; Tushman & Romanelli, 1985). It is this fit among strategy, structure, and environment that enhances the probability of survival (Andrews, 1971). Because environments often are changing (Tushman & Romanelli, 1985), organizations must continually process information to learn about and interpret their environment to survive (Daft & Lengel, 1986).

Previous literature posited that organizations have different information requirements based on the situation

(Daft & Lengel, 1986; Galbraith 1973; Hedberg, 1981).

High information usage is not desirable in every situation because of the costs associated with acquiring and processing information (Hedberg, 1981). Thus, the benefits of obtaining additional information must be weighed against the costs.

The following contingency factors determine the anticipated benefits of information usage: 1) environment (Hedberg, 1981); 2) strategy (Thomas & McDaniel, 1990); and, 3) changes in either environment or strategy (Bartunek, 1988; Freeman & Cameron, 1993; Tichy & Devanna, 1986). The first contingency factor is the environment. Rapidly changing and complex environments involve great uncertainty and ambiguity, whereas stable and simple environments involve less uncertainty and ambiguity (Tushman & Romanelli, 1985). Because information reduces uncertainty and ambiguity (Galbraith, 1973), rapidly changing and complex environments require much more information than do slowly changing and simple environments (Hedberg, 1981).

An organization's strategy also determines the amount of information required. Successful innovation involves using large amounts of information (Monge, Cozzens, & Contractor, 1992). Thus, it follows that strategies stressing innovation (e.g., differentiation -- Porter,

1980) require large amounts of information (Govindarajan, 1988).

Strategies involving domain expansion also require large amounts of information. The domain offense strategy, which is marked by attempts to expand an organization's domain through actions such as pursuing additional markets (Miles, 1982), requires higher levels of communication due to the increasing administrative functions (Thomas & McDaniel, 1990). In contrast, domain defense, which focuses on protecting an existing domain through cultivating repeat customers (Miles, 1982), does not require large amounts of information (Thomas & McDaniel, 1990).

Finally, the magnitude of change in either environment or strategy is an important determinant of information requirements. Because a high level of communication is required to help members understand new situations (e.g., a new strategy or changed external environment -- Bartunek, 1988; Tichey & Devanna, 1986), large changes in strategy or environment require more information, interpretation (Daft & Lengel, 1986), and extensive communication within the organization (Freeman & Cameron, 1993). In contrast, incremental changes in environment or strategy require less extensive use of information (Freeman & Cameron, 1993).

In summary, information usage plays an integral role in enabling organizational adaptation. The amount of information usage needed depends on an organization's environment, strategy, and changes in either environment or strategy.

Centralization of decision making. A highlycentralized organization has its strategic decisions made
by members of the top management group only; in contrast,
decisions are made throughout a highly-decentralized
organization. Centralization is generally associated with
relatively slow decision making processes, high control
over operations, inflexibility, and an efficiency focus.
In contrast, decentralization is associated with fast
decision making processes, low control over operations,
flexibility, and an effectiveness focus (Hage, 1965).

Extant literature has posited a contingency relationship between the appropriate level of centralization and the following: 1) strategy (Thomas & McDaniel, 1990); 2) change in strategy (Freeman & Cameron, 1993); and, 3) change in environment (Lawrence & Dyer, 1983). The first contingency factor is strategy. Because centralized decision making is best for efficiency and control (Hage, 1965), it enhances the performance of organizations using strategies stressing efficiency (Govindarajan, 1988). Examples of strategies stressing efficiency include cost-leadership (Porter, 1980) and

domain defense (Miles, 1982). However, centralized decision making's emphasis on efficiency and control discourages innovation (Govindarajan, 1988; Monge, Cozzens & Contractor, 1992). Thus, it hinders the performance of organizations using strategies that stress innovation (e.g., differentiation -- Porter, 1980; domain offense -- Miles, 1982).

Change in strategy is the second contingency factor.

Incremental changes require less participation in the

decision making process. In contrast, large changes

require decentralized decision making for success (Freeman & Cameron, 1993).

The rate of environmental change is the final contingency factor. Rapidly changing environments require more frequent adaptations for an organization to maintain alignment with the environment (Tushman & Romanelli, 1985). Adaptiveness is enhanced by decentralization because managers making decisions interact directly with the environment, resulting in more timely and effective responses (Hage, 1965; Price, 1968). Thus, decentralized decision making enhances the performance of organizations in rapidly-changing environments (Koberg, 1987).

Conversely, organizations in stable environments require fewer changes to stay aligned with their environment (Tushman & Romanelli, 1985) and, thus, are best served by centralized decision making (Burns & Stalker, 1961).

In summary, information usage and centralization of decision making are important to strategy processes in all organizations (e.g., Chandler, 1962; Daft & Lengel, 1986; Thomas & McDaniel, 1990; Vancil, 1980) and, especially, in declining organizations (Staw, Sandelands & Dutton, 1981). Extant literature has highlighted the contingency relationships of information usage and centralization of decision making. High levels of information usage enhance organization performance when the organization: 1) operates in rapidly changing and complex environments (Hedberg, 1981); 2) has adopted a strategy stressing product innovation (Monge, Cozzens & Contractor, 1992) or involving domain expansion (Thomas & McDaniel, 1990); or, 3) has experienced relatively large strategic or environmental changes (Daft & Lengel, 1986; Freeman & Cameron, 1993). Decentralized decision making enhances organizational performance when the organization: 1) has adopted a strategy stressing product innovation (Govindarajan, 1988); 2) has experienced relatively large strategic changes (Freeman & Cameron, 1993); or, 3) operates in a rapidly changing and uncertain environment (Koberg, 1987).

Fit

This section first establishes the conceptual importance of fit. Then, because statistical treatment and theoretical conceptualization are necessarily

interwoven (Venkatraman, 1989), attention turns to the statistical treatment of fit.

Fit (also termed consistency or coalignment) is an important concept in strategic management. The performance implications of achieving fit among strategy, structure and environment have long been established in strategy research (e.g., Andrews, 1971; Chandler, 1962; Hofer & Schendel, 1978; Keats & Hitt, 1988; Miles & Snow, 1978; Venkatraman & Prescott, 1990). Indeed, the extent of fit between strategy and the external environment has a significant positive impact on performance (Anderson & Zeithaml, 1984; Venkatraman & Prescott, 1990).

Conversely, poor performance is an important indication that a company's strategy does not fit its environment and signals that changes may be necessary (Boeker & Goodstein, 1991).

Not only is fit between environment and strategy important, but also fit between strategy content and process is important. Fit between strategy content and process has positive performance implications (Miles & Snow, 1978). Miles and Snow's strategy typology (1978), one of the discipline's foundational strategy typologies, is based on the extent of fit between strategy process and content. Miles & Snow (1978) found that organizations are faced with three interrelated problems (one related to strategy content and two related to strategy process) that

must be solved with solutions that are consistent with each other (Miles & Snow, 1978). The strategy content problem is the determination of the product/service to be produced and target market. The other problems involve strategy process, and include: 1) creating a system to operationalize management's solution to the strategy content problem; and, 2) establishing coordinating and controlling internal processes relating to both past and future strategic decisions (Miles & Snow, 1978). To be successful, an organization's solutions to these problems must be consistent with each other. Therefore, strategy process and content should be tightly linked.

The conceptualization and statistical treatment of fit are necessarily interwoven (Venkatraman, 1989). In the strategy literature, fit generally has been approached from one of two broadly-defined theoretical and methodological perspectives: 1) holistic; or 2) reductionist (Venkatraman & Prescott, 1990). The holistic perspective is based on the premise that it is important to retain the applicable constructs' multidimensional nature, and is consistent with configurational research (e.g., Ketchen, Thomas & Snow, 1993; Miller, 1981; Miller & Friesen, 1984). This perspective does not focus on linear relationships among independent variables and, instead, focuses on whether performance varies across different combinations (i.e., configurations) of

independent variables. Conversely, the reductionist perspective generally focuses on linear relationships among variables (Venkatraman & Prescott, 1990), and, thus, may provide evidence of causal relationships (i.e., the degree to which an independent variable impacts a dependent variable -- Miller & Mintzberg, 1983).

As noted above, the statistical treatment and theoretical conceptualization of fit are interwoven. Thus, the theoretical conceptualization dictates the statistical treatment. The underlying theory of this study is strategic choice. The underlying assumptions of strategic choice are that: 1) managers make decisions regarding how organizations respond to environmental conditions; and, 2) these decisions are critical determinants of organizational outcomes (Child, 1972). Strategic choice is a descendent of contingency theory (Ginsberg & Venkatraman, 1985), which asserts that there is a relationship between two or more variables that predicts a third variable (Schoonhoven, 1981). The type of fit examined in this paper focuses on linear or bivariate relationships and, thus, is approached with a reductionist perspective (Venkatraman & Prescott, 1990).

Cause of Declining Performance

Although considering the cause of the performance decline when assessing the efficacy of the recovery strategy was proposed early in the research stream

(Schendel, Patton & Riggs, 1976), this has not been done consistently. Turnaround studies have either: 1) ignored the cause of declining performance (e.g., Hambrick & Schecter, 1983; Hofer, 1980; Schendel & Patton, 1976); 2) not related the cause to the recovery strategy (e.g., Bibeault, 1982); 3) not distinguished among causes (e.g., Melin, 1985; O'Neill, 1986b); or, 4) inductively derived the causes of decline (Robbins & Pearce, 1992; Schendel, Patton & Riggs, 1976). This section first reviews literature on cause of decline. Then, literature that serves as the foundation for a theoretically-based classification scheme is reviewed.

Based on observation of turnaround firms, the first turnaround study (Schendel, Patton & Riggs, 1976) dichotomized causes of performance decline as either poor strategy or poor operations. Poor strategy was defined as the inability to adapt to a changing environment, and poor operations were defined as inefficient operations or poor implementation of an otherwise sound strategy.

Specifically, decreased profit margins, increased wages, increased competition, and inadequate raw materials were treated as indicators of poor strategy; depressed price levels, recessions, strikes, labor problems, and excess plant capacity were treated as indicators of poor operations (Schendel, Patton & Riggs, 1976). Strategic responses were suggested to improve declining performance

resulting from poor strategy, and operating responses were suggested to improve downturns resulting from poor operations (Schendel, Patton & Riggs, 1976).

A recent study (Robbins & Pearce, 1992) built on the work of Schendel, Patton and Riggs (1976) and treated the causes of decline as either internal or external to the firm. Robbins and Pearce (1992) found that an efficiency strategy reversed performance declines caused by internal causes, and an entrepreneurial strategy reversed externally-caused performance problems. Internal causes included lack of operating control, overexpansion, excessive leverage, and deficiencies in the top management group. External causes included economic problems, competitive changes, technological changes, and social changes (Robbins & Pearce, 1992).

The distinction between internal and external causes is intuitively appealing. Although Robbins and Pearce (1992) did not theoretically derive this dichotomy, a possible theoretical basis for the distinction is the conceptualization of organizations as open systems (Katz & Kahn, 1966). However, as will be discussed below, an open-systems view of the firm suggests that prescribing the same turnaround strategy for all external causes may be inappropriate.

The open-systems paradigm as a basis for classifying causes. The open-systems paradigm views the organization

as highly dependent on its environment for the resources necessary for its continued existence; in contrast, closed systems view organizations as self-contained structures that are independent of their environment (Katz & Kahn, 1966). Open systems are characterized by three primary functions: 1) importation of resources from the environment; 2) Throughput of the resources within the organization; and, 3) output of resources to the environment. Difficulties in performing any of the functions can threaten the viability of the organization (Katz & Kahn, 1966). Thus, causes of decline can originate in either the input or output environment, or inside the firm.

Input-environmental causes focus on difficulties involved in obtaining resources. The environment is the source of an organization's resources (Koberg, 1987; Pfeffer & Salancik, 1978), and one tenet of the opensystems paradigm is that organizations must continue to import resources to survive (Katz & Kahn, 1966). Thus, changes in the input environment are factors to which an organization must adjust. Changes that reduce the availability of resources are especially noteworthy. Scarcity typically increases the costs of resources, and may limit the throughput and output of the organizations. Thus, the impact of scarce resources on organizational performance can be extreme (McKinley, 1987). Examples of

input-environmental causes, identified in a survey of practitioners (Robbins & Pearce, 1992), include the following: 1) interest rate hikes; 2) credit squeezes; and, 3) high or increasing prices of raw materials, energy and labor. Lack of these or other key resources bring about organizational decline.

In contrast, output-environmental causes of decline focus on difficulties involved in exporting a firm's The output of resources (that were imported and then transformed within the organization) back to the environment is the mechanism that allows for continued importation of new energy (Katz & Kahn, 1966). words, changes in the output environment may threaten an organization's ability to sell its product/service. Because revenues from the sales of products/services are the means for obtaining future resources, changes in the output environment may lead to declining performance. Examples of output-environmental causes of decline, identified by practitioners (Robbins & Pearce, 1992), include the following: 1) a competitor's new range of products; and, 2) failure to react to changing lifestyles, ages of the population, consumer attitudes, or consumer tastes.

All external causes should not be treated in the same manner (cf. Pearce & Robbins, 1993; Robbins & Pearce, 1992). Changes in the input environment may create

problems with regard to importing resources, whereas changes in the output environment may create problems associated with selling products. This distinction is important because of the different responses required: 1) changes in an organization's strategic orientation (i.e., the business an organization is in and method with which it competes -- Tushman & Romanelli, 1985) are required by changes in the output environment (e.g., changes in demand or product users); and, 2) changes in an organization's processes and structure are necessitated by changes in the input environment (e.g., reductions in resource munificence -- Yasai-Ardekani, 1989). Thus, external causes should be treated as coming from either the input or output environments.

Research has shown the wisdom of dichotomizing the environmental causes of decline as input- and output- environmental; for example, D'Aveni & MacMillan (1990) found that companies focusing attention on the input environment when the problem was in the output environment were more likely to fail. Specifically, in responding to severely declining demand, companies that focused more attention on the factors related to the output environment (e.g., customer needs and changing demand) than on factors related to the input environment were successful.

The cause of performance decline may also be internal to the organization. In the long term, organizations

survive only if they import more resources than they expend in the processes of transformation and exportation (Katz & Kahn, 1966). Hence, unless resources are overabundant, organizations must be efficiently organized (Pfeffer & Salancik, 1978). Therefore, attention to internal causes is appropriate. Examples of internal causes of decline include: 1) inadequate or misguided control systems; 2) inefficient organization; 3) excessive financial leverage; and, 4) inefficient manufacturing techniques (Robbins & Pearce, 1992).

In summary, little attention has been paid to the causes of decline in the existing literature. Even less effort has been devoted to constructing the theoretical basis for understanding the cause of decline. Research has been inductive in nature; hence, little consistency across studies has been noted. Based on the open-systems paradigm, causes can be classified as to their origin in either the input or output environments, or internal to the firm. The benefits of this theoretically-derived treatment are twofold: 1) because it is based on theory, the conceptual treatment can be consistent across future studies; and, 2) due to their different foci, factors from the input and output environments are conceptually distinct, and this classification system treats them accordingly.

Turnaround Performance

As noted in Chapter 1, Strategy's emphasis on firm performance distinguishes it from related disciplines (Meyer, 1991). Further, the turnaround research stream's emphasis on improving firm performance distinguishes it from the vast majority of the other organizational decline literature. Performance has been defined as the economic and social outcomes associated with organizational actions (Hrebiniak, Joyce & Snow, 1989), and can be conceptualized in terms of financial, operational, or organizational effectiveness outcomes (Venkatraman & Ramanujam, 1986). Financial outcomes refer to the accounting-based indicators assumed to reflect fulfillment of an organization's economic goals. Operational outcomes refer to nonfinancial indicators (e.g., market share, hospital occupancy) of an organization's operating performance. Finally, organizational effectiveness refers to the degree to which the organization satisfies the multiple, conflicting goals of its stakeholders (Venkatraman & Ramanujam, 1986).

Although operational dimensions have received some attention (e.g., market position -- Hofer, 1980; Zimmerman, 1986), most turnaround research has focused on financial outcomes (Hoffman, 1989). This emphasis may be due to the relationship between financial performance and organizational survival: without an acceptable level of

financial performance, an organization will fail in the long term (Porter, 1980).

Turnaround research has used various referents. performance referents used have included: 1) industry profits (O'Neill, 1981; Pant, 1991; Robbins & Pearce, 1992); 2) changes in Gross National Product (Schendel & Patton, 1976; Schendel, Patton & Riggs, 1976); 3) returns of riskless investments such as government securities (Barker, 1992); 4) predownturn profitability levels (Robbins & Pearce, 1992); and, 5) seemingly arbitrary benchmarks (return on investment greater than 20% --Hambrick & Schecter, 1983). Of the various referents, only the return from riskless investments has its basis in theory. Returns on riskless investments serve as a conservative approximation of risk-adjusted rates of return, and organizations cannot survive as economic entities if they do not earn at least a risk-adjusted rate of return for their owners (Porter, 1980).

In sum, turnaround performance is an organization's performance following its declining performance.

Turnaround performance has been examined primarily along the financial dimension of performance, and successful turnaround performance requires that organizations earn returns greater than the risk-free rate.

Summary

This chapter began with a review of strategy content in turnaround literature that identified two types of strategies: 1) entrepreneurial, which involve changes in a company's products or target market; and, 2) efficiency, which involve becoming more efficient in producing the same products for the same market.

Next, literature highlighting information usage and centralization of decision making as important aspects of strategy process was reviewed. Additionally, the contingency nature of information usage and centralization was emphasized. Increased information usage is required by: 1) changing and complex environments; 2) strategies characterized by changing or expanding product lines and target markets; or, 3) large changes in either environment or strategy. Decentralized decision making is more appropriate when: 1) the organization's strategy stresses innovation; 2) there is a large change in strategy; or, 3) the environment is turbulent or uncertain.

The literature on fit was also reviewed, showing that fit between strategy process and content, and fit between strategy and cause of decline are important determinants of performance. Additionally, the reductionist perspective, and the related statistical treatment, were identified as appropriate for this study.

The fourth section reviewed the causes of performance decline. Based on the open-systems paradigm, causes can be considered as originating in the input or output environments, or internal to the firm. In the last section, the literature on turnaround performance was reviewed. Turnaround performance is the performance of a firm following declining performance and consists of financial, operating, and effectiveness dimensions.

This chapter has served to highlight both the state of knowledge about turnaround and the gaps in knowledge. Regarding the former, researchers generally agree that: 1) companies use either an entrepreneurial or efficiency turnaround strategy; 2) information usage and centralization of decision making are important aspects of strategy process and exhibit a relationship with organizational performance that is contingent on strategy and environment; 3) generally, consistency between strategy content and process has positive performance implications; 4) turnaround performance is multidimensional; and, 5) the cause of performance decline should be accounted for in assessing the efficacy of turnaround strategies.

Turning to the gaps in knowledge about turnaround, the relationship linking strategy content and process fit to turnaround performance has not yet been tested.

Further, the cause of performance decline has not been

consistently treated across past studies, and the performance implications of achieving fit between strategy and the theoretically-derived causes of decline proposed in this study have not been assessed.

In the next chapter, a model is developed that predicts the following relationships: 1) fit between strategy content and process is an important determinant of turnaround performance; and, 2) the closer a firm's recovery strategy fits the cause of performance decline, the better its turnaround performance.

CHAPTER 3: MODEL DEVELOPMENT AND HYPOTHESES

The last chapter reviewed literature on the four constructs (strategy content, strategy process, cause of performance decline, and turnaround performance) and the concept (fit) that are used to develop a model of turnaround performance. In this chapter, these constructs and concept are integrated into a model that suggests that fit between strategy process and content is a key determinant of turnaround performance. Because matching the strategy to the cause of decline determines the efficacy of strategic responses, cause of decline is included in the model as a contextual antecedent.

In the first section of this chapter, a proposition relating fit between strategy content and process to turnaround performance is developed, and testable hypotheses related to this proposition are offered. Next, a proposition about the positive benefits of tailoring turnaround strategy to the cause of decline is developed, and testable hypotheses are offered.

Fit and Turnaround Performance

Strategy content and process are unavoidably intertwined. The conceptualization of strategy as a firm's pattern of strategic decisions over time (Mintzberg, 1987) emphasizes the manner in which strategy content influences subsequent strategy processes. An organization may begin its existence by making strategy

content decisions (e.g., choosing its domain and method for developing competitive advantage) based on basic causal maps of the environment and organization (Andrews, 1971). However, the outcomes associated with the original and subsequent strategy content decisions are retained in organizational memory (Milliken & Lant, 1991; Walsh & Ungson, 1991). Organizational memory contains the revised set of causal maps, and determines the collection, analysis, and interpretation of data. Consequently, organizational memory influences subsequent actions (Hall, 1984). Thus, a key to understanding a firm's present strategic processes is understanding its history of previous strategy content decisions (Ketchen, Thomas & McDaniel, 1996).

Strategy processes not only lag past strategy content decisions but also lead future decisions (Miles & Snow, 1978). The content of a firm's strategy limits strategic decision making processes (Daft & Weick, 1984).

Subsequently, processes activated for making strategic decisions about the future are constrained by the mechanisms in place to achieve existing strategic goals. Thus, the interpretation of a firm's current strategic options is a reflection of the strategic processes and content embodied in its past strategic decisions (Milliken & Lant, 1991).

Strategy process and content are interwoven conceptually (Huff & Reger, 1987) and temporally (Miller & Friesen, 1983). An implication of this tight linkage is that process/content fit may influence performance by expediting (or hindering) internal coordination and adaptation to the demands of the environment (Ketchen, Thomas & McDaniel, 1996). Thus, process/content fit is an important determinant of firm performance. Although the interaction between strategy content and process has received scant attention in the turnaround literature, case study research noted that process and content ought to act coherently in a turnaround (Zimmerman, 1986). Accordingly, the model presented in Figure 3-1 begins with an overall expectation that:

Proposition 1: Fit between strategy process and content will be positively related to turnaround performance.

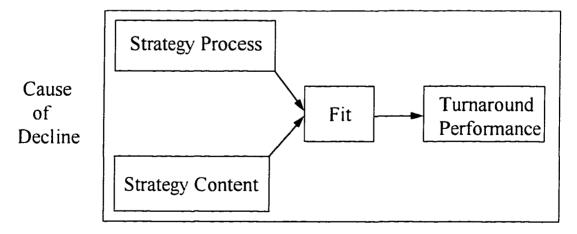


Figure 3-1
A General Model of Turnaround

The general prediction of the positive performance implications of strategy process/content fit suggests that relationships exist among performance and specific strategy content and process variables. Thus, attention turns to developing these relationships.

Strategy content and information usage. As noted in Chapter 2, information usage (i.e., the quantity of data that organizations gather and process in addressing strategic decisions -- Daft & Macintosh, 1981; Thomas & McDaniel, 1990) plays an important role in strategy formulation. Information usage influences an organization's interpretation of environmental events (Thomas & McDaniel, 1990). In turn, interpretation (the process of translating data into knowledge and understanding -- Daft & Weick, 1984), ultimately affects organizational actions (Dutton, Fahey & Narayanan, 1983) and performance (Thomas, Clark & Gioia, 1993). Thus, information usage ultimately plays a key role in organizational actions and performance.

Because organizations are dependent on the environment for resources (Katz & Kahn, 1966), organizations must process information to learn about and interpret their environment to survive (Daft & Lengel, 1986). However, the costs of obtaining information can be high (Hedberg, 1981), and a firm's information usage requirements are based on its strategy (Thomas & McDaniel,

1990). Thus, it is reasonable to expect that organizations have different information requirements based on the strategy used to respond to declining performance.

Based on the nature of an entrepreneurial strategy, it appears there would be a fit between high levels of information usage and an entrepreneurial strategy. An entrepreneurial strategy involves changes in a company's products and/or target market (Pearce & Robbins, 1993) and focuses on products and market-based activities (Hambrick & Schecter, 1983). More specifically, an entrepreneurial strategy includes product changes, shifting to more desirable niches (Hambrick & Schecter, 1983), or entering new businesses (Hofer, 1980). Thus, an entrepreneurial strategy reflects ambiguity and uncertainty regarding consumer reaction to product or target market changes as well as high levels of product/service innovation.

Changes involving relatively high levels of uncertainty or ambiguity require that an organization process large amounts of information before decision makers in the organization are willing to act (Huber, O'Connell, & Cummings, 1975). The amount of data gathered reflects an organization's perceived level of understanding of a situation (MacKay, 1969; Tushman & Nadler, 1978), and large amounts of information give decision makers a more complete understanding of causal

relationships (Thompson, 1967). Gathering large amounts of information enables decision makers to make faster decisions, and decision making speed is of the essence for companies facing rapid, discontinuous changes in demand, competition, or product component technology (Eisenhardt & Bourgeois, 1988). Thus, the uncertainty and ambiguity involved with an entrepreneurial strategy require that the organization gather large amounts of information to speed decision making and, thereby, enhance organizational performance.

Further, the high level of product/service innovation and the increase in product/service diversity associated with an entrepreneurial strategy require large amounts of information. Successful product/service innovation depends on high levels of information usage (Monge, Cozzens & Contractor, 1992). Further, increased product/service diversity increases administrative and technological complexity; to cope, organizations must process large amounts of information (Thomas & McDaniel, 1990). Hence, an entrepreneurial strategy and information usage are expected to be related in the following manner:

Hypothesis 1a: For organizations choosing an entrepreneurial strategy in response to decline, the amount of information usage will be positively related to turnaround performance.

An efficiency strategy does not involve product/service or target market changes (D'Aveni, 1989; Pearce & Robbins, 1993), but, instead, focus on a company's production and management systems (Hambrick & Schecter, 1983; Pearce & Robbins, 1993). Typical activities associated with an efficiency strategy include cost cutting and selling assets (Hambrick & Schecter, 1983; Hofer, 1980). An efficiency strategy is most like a domain defense strategy. Organizations following a domain defense strategy use less information because their administrative functions are more efficient and standardized (Thomas & McDaniel, 1990).

An efficiency strategy is incremental in nature.

Because of the relatively low ambiguity and uncertainty surrounding small changes (Huber, O'Connell & Cummings, 1975), incremental changes require less information usage (Freeman & Cameron, 1993). Further, an efficiency strategy requires little product/service innovation, and, hence, do not require high levels of information usage (Monge, Cozzens & Contractor, 1992).

There are substantial financial costs, as well as opportunity costs, associated with acquiring information (Hedberg, 1981). Because of these costs, procuring large amounts of information is inconsistent with an efficiency strategy; the increased costs are not justified by the

demands of the strategy. Thus, the following relationship is expected:

Hypothesis 1b: For organizations choosing an efficiency strategy in response to decline, the amount of information usage will be negatively related to turnaround performance.

making. Centralization of decision making refers to the level at which decisions are made for the organization (Jennergren, 1981). Centralized decision making is associated with high control over operations, inflexibility, and an efficiency focus; in contrast, decentralized decision making is associated with low control over operations, flexibility, and an effectiveness focus (Hage, 1965). The two types of turnaround strategies differ concerning the desired amount of control and flexibility, and their focus on efficiency or effectiveness. Thus, it is reasonable to expect that different levels of centralization fit with the two types of turnaround strategy.

Centralization of decision making inhibits strategic experimentation, hinders accurate interpretation of the marketplace, and drives away innovative employees.

Specifically, centralization places responsibility for decision making with the highest managers in the hierarchy, who may be more isolated from the realities of

the marketplace (Starbuck, Greve & Hedberg, 1978).

Further, centralization discourages lower-level employees from adopting innovations or changes that they perceive will reverse the decline (Staw, Sandelands & Dutton, 1981). Thus, centralization hinders an organization's ability to introduce product/service innovations. Because the ability to introduce product/service innovation is a particularly important ability for organizations choosing an entrepreneurial strategy, it is predicted that:

Hypothesis 1c: For organizations choosing an entrepreneurial strategy in response to decline, centralization of decision making will be negatively related to turnaround performance.

The costs associated with centralized decision making are high for organizations adapting to rapid and discontinuous changes in demand, competitors, and product technology (Eisenhardt & Bourgeois, 1988). However, this relationship may not hold in situations where rapid product changes are not required (Bourgeois & Eisenhardt, 1987, 1988). Indeed, because an efficiency strategy does not stress product innovation, the decreased ability to introduce product innovations associated with centralization would have little negative impact.

Conversely, centralization enhances control over costs and is positively related to efficiency gains in an organization's present operations (Huber, Miller & Glick,

1990). Thus, the benefits of highly centralized decision making would enhance organizational performance for those organizations using an efficiency strategy. Hence, the following hypothesis:

Hypothesis 1d: For organizations using an efficiency strategy in response to decline, centralization of decision making will be positively related to turnaround performance.

Cause of Performance Decline: The Context of Turnaround

An organization's strategy provides a framework within which its managers understand their environment and interpret strategic issues (Hambrick, 1981; Meyer, 1982; Thomas & McDaniel, 1990). Strategy serves as an information filter separating the critical from insignificant (Huff, 1982). Specifically, an organization's top managers focus on information needed to execute its strategy and ignore information that seems irrelevant (Hambrick, 1981).

The foci of turnaround strategies differ; an efficiency strategy is input-environment (on a company's procurement systems) and internally focused (on a company's production and manufacturing systems -- Hambrick & Schecter, 1983; Pearce & Robbins, 1993). In contrast, an entrepreneurial strategy is output-environmentally focused (on a firm's products and market-based activities -- Hambrick & Schecter, 1983; Pearce & Robbins, 1993).

Thus, turnaround strategies focus managers' attention on different aspects of the environment or on the internal processes of the organization.

Because strategy directs organizational attention to specific aspects of the environment, matching the strategy to the cause of decline becomes imperative. An organization's efforts should focus on matching its strategy with the cause of decline, else attention will be diverted away from the true problem (D'Aveni & MacMillan, 1990). If attention is diverted away from the true problem, continued decline is likely. Hence, the model of turnaround performance (Figure 3-1) also is built on a second general proposition:

Proposition 2: The closer a firm's recovery strategy matches the cause of performance decline, the better its turnaround performance.

The general prediction of the positive implications of achieving fit between strategy and cause of decline suggests that relationships exist among specific strategies and causes of decline. Hence attention turns to developing these relationships.

Input-environmental causes of decline. The environment is the source of the resources an organization needs to survive (Katz & Kahn, 1966; Koberg, 1987; Pfeffer & Salancik, 1978). Thus, anything interfering with the importation of resources may cause performance decline.

Changes in the input environment may change the way an organization acquires resources (Katz & Kahn, 1966), but do not alter the basic relationship between the organization and its output environment. An entrepreneurial strategy focuses managerial attention on the output environment. Thus, an entrepreneurial strategy would divert attention from the cause of decline, and, thus, not fit with input environmental causes of decline to reverse the decline.

In contrast, an efficiency strategy focuses managerial attention on a firm's internal processes and procurement systems. Thus, the likelihood of management effectively dealing with the impact of changes in the input environment is increased by the adoption of an efficiency strategy. Input-environmental causes of decline (such as increasing resource prices -- Robbins & Pearce, 1992) effectively raise the costs of production unless countered by changes in an organization's production systems. By becoming more efficient, organizations reduce their dependence on a resource (Thompson, 1967). Thus, because of its focus on the input environment and production systems, an efficiency strategy can reduce the impact of scarcity and increasing costs of resources. Hence, the following hypothesis is offered:

Hypothesis 2a: To the extent that an organization's decline is related to input-

environmental factors, an efficiency strategy will lead to positive turnaround performance.

Internal causes of decline. All organizations survive over the long term only if they import more resources than they expend (Katz & Kahn, 1966); therefore, organizations must be efficiently organized and operated to be successful. However, not all organizations are efficiently organized and operated. Thus, decline may originate from within an organization. Examples of internal causes of decline include inefficient growth, excessive leverage, lack of control, and high production costs (Robbins & Pearce, 1992).

As noted earlier, strategy directs the attention of decision makers. An entrepreneurial strategy is thought to focus attention on the output environment. Thus, an entrepreneurial strategy likely would be ineffective in countering internal causes of decline. Instead, because the inherent problem associated with internal factors is inefficiency (Robbins & Pearce, 1992), an efficiency strategy with its internal focus would be more successful. Hence, the following relationship is predicted:

Hypothesis 2b: To the extent that an organization's decline is related to internal factors, an efficiency strategy will lead to positive turnaround performance.

Output-environmental causes of decline. The exportation of products is the mechanism that allows for continued importation of new energy (Katz & Kahn, 1966). Thus, changes in the output environment that threaten the ability of the organization to export its products to the environment can lead to declining performance. Indeed, changes in the output environment (e.g., declining demand) are often threats to organizational survival (Harrigan, 1980; Zammuto & Cameron, 1985).

To the extent that a cause of decline originated in the output environment, an efficiency strategy misdirects management's attention to internal production and coordination systems and the input-environment. Hence, the misdirected focus of an efficiency strategy may be lethal.

On the other hand, an entrepreneurial strategy focuses management's attention on the output environment, and the changes that organizations need to make.

Organizations with an external orientation are better able to respond to competitors (Thomas, Clark & Gioia, 1993).

Changes in product demand and product users (i.e., output-environment factors) drive changes in an organization's strategic orientation (the business the organization is in and the method with which it competes) if the organization is to survive (Tushman & Romanelli, 1985). Thus, declining performance caused by output-environment factors

should be countered with an entrepreneurial strategy. Hence, the following relationship is predicted:

Hypothesis 2c: To the extent that an organization's decline is related to output-environmental factors, an entrepreneurial strategy will lead to positive turnaround performance.

Summary

This chapter developed a model of turnaround performance and accompanying propositions and hypotheses. The first section focused on developing the positive performance implications of strategy content and process fit. The second section focused on developing the positive performance implications of fitting the turnaround strategies to the cause of decline. An efficiency strategy is appropriate for addressing performance declines caused by either input-environmental factors or internal factors. In contrast, an entrepreneurial strategy is appropriate for addressing performance declines caused by output-environmental factors. The predictions articulated in this chapter were tested using the methodology outlined in Chapter 4.

CHAPTER 4: METHOD

In this chapter, the research design used to test the hypotheses developed in Chapter 3 is described. This chapter is organized as follows. First, the sample and data sources are described. Then, descriptions of the measures used and the data collection procedures are presented. Finally, the statistical analyses used to examine the hypotheses are detailed.

At several points during this research, experts, both practitioners and academics, were consulted to help address important methodological issues. These interactions are detailed where appropriate.

Sample and Data

Organizations in a single industry were chosen as the setting for this study. Several considerations underlay this choice. First, the restriction to a single industry ensured that industry effects on firm-level performance were not confused with the performance effects of interest (Dess, Ireland & Hitt, 1990). Second, it was desirable to examine a setting in which: 1) reliable and longitudinal data were available; and, 2) appropriate measures could be found for all modeled constructs. Given these requirements, the hospital industry was selected.

Before 1983, third-party payers reimbursed hospitals for the full costs of patient care from third-party payers. However, legislation limiting reimbursements to

hospitals (i.e., the Medicare Prospective Payment System) was fully implemented in 1986. Over an extended period, the impact of this legislation was a dramatic downward shift in profitability (Guterman & Dobson, 1986). Thus, besides available, reliable and longitudinal data, there is evidence that this industry experienced major environmental changes which resulted in declining performance for many incumbents (Johnson & Johnson, 1986; Shortell, Morrison & Friedman, 1990).

Drawing a sample from the entire hospital industry was not feasible due to the costs and other practical concerns (e.g., likelihood of obtaining responses).

Hence, the sample was drawn from the 325 hospitals owned by Columbia/HCA. Columbia/HCA is the largest U.S. hospital system (Lutz, 1995) and twelfth-largest employer in the United States (Lutz, 1994). Columbia/HCA was chosen because of its size and multi-state distribution of hospitals.

The sample of declining hospitals was selected from between the years of 1988-1991. These years were selected because they were the most recent years from which to obtain a sample yet allow sufficient time to observe performance turnaround. Performance data was collected through 1994 (the most recent archival data available). Since the average time for an organization to turnaround is three years (Hoffman, 1989), it is reasonable to assume

that this period is sufficient to observe the performance implications of strategic responses.

As noted in Chapter 1, organizational decline is defined as decreasing internal resources (Cameron, Sutton & Whetten, 1988). Thus, to be included in this sample, hospitals experienced: 1) a return on assets (ROA) of less than the risk-free rate of return for at least two continuous years; and, 2) at least one year of net loss. The first criterion ensured that each hospital's poor performance was over an extended period, and not a oneyear aberration. As noted in Chapter 2, organizations not producing returns that are at least equal to the riskadjusted rate of return are failing in an economic sense (Porter, 1980). Since the risk-adjusted rate of return is higher, the risk-free rate served as a conservative criterion for sample inclusion (Barker, 1992). The second criterion ensured that each hospital had, in fact, experienced a reduction of resources. A net loss fundamentally represents an organization's inability to recoup all the costs of producing its services and, thus, reflects declining internal resources (Barker, 1992). ensure that these criteria were consistent with those used by practitioners, three hospital executives were consulted. The three executives concurred with these criteria. Of the 325 hospitals owned by Columbia/HCA, 131 met the guidelines for inclusion in the sample.

Archival data was collected for the years 1987-1994. It was obtained from the Center for Healthcare Industry Performance Studies (CHIPS), and the American Hospital Association's annual <u>Guide to the Health Care Field</u> (AHA Guide). Primary data was obtained through questionnaires distributed to a top manager from each hospital.

Measures

Four control variables were measured beyond the variables corresponding to constructs in the model. The discussion of these control variables is followed by discussions of the independent and dependent measures. To help ensure the validity of the archival measures, a panel of three researchers, who specialize in health care issues, and a former hospital consultant reviewed the archival measures for face validity. Tables 4-1, 4-2, 4-3, 4-4, and 4-5 list the measures and data sources for each variable in the study.

Control variables. Three control variables relating to organizational characteristics specific to the hospital industry and one control variable required by the sampling method were used in this study. First, there are three organizational characteristics that have been found to predict hospital performance including: 1) size (Molinari, Morlock, Alexander & Lyles, 1993; Ozcan & Luke, 1993); 2) outpatient service mix (Goes & Zhan, 1995); and, 3) Medicare and Medicaid intensity (Goes & Zhan, 1995).

These organizational characteristics were included in the study to control for their potential confounding effects.

As shown in Table 4-1, this study measured size as number of hospital beds. The number of beds is a well-established, widely-accepted measure of size (e.g., Alexander & Amburgey, 1987; Ginn, 1990; Provan, 1991) that is robust across locations (e.g., rural or metropolitan). Outpatient service mix was measured as the ratio of outpatient revenues to total revenues. Medicare and Medicaid intensity was measured as the percent of total hospital days accounted for by the Medicare and Medicaid payment mechanisms.

Table 4-1 Control Variables

VARIABLE	MEASURE	DATA SOURCE
Size	Total number of hospital beds	CHIPS
Outpatient Service Mix	Ratio of outpatient revenues to total revenues	CHIPS
Medicare and Medicaid Intensity	Ratio of Medicare and Medicaid hospital days to total hospital days	CHIPS
Prior Performance	ROA in the third year prior to the year of sample inclusion	CHIPS

Besides the organizational characteristics discussed previously, this study also accounted for the potential performance effects of the extent and length of decline by accounting for the organization's prior performance. As

noted previously, the criteria for sample inclusion ensured that an organization's poor performance was over an extended period, and that the organization experienced a reduction of resources. However, these criteria did not preclude varied lengths of decline. For example, an organization may have experienced multiple years of sub risk-free ROA before having one year of negative profit or may have had poor performance before 1988. Ideally, the number of years a hospital was in decline could be measured and included as a control variable. this was precluded because performance data prior to 1987 was unavailable from CHIPS and there was no other suitable source for this data. Thus, instead of directly measuring the length of decline, this study included the organization's ROA in the third year prior to the year of sample inclusion as a control variable. Although this control variable is probably less accurate than the number of years a hospital was in decline, this variable indicates if the hospital was in decline as well as the extent of that decline prior to sample inclusion.

Strategy Content. Strategy content was measured with the weighted change in service offerings and change in the routine days percentage. The weighted change in service offerings was computed using a system developed by Hambrick (1981) and has been used in several other hospital industry studies (e.g., Ketchen, Thomas &

McDaniel, 1996; Thomas, Clark & Gioia, 1993; Thomas & McDaniel, 1990). A list of services offered by individual hospitals is printed annually in the AHA Guide. Using this list, a profile of changes in product/service offerings between the year of and three years after sample inclusion was compiled for each hospital. A high adoption of new service offerings indicates that the hospital added new products and services and, thus, adopted an entrepreneurial strategy. Conversely, a low score on this measure indicates that the hospital did not adopt new service offerings and, instead, adopted an efficiency strategy.

Table 4-2 Operationalization of Strategy Content

VARIABLE	MEASURE	DATA SOURCE
Turnaround Strategy	Weighted change in service offerings	AHA Guide
	Change in routine days percentage	CHIPS

The second measure of strategy content is the change in routine patient days as a percentage of total patient days (Ketchen, Thomas & Snow, 1993). Hospital services can be categorized as routine (e.g., radiology, pharmacy) or nonroutine (e.g., neonatal and burn care units). Hospitals seeking to exploit new service opportunities have a relatively large percentage of patients in

nonroutine service units (Shortell, Morrison & Freidman, 1990). In contrast, hospitals focusing on efficiency ignore the opportunities presented by nonroutine services, and instead concentrate on offering routine services efficiently (Meyer, 1982). A decreasing ratio of routine to total days indicates that a hospital added or emphasized nonroutine services and, thus, adopted an entrepreneurial strategy. In contrast, a stable or increasing ratio indicates that a hospital emphasized efficiency in its current services rather than service innovations. Thus, a stable or increasing ratio indicates an efficiency strategy.

Strategy process. Averaged five-point Likert scale responses are the measures of strategy process variables (see Table 4-3). The scale to measure centralization of decision making was adapted from the scales used by Inkson, Pugh and Hickson (1970) and Thomas and McDaniel (1990). Originally, the centralization of decision making scale consisted of six items; however, as discussed in Chapter 5, the scale was reduced to four items because of low loadings in the confirmatory factor analysis.

A scale to measure information usage was not available. Thus, a new scale was developed. Items were validated by the practitioners with which the

questionnaire was pretested. The information usage scale consisted of fifteen items.

Table 4-3
Operationalization of Strategy Process

VARIABLE	MEASURE	DATA SOURCE
Information Usage	Average of Likert scale responses	Questionnaire
Centraliza- tion of Decision Making	Average of Likert scale responses	Questionnaire

Cause of decline. Because using archival data is more valid than using perceptual data when a study's objective is understanding the outcomes of strategic actions (Boyd, Dess & Rasheed, 1993), archival measures were used to assess the cause of decline. The measure of input-environmental causes of decline was the ratio of salary per full-time employee (FTE) as compared to the Columbia/HCA average. If skilled employees are relatively scarce, then the hospital would have to pay more to attract them than the other hospitals in the system (Nutt & Milter, 1992); thus, a ratio higher than the system's average would indicate scarce employee resources in that hospital's location. To eliminate the impact of regional wage differences, this ratio was adjusted by the regional wage index. This variable, as well as the other cause-ofdecline variables, was averaged over the years that the

organizations met the selection criteria for sample inclusion.

Table 4-4
Operationalization of Cause of Decline

VARIABLE	MEASURE	DATA SOURCE
Input-Environmental Cause of Decline	Salary per FTE (adjusted by wage index) / Columbia- HCA average	CHIPS
Internal Cause of Decline	Length of stays (adjusted for case mix) / Columbia-HCA average	CHIPS
Output- Environmental Cause of Decline	Market share of county / prior year	CHIPS

Internal causes of decline were represented by the length of stay compared to Columbia/HCA average. Length of stay is the number of days the average patient is hospitalized and is a measure of efficiency (Goes & Meyer, 1990). The more efficient a hospital is in providing medical care, the shorter the length of stay (Ketchen, Thomas & Snow, 1993). Thus, the extent to which this ratio exceeds Columbia/HCA average indicates the extent to which the hospital suffered from internal causes of decline. This measure was adjusted for case mix to eliminate differences among hospitals regarding the severity of illness treated.

The measure selected to represent outputenvironmental causes of decline was change in county market share. The county is a widely-used measure of a hospital market area (Garnick, Luft, Robinson & Tetreault, 1987) The change was measured between the year prior to and the year of sample inclusion. A declining market share may suggest the presence of a new competitor, the addition of new services by a competitor. Whatever the specific underlying reason, a declining market share fundamentally represents that the hospital's services are less desirable than those of competitors; thus, a declining market share represents an output-environmental cause of decline.

Turnaround performance. The most complex construct in this study is performance. As noted in Chapter 2, performance is a multidimensional construct that can be conceptualized in terms of financial, operational, or effectiveness outcomes (Venkatraman & Ramanujam, 1986). Because performance is a multidimensional construct, the dimensions should exhibit divergent validity (i.e., the three dimensions should be distinct) as well as convergent construct validity (i.e., there should be correspondence among the three dimensions). Thus, it is generally believed that the multiple dimensions of performance should be examined in the same study, so that divergence and convergence can be examined (Cameron, 1986; Venkatraman & Ramanujam, 1986).

This study did indeed examine all three dimensions of performance. The effectiveness outcomes were obtained

with the use of questionnaires. The respondents were asked to respond in a five-point Likert scale format to two questions about the overall performance of the hospital (See Appendix). The responses to the two questions were averaged to obtain a measure of the effectiveness outcome for each hospital. Operating performance was measured with the hospital occupancy rate. Occupancy reflects the extent to which a hospital presents an attractive bundle of characteristics to admitting physicians and potential patients (Ketchen, Thomas & Snow, 1993; Molinari, Morlock, Alexander & Lyles, 1993) and, thus, serves as a measure of operating performance. Financial performance was measured in this study with ROA, which is a widely-used financial performance measure in studies of hospitals (e.g., Clement, D'Aunno & Poyzer, 1993; Cleverley & Harvey, 1992; Molinari, Morlock, Alexander & Lyles, 1993).

As shown in Table 4-5, the operational and financial performance indicators were measured in two ways. First, these indicators were averaged over a three-year period that began one year after the year during which the hospital qualified for inclusion in the sample. Second, these indicators were measured during the third year after the year during which the hospital qualified for inclusion in the sample.

Organizational performance was measured in the first way (i.e., 3-year average) because averaging prevents one-year outliers from producing spurious results (Thomas, Clark & Gioia, 1993). Measuring performance in the second way (i.e., the third year only) gives an indication of the long-term success of the organization's strategy. It is conceptually different from the first method because it is not affected by large write-offs and losses that may happen in the first year of the turnaround (cf. Robbins & Pearce, 1992). Thus, this measure attempts to parcel out any retrenchment expenses by examining performance in only the third year (Barker, 1992).

Table 4-5
Operationalization of Performance

VARIABLE	MEASURE	DATA SOURCE
Effectiveness Performance	Average of Likert-scale responses	Survey
Operational Performance	Three-year average occupancy Occupancy in third year	CHIPS CHIPS
Financial Performance	Three-year average ROA ROA in third year	CHIPS CHIPS

The choice of three years was based on a summary of past turnaround studies that indicated organizations take three years on average to achieve turnaround (Hoffman, 1989). Further, a relatively short period was necessary to minimize potential history threats (i.e., performance effects of events unrelated to the turnaround strategies -

- Cook & Campbell, 1979). Finally, a longer period likely would have increased retrospective errors (i.e., misreporting past events or behaviors -- Golden, 1992). Thus, three years appeared to be a prudent time frame.

Data Collection Procedures

The measures of strategy process and effectiveness performance were obtained via a mailed questionnaire. The content validity and reliability of these scale items were established using a retranslation exercise (Russell & Russell, 1992; Smith & Kendall, 1963). In this exercise, a panel of nine doctoral graduate students sorted individual scale items into piles representing the variables. As a result of this exercise, one item was removed from the questionnaire because it was not consistently sorted into the "correct" pile. The remaining questions were sorted into the "correct" piles (i.e., at least eight of the nine students sorted the remaining questions into the "correct" pile). Thus, the construct validity and reliability of the scale items were demonstrated.

The construction of the questionnaire and associated materials (i.e., cover letters and envelopes) was guided by Dillman's (1978) total design method. Dillman and associates' specific and empirically-supported recommendations were designed to maximize both the validity of the survey questions and the response rate.

Based on the effectiveness of the total design method (cf. Snow & Thomas, 1994), Dillman's (1978) methods guided activities throughout the survey process.

Dillman's (1978) method specifies that questionnaires be pilot tested with three types of individuals (academics, practitioners in the industry of interest, and industry experts). Based on this suggestion, the questionnaire for the present study was pilot tested with four researchers, four hospital executives, and three industry experts.

An initial mailing (including a personalized cover letter, questionnaire, and stamped return envelope) was followed in one week by a reminder postcard. Two weeks later, a second mailing was sent to those managers not responding to the first. Four weeks, later, a set of questionnaires was sent via a facsimile machine. A fourth mailing, which included a personalized cover letter from a Columbia/HCA hospital CEO, was sent out sixteen weeks after the original mailing. Copies of the cover letters and questionnaire are included in the Appendix.

To establish the reliability and discriminant validity of the variables measured by the survey, all scale items were analyzed using confirmatory factor analysis. The results were examined to: 1) ensure that the scale items were significantly related to their specified constructs; 2) assess the reliability of the

measures; and, 3) establish discriminant validity of the variables. Results of this confirmatory factor analysis are presented in Chapter 5.

Another concern was the use of retrospective accounts. Individuals may attempt to project a socially-desirable image by trying to present their past decisions as rational (Feldman & March, 1981; Salancik & Meindl, 1984). Further, respondents may unintentionally represent the past due to "hindsight" bias (Fischhoff & Beyth, 1975) or as an attempt to maintain their self-esteem (Huber & Power, 1985). Notably, the recall by respondents in organizations that have changed strategies is less accurate than recall by respondents in organizations that have not changed strategies. Thus, retrospective errors (i.e., misreporting the past -- Golden, 1992) are especially pertinent threats to the validity of the survey responses for this study. Hence, attempts were made to minimize these errors.

First, the survey was designed to ask about specific facts or behaviors, rather than general assessments of the hospitals' past strategies. Accounts of past facts and behaviors are likely to be more accurate than accounts of past beliefs and intentions (Golden, 1992). Further, the cover letter attempted to motivate managers to provide accurate information by stressing the value of this research to their company and themselves. Additionally,

the survey included a customized financial summary of the years 1988 - 1994. Furnishing a financial summary with the questionnaire helps focus the respondents' attention to a specific time (Robbins & Pearce, 1992). The items included on the financial summary were validated by the hospital executives who pretested the survey as those items most likely to focus the respondent's attention on the appropriate time frame.

Hypotheses Testing

As noted in Chapter 2, the theoretical basis of this study is strategic choice (Child, 1972), which is a descendant of contingency theory (Ginsberg & Venkatraman, 1985). Contingency theory asserts that there is an interaction between two or more variables that predicts a third variable (Schoonhoven, 1981). Thus, the statistical tests for these hypotheses must be capable of detecting interactions. Specifically, hypotheses 1a, 1b, 1c and 1d predict an interaction between strategy content and process variables, and hypotheses 2a, 2b and 2c predict an interaction between strategy content and cause of decline. Because these hypotheses specify a particular criterion (i.e., turnaround performance) and are precise in their specification of the functional form (i.e., interaction between strategy content and process, and interaction between strategy content and cause of decline), moderated multiple regression analysis (MMR) is the appropriate

statistical test (Venkatraman, 1989). MMR is the most powerful technique to detect the presence of a moderator relationship (Stone, 1988). Because turnaround performance is measured using multiple variables, multivariate moderated multiple regression (MMMR) is appropriate (Johnson & Wichern, 1988).

MMMR requires that a two-step process be followed. In the first step, only the control variables and the main effects are entered into the regression equation. In the second step, the interaction terms are added into the equation. If a statistically significant difference in explanatory power is found (i.e., change in R⁻), then an interaction has been noted.

Summary

This chapter outlined the sample, data sources, measures, and research design used in this study. Chapter 5 presents the results of the analyses.

CHAPTER 5: RESULTS

This chapter is organized into three parts. First, the results of the primary data collection are described. Second, descriptive statistics (means, standard deviations, and Pearson zero-order correlations) for all variables used in the study are presented. Finally, the results of the analyses used to examine each hypothesis developed in Chapter 4 are detailed.

Primary Data Collection

Responses were received from 77 or 58.8% of the 131 hospitals surveyed. However, ten organizations responded that no current managers had been at the hospital for a sufficient amount of time to complete the questionnaire. Further, one response was unusable because the top manager failed to complete substantial portions of the survey. Thus, the number of organizations represented by usable responses was 66, or 50.4%, which compares very favorably to the 12% response rate typically obtained when surveying top managers (Hambrick, Geletkanycz & Fredrickson, 1993). Certain hospitals were represented by multiple responses; thus, the total number of surveys received from the 66 hospitals was 80. Because the goal of the confirmatory factor analysis was to examine the reliability of and variance extracted by the scale items, rather than analyze the organization, all 80 surveys were used in the confirmatory factor analysis. However, the unit of

analysis in the remaining analyses is the organization. Thus, the questionnaire completed by the highest-level manager was selected to represent the organization. This decision rule was deemed appropriate because higher-level managers have the best understanding of an entire organization (Snow & Hrebiniak, 1980), and, thus, would have the most knowledge of an organization's strategy processes and performance. In the event that the questionnaires were completed by managers at equal levels, the questionnaire used was selected randomly.

Description of respondents. Of the 66 usable responses, 37 (56%) were completed by chief executive officers, 19 (29%) were completed by chief operating officers or chief financial officers, and 6 surveys (9%) were completed by other managers (e.g., assistant administrator, chief nursing officer). The remaining 4 surveys (6%) did not identify which manager completed them. To assess if there were any significant differences in responses across these groups of respondents, the mean responses were analyzed with multivariate analysis of variance (MANOVA). The results reflected no significant differences in reported information usage (F=1.39, p<.25), centralization (F=1.02, p<.39) and effectiveness performance (F=.05, p<.98). Because there were no obvious differences in responses, no further controls for

differences in organizational level of the respondents were deemed necessary.

The respondents, averaging 45 years of age, had been at their hospital an average of 8.2 years and had an average of 18 years of experience in the hospital industry. Operations/management was identified by 54.5% of the respondents as their primary area of expertise. Accounting/finance, clinical, and marketing were identified by 16.7%, 4.5%, and 3.0% respectively. Multiple areas were identified by 16.7%, and 4.6% did not identify any areas of expertise.

Test for non-response bias. The extent to which the 66 respondents represented the total sample of 131 was a major concern. Accordingly, T-tests were used for comparison in terms of important hospital demographic variables. Also, because one might expect that successful hospitals would be more likely to respond, respondents and nonrespondents were compared based on subsequent performance. As shown in Table 5-1, the results of these tests indicate that those hospitals which did respond do not appear significantly different from those which did not. Thus, the hospitals from which responses were received appear to be representative of all the hospitals that were sent a questionnaire.

Reliability and variance extracted. A survey was used to gather data on three variables (i.e.,

Table 5-1 T-test Comparisons of Respondents and Non-Respondents

<u>Dimension</u>	Respondents (n=66)		Non-Respondents (n=65)
1. Size			
Mean Standard Deviation	158.7 84.1		164.5 113.5
		t = .3324 (p < .74)	
2. Outpatient revenue as a percentage of total revenue			
Mean Standard Deviation	23.79 7.53		24.91 11.93
		t = .6451 (p < .52)	
3. Medicare and Medicaid revenue as a percentage of total revenue			
Mean Standard Deviation	60.48 13.62		59.47 15.91
		t = .39 (p < .70)	
4. ROA in third year after sample inclusion			
Mean Standard Deviation	3.05 12.39		-1.82 43.82
		t = .87 (p < .39)	
		(table	e con'd.)

<u>Dimension</u>	Respondents (n=66)		Non-Respondents (n=65)
5. ROA averaged over 3 years after sample inclusion			
Mean Standard Deviation	51 11.25	t = 1.0 (p < .32)	-3.85 24.76
6. Occupancy in third year after sample inclusion			
Mean Standard Deviation	.63 .15	t = .05 (p < .96)	.63 .18
7. Occupancy averaged over three years after sample inclusion			
Mean Standard Deviation	.62 .13	t = .19 (p < .85)	.63 .16

centralization of decision making, information usage, and performance). The scale items representing the variables were analyzed using confirmatory factor analysis. The results were examined to: 1) ensure that the scale items were significantly related to their specified constructs; 2) assess the reliability of the measures; and, 3) assess discriminant validity among the variables.

The correlations among the scale items for centralization of decision making and performance, and the average of the information usage items were analyzed with confirmatory factor analysis. Because there was a sole indicator for information usage, reliability estimates were used to fix measurement parameters (cf. Williams & Hazer, 1986). Specifically, the information usage construct's path to its indicator was set equal to the square root of the indicator's composite latent reliability, which was computed with the sums of standardized loadings and indicator measurement errors derived from the confirmatory factor analysis ran with all fifteen items (Q3 items 1-15) loading on one construct. The reliability of the fifteen items was .825; thus the path was set equal to .908. The indicator's measurement error was set to one minus the reliability (.175).

A Heywood case was noted when examining the measurement model results. Q8.1 had a loading of 1.05; thus, before the overall fit of the model could be

assessed, the measurement error for q8.1 was set to a small value (.005) to correct the offending estimate (Hair, et al., 1992). The overall fit of the model to the data was satisfactory. The χ was 10.85 and nonsignificant (p=.62, 13 df); however, this measure of fit may not be reliable with sample sizes smaller than 100 (Hair, et al. 1992). Thus, other measures of fit were examined. These alternative measures indicated support for an adequate overall fit of the model. Bentler's (1990) comparative fit index was 1.0, Bollen's (1989) incremental fit index was 1.0, Jörskog and Sörbom's (1993) goodness of fit index was .96, Tucker and Lewis' (1973) fit index was 1.0, and the normed fit index (Bentler & Bonett, 1990) was .94. The model fit was further evaluated by testing whether any of the three hypothesized factors could be combined without significantly affecting the fit of the model. The results suggested that the three factor model fit the data significantly better than any rival model.

As shown in the Table 5-2, the reliability of and amount of variance extracted by the items for each construct were satisfactory. Although the reliability of the performance construct may be slightly inflated because the respecification of the measurement error for q8.1 (Hair et al., 1992), the reliability of the items comprising centralization of decision making and

performance far exceeded the recommended level of .70 (Nunnally, 1978), measuring .84 and .82 respectively. The variance extracted for these same measures exceeds the recommended .50 level (Hair et al., 1992). The variance extracted totaled .57 for centralization of decision making and .59 for performance. The correlation between factors was significant only between centralization of decision making and information usage (r=.431, t=3.76, p<.001). The correlations between performance and centralization of decision making, and performance and information usage were nonsignificant (r=.179, t=1.496; and r=-.01 t=-.10 respectively).

Descriptive Statistics

Table 5-3 presents the means, standard deviations, and Pearson zero-order correlations among the control, strategy content and process, cause of decline, and performance variables.

Testing of Hypotheses

Tables 5-4 through 5-9 summarize the regression results. As noted in Chapter 4, two measures of turnaround strategy (weighted change in strategy offerings and change in routine days percentage) were obtained. The goal of obtaining two measures of strategy was to ensure the findings were robust across measures of strategy (Jick, 1979). Thus, the hypotheses were tested using the

Table 5-2 Completely Standardized Confirmatory Factor Loadings

Item #	Item	Centralization	Info Usage	Performance
2.2	did all members of the hospital's top management make strategic decisions on a regular basis?	.737		
2.3	was authority for making strategic decisions shared			
2.5	by all top managers? did all top managers share responsibility for strategic decisions?	.764 .787		
2.6	could decision making authority be characterized as shared among all top managers?			
	top managers:	.728		
average of 3.1-				
3.15	information usage		.908	
0.1				
8.1	the effectiveness of your hospitals response to the financial decline			.997
8.2	the current performance of your hospital			.648
Variance	Extracted	.57		.59
Reliability	y	.84		.82

measures of strategy consecutively. Tables 5-4 through 5-6 show the regression results when using the weighted change in service offerings as the measure of strategy. Tables 5-7 through 5-9 show the regression results when using the change in routine days percentage as the measure of strategy. Comparing Equations 1 and 2 for all performance measures allows examination of the hypotheses. Equation 1 includes the control variables and the main effects of the strategy process and content, and cause of decline variables. Equation 2 includes these same variables and the interactions among these variables. all cases, the change in R after adding the interaction effects was nonsignificant. Thus, there was no support for the presence of interactions (Jaccard, Turrisi & Wan, 1990), and no support for the hypotheses developed in this study.

Multicollinearity is often found among variables when multiplicative terms are used to represent interaction effects (Jaccard, Turrisi & Wan, 1990). If present, multicollinearity can distort the results or make the results unstable (Hair et al., 1992). Thus, the impact of multicollinearity was assessed using a procedure outlined in Hair et al (1992). First, all condition indices (ameasure of the relative amount of variance associated with an eigenvalue, such that larger values indicate high

Table 5-3 Descriptive Statistics $(n=66)^{1}$

<u>Variables</u>	<u>Mean</u>	<u>S.D.</u>	1	<u>2</u>	<u>3</u>
Control Variables					
1. Size	158.73	84.09			
2. Outpatient Service Mix	23.79	7.53	49		
3. Medicare and					
Medicaid Intensity	60.48	13.62	40	.19	
4. Prior Performance	1.52	8.22	10	.19	.13
Strategy Content					
Weighted Change					
in Service Offerings	24.58	19.13	.33	10	06
6. Change in Routine Days	-1.30	2.69	05	.04	.07
Strategy Process					
7. Information Usage	3.25	.52	.10	13	11
8. Centralization of					
Decision Making	3.53	.81	.15	.06	18
Cause of Decline					
Input - Environmental					
Cause of Decline	1.03	.11	12	02	09
Internal Cause of					
Decline	1.04	.18	.04	02	.22
11. Output - Environmental					
Cause of Decline	.99	.11	.01	.20	10
Performance					
12. Effectiveness Performance	4.15	.77	12	.10	.04
13. Three-year Average					
Occupancy	44.23	10.96	.27	24	06
14. Occupancy in					
Third Year	44.99	10.74	.33	35	14
15. Three-year					
Average ROA	51	11.25	08	.23	04
16. ROA in third year	3.06	12.4	.09	.27	11

¹Correlations greater than |.24| are significant as p<.05; correlations greater than |.32| are significant at p<.01; correlations greater than |.39| are significant at p<.001.

<u>Variables</u>	<u>4</u>	<u>5</u>	<u>6</u>	7	<u>8</u>
Control Variables 1. Size 2. Outpatient Service Mix 3. Medicare and Medicaid Intensity 4. Prior Performance					
Strategy Content5. Weighted Change in Service Offerings6. Change in Routine Days	09 35	.20			
Strategy Process 7. Information Usage 8. Centralization of Decision Making	06 .23	14 .19	.02	.27	
Cause of Decline 9. Input - Environmental					
Cause of Decline 10. Internal Cause of	04	16	.13	.09	.18
Decline 11. Output - Environmental	23	04	.12	.17	20
Cause of Decline	04	.17	.02	11	02
Performance 12. Effectiveness Performance 13. Three-year Average	.03	.12	.11	03	.16
Occupancy 14. Occupancy in	26	.26	.24	.17	.09
Third Year 15. Three-year	18	.23	.12	.23	.08
Average ROA 16. ROA in third year	.02 07	.10 .14	.08 .07	18 22	.04 02

¹Correlations greater than |.24| are significant as p<.05; correlations greater than |.32| are significant at p<.01; correlations greater than |.39| are significant at p<.001.

<u>Variables</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
------------------	----------	-----------	-----------	-----------	-----------

Control Variables

- 1. Size
- 2. Outpatient Service Mix
- 3. Medicare and Medicaid Intensity
- 4. Prior Performance

Strategy Content

- 5. Weighted Change in Service Offerings
- 6. Change in Routine Days

Strategy Process

- 7. Information Usage
- 8. Centralization of Decision Making

Cause of Decline

 Input - Environmental Cause of Decline
 Internal Cause of

Decline -.18

11. Output - Environmental

Cause of Decline -.01 .04

Performance

12. Effectiveness Performance	.11	03	.34		
13. Three-year Average					
Occupancy	17	10	09	.01	
14. Occupancy in					
Third Year	17	03	07	03	.91
15. Three-year					
Average ROA	.16	30	.12	.09	.10
16. ROA in third year	14	21	.13	.00	.25

¹Correlations greater than |.24| are significant as p<.05; correlations greater than |.32| are significant at p<.01; correlations greater than |.39| are significant at p<.001.

<u>Variables</u> <u>14</u> <u>15</u> <u>16</u>

Control Variables

- 1. Size
- 2. Outpatient Service Mix
- 3. Medicare and Medicaid Intensity
- 4. Prior Performance

Strategy Content

- 5. Weighted Change in Service Offerings
- 6. Change in Routine Days

Strategy Process

- 7. Information Usage
- 8. Centralization of Decision Making

Cause of Decline

- 9. Input Environmental Cause of Decline
- 10. Internal Cause of

Decline

11. Output - Environmental Cause of Decline

Performance

- 12. Effectiveness Performance
- 13. Three-year Average Occupancy
- 14. Occupancy in

Third Year

15. Three-year

Average ROA

-.01

16. ROA in third year

.18 .75

Correlations greater than |.24| are significant as p<.05; correlations greater than |.32| are significant at p<.01; correlations greater than |.39| are significant at p<.001.

Table 5-4
Regression Results
Change In Service Offerings as Indicator
of Strategy Content

Independent Variables

Dependent Variables

Equation	Three Year Average ROA 1 2	ROA in <u>Third Year</u> 1 2
Size Outpatient Service Mix Medicare/Medicaid Intensity	.36* .36 .39** .40 .11 .15	** .42** .41**
Prior Performance	0913	
Change in Service Offerings	.03 .08	.04 3.09
Information Usage	10 .15	13 .11
Centralization	0701	06 .04
Input-Environmental Cause of Decline	.19 .05	1215
Internal Cause of Decline	32*38	2614
Output-Environmental Cause of Decline	.0401	.02 .15
Change in Service Offerings X Info Usage	-1.05	-1.16
Change in Service Offerings X Centralization	49	38
Change in Service Offerings X Input-Environmental Cause of Decline	.88	23
Change in Service Offerings X Internal Cause of Decline	.21	73
Change in Service Offerings X Output-Environmental Cause of Decline	.37	67
		

Note: *p<.05; **p<.01; ***p<.001

Dependent Variables

Equation	Three \ <u>Average</u>		ROA in <u>Third Year</u>	
	1	2	1	2
df Adjusted R ²	(10,55) .13	(15,50) .10	(10,55) .13	(15,50)
R ² F	.26 1.99*	.31 1.47	.27 1.93	.31 1.50
Change in R ² F		.05 .73		.04 .58

Note: *p<.05; **p<.01; ***p<.001

Table 5-5
Regression Results
Change in Service Offerings as Indicator
of Strategy Content

Independent Variables

Dependent Variables

Equation	Three ' Average Oc		•	oancy in rd Year 2
Size	.14	.22	.11	.21
Outpatient Service Mix	10	10	23	21
Medicare/Medicaid Intensity	.13	.15	.02	.04
Prior Performance	30*	37*	15	23
Change in Service Offerings	.16	94	.16	-2.52
Information Usage	.19	.28	.23	.30
Centralization	.08	23	.03	37
Input-Environmental Cause of Decline	21	37	19	39
Internal Cause of Decline	25	26	14	23
Output-Environmental Cause of Decline	07	04	03	08
Change in Service Offerings X Info Usage		07		.12
Change in Service Offerings X Centralization		1.07		1.35
Change in Service Offerings X Input-Environmental Cause of Decline		.54		.91
Change in Service Offerings X				
Internal Cause of Decline		17		.21
Change in Service Offerings X Output-Environmental Cause of Decline		21		.22
Note: *p<.05; **p<.01; ***p<.001				

Dependent Variables

	Three <u>Average O</u>		Occupancy in Third Year	
Equation	1	2	1	2
df Adjusted R^2	(10,55) .15	(15,50)	(10,55)	(15,50)
R ²	.28 2.16*	.33 1.65	.27 2.02*	.34
Change in R2 F	2.10	.05 1.19	2.02	.07 1.04

Note: p<.05; **p<.01; ***p<.001

(table con'd.)

Table 5-6
Regression Results
Change in Service Offerings as Indicator
of Strategy Content

Independent Variables	<u>Dependent Variable</u> Performance	
Equation	1	<u>2</u>
Size Outpatient Service Mix Medicare/Medicaid Intensity Prior Performance Change in Service Offerings	20 08 .05 .00	14 10 .03 .12
Information Usage Centralization	01 .20	05 .19
Input-Environmental Cause of Decline Internal Cause of Decline Output-Environmental Cause of Decline	.08 .01 .35**	.03 .24 .95**
Change in Service Offerings X Info Usage		.15
Change in Service Offerings X Centralization		.10
Change in Service Offerings X Input-Environmental Cause of Decline		.12
Change in Service Offerings X Internal Cause of Decline		69
Change in Service Offerings X Output-Environmental Cause of Decline		-3.68
Note: *p<.05; **p<.01; ***p<.001		

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Dependent Variable Performance

Equation	<u>1</u>	2
df	(10,55)	(15,50)
Adjusted R ²	.04	.05
R^2	.19	.27
F	1.27	1.23
Change in R ²		.08
F		1.12

Note: *p<.05; **p<.01; ***p<.001

Table 5-7
Regression Results
Change in Routine Days as Indicator of Strategy Content

Independent Variables

Dependent Variables

	Three \\ Average		ROA <u>Third</u>	
Equation	1	2	1	2
Size	.37*	.36*	.28	.21
Outpatient Service Mix	.38**	•	.41**	.36**
Medicare/Medicaid Intensity	.10	.08	03	05
Prior Performance	07	07	16	21
Change in Routine Days	.07	-2.76	.07	80
Information Usage	10	05	06	.03
Centralization	07	03	12	09
Input-Environmental Cause of Decline	.18	.22	14	11
Internal Cause of Decline	33*	43*	27*	58**
Output-Environmental Cause of Decline	.04	.13	.02	.16
Change in Routine Days X Info Usage		.39		1.34
Change in Routine Days X Centralization		.11		64
Change in Routine Days X Input-Environmental Cause of Declin	ne	1.38		39
Change in Routine Days X Internal Cause of Decline		50		-2.11*
Change in Routine Days X Output-Environmental Cause of Decl	ine	1.46		1.85
Note: *p<.05; **p<.01; ***p<.001				

Dependent Variables

	Three \ <u>Average</u>		RO <u>Third</u>	A in <u>Year</u>
Equation	1	2	1	2
df Adjusted R ²	(10,55) .14	(15,55) .10	(10,55)	(15,55)
R ²	.27	.31	.26	.37
F	2.03*	1.50	1.95	1.98*
Change in R ²		.04		.06
F		.60		1.75

Note: *p<.05; **p<.01; ***p<.001

Table 5-8
Regression Results
Change in Routine Days as Indicator of Strategy Content

Independent Variables

Dependent Variables

	Three Year Average Occupancy		Occupancy in <u>Third Year</u>	
Equation	1	2	1	2
Size	.19	.14	.17	.07
Outpatient Service Mix	12	16	24	27
Medicare/Medicaid Intensity	.12	.10	.03	01
Prior Performance	25	36*	11	24
Change in Routine Days	.22	1.52	.13	08
Information Usage	.17	.17	.21	.28
Centralization	.09	.13	.05	.06
Input-Environmental Cause of Decline	26*	32*	23	30*
Internal Cause of Decline	27*	34	16	29
Output-Environmental Cause of Declin	ne04	.03	01	.12
Change in Routine Days X Info Usage		.17		1.29
Change in Routine Days X Centralization		.13		28
Change in Routine Days X Input-Environmental Cause of Dec	line	-2.44		-2.50
Change in Routine Days X Internal Cause of Decline		59		90
Change in Routine Days X Output-Environmental Cause of De	ecline	1.11		2.55*
Note: *p<.05; **p<.01; ***p<.001				

Dependent Variables

	-	Three Year <u>Average Occupancy</u>		Occupancy in <u>Third Year</u>	
Equation	1	2	1	2	
df Adjusted R ²	(10,55) .18	(15,50) .19	(10,55)	(15,50)	
R ²	.30	.37	.26	.37	
Change in R ² F	2.38*	2.01* .07 1.18	1.97	1.98* .11 1.75	

Note: *p<.05; **p<.01; ***p<.001

Table 5-9
Regression Results
Change in Routine Days as Indicator of Strategy Content

	<u>Dependent Variable</u> Performance	
Equation	1	<u>_2</u>
Size	16	18
Outpatient Service Mix	09	08
Medicare/Medicaid Intensity	.05	.00
Prior Performance	.02	-1.04
Change in Routine Days	.09	-1.00
Information Usage	03	02
Centralization	.19	.23
Input-Environmental Cause of Decline	.05	.02
Internal Cause of Decline	01	.07
Output-Environmental Cause of Decline	.37**	.39**
Change in Routine Days X Info Usage		.98
Change in Routine Days X Centralization		.27
Change in Routine Days X Input-Environmental Cause of Decline		-1.50
Change in Routine Days X Internal Cause of Decline		.52
Change in Routine Days X Output-Environmental Cause of Decline		.82

Note: *p<.05;**p<.01;***p<.001

<u>Dependent Variable</u> Performance

Equation	1	<u>2</u>
df	(10,55)	(15,50)
Adjusted R ²	.04	02
\mathbb{R}^2	.19	.22
F	1.26	.93
Change in R ²		.03
F		.39

Note: *p<.05;**p<.01;***p<.001

collinearity -- Hair et al., 1992) greater than 15 were identified. Then for all the condition indices greater than 15, variables with variance proportions greater than 50 percent were identified. This analysis did not identify any condition indices where a substantial proportion of the variance was explained for multiple coefficients. Thus, multicollinearity does not appear to have had a significant impact on these results. further ensure that the impact of multicollinearity was minimal, the variables comprising the main effects (e.g., strategy process and content, and cause of decline) were centered prior to the formation of the multiplicative interaction terms (Cronbach, 1987). The results of the regression analyses with the centered variables were not materially different from the results of the regressionTo analyses presented above. Thus, the impact of multicollinearity appears minimal.

Summary

This chapter presented the results of the primary data collection, the means, standard deviations, and Pearson zero-order correlations among the variables, and the results of the regression analyses. The measures gathered by primary data collection (i.e., information usage, centralization of decision making, and the effectiveness measure of performance) were shown to be

reliable and valid. Nonetheless, the results of the regression analyses failed to support any of the hypotheses. In the next chapter, the results presented above are discussed.

CHAPTER 6: DISCUSSION AND CONCLUSION

This chapter reviews the study's results and discusses avenues for future research prompted by the results. First, the results of the hypotheses testing are discussed. Second, the limitations of this study are identified. Finally, several research opportunities are described.

Discussion of Results

This study posited that achieving two types of fit positively impacts turnaround performance. The first type of fit is between strategy content and strategy process, and the second type of fit is between strategy and cause of decline. However, the results of the study did not show that either type of fit impacted performance. Although the notion that strategy content or strategy process individually impact turnaround performance was not formally hypothesized, past research has supported the relationship between strategy content and performance (e.g., Dess & Davis, 1984; Hrebiniak, Joyce & Snow, 1989; Rumelt, 1982) and strategy process and performance (e.g., Dean & Sharfman, 1996; Huff & Reger, 1987; Priem, Rasheed & Kotulic, 1985). Nonetheless, the results of the study do not show a relationship between either strategy content or strategy process and turnaround performance. following potential explanations for these results are discussed below: 1) strategy is not crucial to an

organization's ability to restore its performance; 2) the two types of fit are necessary, but not sufficient conditions for enhanced performance; 3) turnaround processes are too idiosyncratic to generalize; and, 4) alternative conceptualizations and statistical tests of fit may be more appropriate.

The first possibility is that the choice of strategy is not crucial because strategy may be only loosely coupled to performance. Loose coupling can result from the equifinality of strategies or causal independence (Weick, 1976). More specifically, the choice of strategy may not be important because both turnaround strategies are equally effective in resuscitating an organization's performance (i.e., equifinality may be operative -- Gresov, 1989; Mohr, 1982). Previous research has found that more than one strategy may lead to high performance in a given situation; for example, different strategies may perform equally well if used in different industries (Hambrick, 1983), or if supported by appropriate distinctive competencies (Snow & Hrebiniak, 1980).

This study originally predicted the equifinality of turnaround strategies; both strategies were predicted to lead to high performance if matched to the appropriate cause of decline. Although the predicted equifinality resulting from matching strategy to the cause of decline was not supported, equifinality may still be operative.

For example, variances in distinctive competencies (i.e., those things an organization does well in comparison to its competitors -- Selznick, 1957) might contribute to equifinality. Defender strategies (Miles & Snow, 1978) are successful when supported by competencies in financial management, production, and applied engineering, and prospector strategies (Miles & Snow, 1978) are successful when supported by competencies in product research and development, market research, and basic engineering (Snow and Hrebiniak, 1980). The defender and efficiency turnaround strategies both strongly emphasize efficiency (Robbins & Pearce, 1992; Miles & Snow, 1978). Thus, the efficiency strategy may be successful if supported by some of the same competencies that support the defender strategy (e.g., financial management, service delivery, and engineering geared toward improving efficiency in service delivery). The prospector and entrepreneurial turnaround strategies both strongly emphasize product and market effectiveness (Robbins & Pearce, 1992; Miles & Snow, 1978). Hence, the entrepreneurial strategy may be successful if supported by the same competencies that support a prospector strategy (e.g., market research and new service development). Future research is needed to assess the role of supporting competencies in turnaround strategy equifinality.

The other reason for the loose coupling between strategy and turnaround performance may be causal independence. Specifically, the strategic decisions of managers may not be related to performance; instead, the coercive forces of the environment may determine which organizations will turnaround and which organizations will fail (Hannan & Freeman, 1977, 1984). Population ecologists posit that individual organizations rarely succeed in making changes to their strategies (Hannan & Freeman, 1984). Because of this inertia, the sources of the organization's decline will continue to exhibit downward pressure on performance. This study showed very modest support for this ecological line of thinking. Some of the cause of decline variables reflected a negative relationship with turnaround performance; in contrast, neither strategy content nor performance was significantly related to turnaround performance. Length of stay, an indicator of inefficiency, was negatively related to financial performance (see Tables 5-4 and 5-7) and occupancy (see Table 5-8). Further, salary per FTE, an indicator of input-environmental causes of decline, was negatively related to occupancy (See Table 5-8). results lend support to the notion that the hospitals were not malleable, and their attempts to change were not realized. As a result, the environment determined the subsequent performance of the organizations. However,

this study's conclusions regarding the impact of environmental determinism must be viewed with extreme caution. The findings were not robust across all measures of performance (i.e., financial, operating, and effectiveness) and were not consistent across all the causes of decline. Notably, the relationship between salary per FTE (the indicator of input-environmental causes of decline) and subsequent performance was found only for occupancy. Further, no relationship between market share (the indicator of output-environmental causes of decline) and performance was found.

In examining turnaround, future research could integrate ecological theories (Hannan & Freeman, 1977) with strategic choice theories (Child, 1972) to better explain an organization's ability to restore its performance. Turnaround studies have not accounted for population effects into their design (McKelvey, 1988). Investigating organizational phenomena at multiple levels of analysis could enhance understanding of the phenomena (Rousseau, 1985). Thus, our understanding of organizational decline and turnaround could be enhanced by undertaking a multi-level investigation. For example, population/industry environments vary in their coercive forces and organizations vary in their adaptability due to differences in the impediments to adaptation (McKelvey, 1988). Hence, it seems that the tightness of the coupling

between strategy and turnaround performance would be influenced by the interaction between the strength of the coercive forces in the environment and the barriers to adaption within organizations. The choice of strategy would be important for adaptable organizations in environments with weak coercive forces. In contrast, the choice of strategy may be unimportant for unadaptable organizations in environments with strongly coercive forces; these organizations likely would be selected out.

A second alternative explanation to the lack of support for the hypotheses is that the interactions between strategy content and strategy process, and strategy content and cause of decline are necessary but not sufficient conditions for performance. When managers match their strategy process to strategy content and their strategy content with the cause of decline, it may become possible to enhance organizational performance. However, the realized performance may depend on additional contingency variables that were not examined in this study. For example, the efficacy of strategies depends on the availability of resources to support that strategy (Wernerfelt, 1984). Thus, resources may be an important contingency variable. This study's results provide modest support for the importance of an organization's resources. Two hospital characteristics, both of which could indicate a hospital's resources, impacted subsequent

performance; hospital size (a possible indicator of resources) and outpatient service mix (an indicator of capabilities) during decline impacted subsequent performance (see Tables 5-4 and 5-7).

One resource-related issue that has received some attention in the turnaround research stream is retrenchment (i.e., the liquidation and divestment of assets to improve the organization's cash position --Robbins & Pearce, 1992). Recent research has indicated that the generation of positive cash balances through retrenchment is a key to restoring an organization's performance to satisfactory levels (Pearce & Robbins, 1994; Robbins & Pearce, 1992). Indeed, Pearce and Robbins (1994) maintain that retrenchment is the foundation for However, other recent research (Barker & all turnarounds. Mone, 1994) has disagreed on the utility of retrenchment in all situations, and suggested that the utility of retrenchment may be dependent upon the cause of a firm's decline.

An alternative determinant of the utility of retrenchment may be disparity between a declining firm's resource portfolio and the resources necessary to support a given turnaround strategy. In general, an organization's resources suggest an optimal strategy (Wernerfelt, 1984). However, an organization is not completely constrained by their present resources; some of

the resources used to support an organization's strategy may be purchased (Barney, 1986). Thus, retrenchment may be useful when an organization lacks the specific resources relevant to a new strategy and the cash generated from retrenchment is used to procure the relevant resources. In situations where the organization has the relevant resources, retrenchment may serve no useful purpose.

Third, the lack of significant results may suggest that turnaround processes are highly idiosyncratic to each hospital and, thus, not generalizable. For example, the respondent at Daytona Medical Center indicated that his/her hospital's decline was attributable to a boycott of the hospital by admitting physicians. Part of this hospital's turnaround strategy involved mending relationships with area physicians, which is a political strategy instead of the competitive strategies examined in this study. Political strategies include a focus on collective strategies (i.e., strategies of cooperation instead of competition -- Astley, 1984). Although past turnaround research has focused on competitive strategies (e.g., Hambrick & Schecter, 1983; Hofer, 1980; Robbins & Pearce, 1992; Schendel, Patton & Riggs, 1976), the future of this research stream may lie in the examination of collective strategies. Organizations do not act as closed systems (Katz & Kahn, 1966); thus, understanding a

declining organization's interactions with its environment may yield important insights into an organization's ability to restore its performance. By identifying the stakeholders of an organization (Freeman, 1984), future research could identify the important constituencies of declining firms (e.g., suppliers of financial capital -- D'Aveni, 1989; customers and employees -- Hardy, 1987; regulators -- Birnbaum, 1985). Once identified, the impact of strategies geared toward garnering the support of these external constituencies could be assessed.

A final possible explanation of the results is that the concept of fit was theorized and modeled incorrectly. There are differing theoretical conceptions and statistical tests of fit commonly used in strategy research (Venkatraman, 1989). This study's theoretical basis is strategic choice (Child, 1972); accordingly, fit was theorized to be a bivariate interaction between The bivariate relationships were assumed to variables. be linear; however, the relationships may be curvilinear. To assess the possibility that the relationships between performance and strategy content and process variables were curvilinear rather than linear, the strategy content and process variables were squared and used in regression equations (Hair et al., 1992). The regression equations were nonsignificant across the performance measures. Thus, the post-hoc analyses showed no support for the

notion that the relationships between strategy content and performance, and strategy process and performance are curvilinear.

Bivariate relationships often are under specified (Miller, 1981). Hence, the relationship among strategy content and process, and performance may be viewed best in multivariate terms. For example, the configurational perspective of fit groups organizations simultaneously along several important organizational dimensions (Miller & Mintzberg, 1984). Because configurations are comprised of firms with similar combinations of important organizational variables, sets of inter-relationships can be holistically linked to performance (Ketchen, Thomas & Snow, 1993). Therefore, holistic combinations of strategy content and strategy process factors may impact subsequent performance.

Post-hoc analysis did not support this alternative theoretical perspective. Following procedures outlined in Ketchen and Shook (1996), the hospitals in this sample were clustered using the weighted change in services, information usage, and centralization as clustering variables. The stability of the clustering solution across clustering algorithms was poor. Further, the resultant clusters were uninterpretable and reflected no significant differences in performance.

This section has identified four possible explanations for the results of this study. In addition, future research avenues related to the results were highlighted. First, strategy may not crucial to an organization's ability to restore its performance; accordingly, future research could explore the interaction of strategy and distinctive competencies in creating equifinality. Also, ecological theories and strategic choice theories could be integrated and tested. the two types of fit are necessary, but not sufficient conditions for enhanced performance. Future research could explore the role of resources as an important Third, turnaround processes are too contingency variable. idiosyncratic to generalize. The roles of external constituencies and collective strategies in organizational turnaround were identified as worthy of future research. Finally, alternative conceptualizations and statistical tests of fit may be more appropriate. In the next section, the limitations of this study are addressed.

Limitations

As with all studies (Thorngate, 1976), this dissertation had limitations that must be noted. These include: 1) the number of respondents per organization; 2) limited statistical power; 3) potential retrospective bias; 4) limited generalizability of results; 5) potential

survival bias; and, 6) omission of possible feedback loops. These limitations are discussed next.

Originally, this study's design included two respondents per organization. However, the turnover of top managers at the hospitals was much greater than expected. As this study progressed, it became apparent that obtaining multiple respondents from a sufficient number of organizations was not going to be possible. Indeed, only twelve organizations, were, in the end, represented by multiple respondents. Thus, the decision was made to proceed with one survey per organization.

Although the use of one respondent per organization is not unusual in strategy research (Venkatraman & Grant, 1986), the validity of this study may have been enhanced by multiple respondents per hospital. Indeed, it has been argued that some true substantive relationships have been rejected because of measurement problems (Venkatraman & Grant, 1986). Thus, there may have been a greater probability of finding support for the hypotheses if multiple respondents had been available.

The small sample size (N=66) limited statistical power in this study. When testing the hypotheses, the maximum power obtained was .19 at the .05 level of significance (Cohen, 1977). Thus, the results should be viewed as conservative tests of these hypotheses. When this study was proposed, it was anticipated that the

sample size would approximate 110; thus, this study would have an 80 percent probability of detecting a medium effect (change in $R^- = .15$) at the .05 level of significance. Two factors account for the smaller-thanexpected sample size: 1) the turnover of top-level managers; and 2) the anticipated level of organizational support from Columbia/HCA did not materialize. reasonable to assume the high level of turnover had a dampening effect on the number of responses received. second factor that reduced the anticipated sample size was the level of organizational support. Originally, an executive at Columbia/HCA had agreed to: 1) send out letters encouraging managers to respond to the survey; and, 2) follow up with non-respondents by telephone. Although, the executive did send out the letters, the personal follow-up did not materialize.

Another limitation is the possible presence of retrospective errors (i.e., misreporting the past -- Golden, 1992). Ideally, the variables measured by survey would be measured with objective data, and the presence of retrospective errors assessed. However, this was not possible because valid alternative methods of measuring the strategy process variables and the effectiveness performance variable were not available. However, as discussed in Chapter 4, efforts were made to reduce retrospective errors. These efforts included: 1)

designing the survey to ask about specific facts or behaviors; 2) attempting to motivate managers to provide accurate information; and, 3) including a financial summary to focus the thoughts of the respondents on the appropriate period. Nonetheless, it is possible that managers may have misreported their organization's information usage, centralization, and effectiveness performance. Future turnaround research should consider collecting data by means that do not involve retrospective data collection. For example, if a sample could be identified early in the stages of decline, data could be collected at intervals of time such as the onset, points during the decline and response, and when turnaround is achieved. However, such a research design would take a major commitment of resources.

This study restricted the sample to a single industry to ensure that industry-level effects on firm-level performance were not confused with the performance effects of interest (Dess, Ireland & Hitt, 1990). However, the control over industry-level effects came at the cost of generalizability across industries. It is possible that these hypotheses would have been supported in other settings. For example, the hypotheses may have been supported in an industry where the influence of its external constituents is significantly less. Industries vary regarding the influence of external constituents

(Hirsch, 1975), and highly regulated industries are subject to great influence by external constituencies (Birnbaum, 1985). The hospital industry is highly regulated and largely influenced by third-party payers (Schulz & Johnson, 1983); thus, political strategies may be more important than competitive strategies in the hospital industry. In other industries, where the external constituencies are less influential (e.g., traditional manufacturing industries), competitive strategies may have more influence on performance; accordingly, the hypotheses may have been supported in alternative settings.

Additionally, the strategy content/cause of decline fit hypotheses may have been supported in industries outside the service sector of the economy. Although the causes of decline were categorized differently, support for matching strategy content to the cause of decline was found in the textile manufacturing industry (Robbins & Pearce, 1992). Support for the hypotheses predicting positive performance implications of achieving strategy content/cause of decline fit may have been supported in the manufacturing sector, because organizations in this sector may have clearer organizational boundaries. For example, in the manufacturing sector, the customers interface with the organization as part of the output environment. In contrast, the boundaries of the

organization are less distinct in the service industry. In the hospital industry, patients interface with the organization as a customer in the output environment, and can be considered a raw material (i.e., an input) upon admission and a "finished" product (i.e., and output) upon discharge (Schulz & Johnson, 1983). Thus, future research on the role of strategy content/cause of decline fit should be pursued in other research settings.

All firms in the sample were still operational at the end of the focal period. Thus, some hospitals may have attained a fit between strategy process and content, or a fit between strategy and cause of decline but still failed (e.g., were closed, or merged with another hospital). Thus, had it been possible, including these failed firms may have influenced the results of this study. Additional research is needed to assess the extent of survival bias in turnaround literature. One design that could accomplish this task is a longitudinal design where data is collected at intervals. By collecting data in intervals, data could be collected from firms before they fail and the opportunity to collect data from them is missed.

Finally, the model tested in this study ignores the possibility of feedback loops; however, potentially confounding feedback loops may exist. Strategy process and content have important implications for performance

(Dean & Sharfman, 1996; Huff & Reger, 1987; Li, 1995; Pettigrew & Whipp, 1991); nonetheless, performance also has important implications for subsequent strategy content and process (Milliken & Lant, 1991). This study tested the strategy content and process to performance linkage, but did not assess the impact of past performance on current strategy process and content. Current strategy process and content may have been constrained by past performance (Cameron, Whetten & Kim, 1987; Staw, Sandelands & Dutton, 1981); thus, past performance may have discouraged high levels of information usage, decentralized decision making, or the use of efficiency or entrepreneurial strategies. The potential feedback loops demonstrate that performance and strategy process and content are temporally intertwined. Thus, future research should involve longitudinal designs that would allow for the detangling of these relationships.

Future Research

At appropriate spots throughout the discussion of the results and limitations of this study, implications for future research have been noted. Nonetheless, there are other future research opportunities. These opportunities are discussed in terms of organizational resources, strategy process issues, and methodological issues.

Earlier in this chapter it was suggested that future turnaround research could be enhanced by examining the

resources of the declining organizations. Specifically the role of core competencies in organizational turnaround and the role of retrenchment in obtaining the appropriate supporting resources have been identified as opportunities for research. However, an organization's resources include anything that can be thought of as a strength or weakness of an organization (Wernerfelt, 1984); indeed, resources include all assets, capabilities, organizational processes, firm attributes, information, and knowledge controlled by an organization (Barney, 1991). Thus, the implications of resources on an organization's ability to turn its performance around may be quite broad. top management groups are the only resource that has received some attention (e.g., Bibeault, 1982; Hofer, 1980; O'Neill, 1986a). Hence, other resources, such as culture, seem ripe for investigation. For example, researchers could investigate how an organization's identity (the way an organization's members see it --Dutton & Dukerich, 1991) influences a declining organization's interpretation of its declining performance and its subsequent actions. Indeed, organizational identity may offer reconciliation between two competing perspectives on the actions of declining organizations. Prospect theory predicts that organizations will choose risky actions in response to poor performance (Kahneman & Tversky, 1979, 1982); in contrast, the threat-rigidity

thesis predicts organizations will choose conservative actions (Staw, Sandelands & Dutton, 1981). Thus, these two perspectives predict opposite reactions to the same strategic issue. Because organizational identity shapes issue interpretation and influences subsequent actions (Dutton & Dukerich, 1991; Fiol, 1991), divergent organizational identities may partly explain why some organizations act riskily, as prospect theory would predict, or conservatively as the threat-rigidity thesis would suggest. Organizations who see themselves as risktakers may interpret poor performance as an opportunity and take risky actions that are consistent with their identities. In contrast, organizations who see themselves as conservative may view poor performance as a threat and act in conservative ways that are consistent with their identities.

The role of organizational identity in organizational turnaround may prove to be quite important. A declining organization's identity was developed in the past (Dutton & Dukerich, 1991); hence, its present interpretations of, and actions in response to, strategic issues are deeply rooted in the past (Milliken & Lant, 1991). However, changing times may require different interpretations and actions (Zimmerman, 1986). Thus, the challenge for declining organizations may be doing things that are "out of character."

Although the strategy process variables examined in this study did not appear to be determinants of organizational performance, there are other strategy process issues that could be examined. For example, conflict among decision makers tends to increase in declining organizations (Cameron, Whetten & Kim, 1987). Recent research has found that there are two types of conflict: 1) affective, which is conflict based on personality issues and is dysfunctional; and, 2) cognitive, which is based on disagreement about ideas and is functional (Amason, 1996). Future research could examine the impact of both types of conflict on organizational decline and turnaround. Cognitive and affective conflict are significantly correlated in nondeclining organizations (Amason, 1996). If this relationship holds for declining organizations, managers must walk a tightrope balancing the benefits of encouraging open discussion about ways to address the decline against the tendency of these open discussions to turn into personality conflicts.

Another strategy process issue worthy of attention is interpretation of the environment. Divergence between objective and perceptual measures of the environment is more prevalent for low-performing firms than for high-performing firms (Boyd, Dess & Rasheed, 1993). Hence, it would appear that there is a relationship between poor

performance and inaccuracy in interpretation of environments. Accurate interpretation of the environment is key to an organization's success (Boyd, Dess & Rasheed, 1993), thus inaccurate interpretation may cause low performance. However, low performance may also cause inaccurate interpretation. Because low performance is not self-enhancing, organizational decision makers may ignore it and instead look for environmental factors that confirm their understanding of the environment (Kiesler & Sproull, 1982). Hence, it would appear the relationship between accurate interpretation of the environment and low performance may be cyclical; inaccurate perceptions of the environment promote poor performance, and poor performance promotes inaccurate perceptions of the environment. this relationship is indeed cyclical, research might focus on how decision makers can break the downward cycle.

Finally, the conceptualization and measurement of turnaround performance deserves future research attention. Performance is a key construct in the discipline (Meyer, 1991), and especially in turnaround studies (Venkatraman & Prescott, 1986). Although most turnaround studies have focused solely on financial outcomes (Hoffman, 1989), this study measured all three types of performance (financial, operational, and effectiveness -- Venkatraman & Ramanujam, 1986). However, as shown in Table 5-3, the correlations between the effectiveness and the operational and

financial measures of performance are extremely low. The reasons for divergence between these measures of performance are unknown. However, divergence of these measures should be viewed as an opportunity; lack of convergence should spur efforts at reconciliation, and can be an opportunity for enhancing our understanding of a phenomenon (Jick, 1979).

Reconciliation of the measures could follow two paths; one is methodological, and the other is conceptual (Venkatraman & Prescott, 1986). Along the methodological path, perhaps the financial and operational measures should have been measured with a different time frame, or the effectiveness outcomes may have been subject to retrospective errors (Golden, 1992). The implications of this path are rather mild; as researchers, we may need to refine our methods for measuring turnaround performance.

Alternatively, the explanation may lay along conceptual paths. Perhaps practitioners and researchers conceptualize and assess performance differently. In contrast to the relatively mild implications of the methodological path, the research implications of this path go to the very heart of this research stream.

Performance is a construct that is central to this research stream. Thus, it is critical that researchers understand the nature of this construct. One of the discipline's tenets is that research should have ultimate

application to the problems of managers (Montgomery, Wernerfelt & Balakrishnan, 1989). The discipline has nothing to tell practitioners about how to improve their organization's performance until it determines that researchers and managers are talking about the same issue in the same language.

Conclusion

This study sought to illustrate the importance of achieving two types of fit to restoring declining performance. The two types of fit were: 1) fit between strategy content and strategy process; and, 2) fit between strategy and cause of decline.

Past research has shown that fit between strategy content and process leads to higher performance (Ketchen, Thomas & McDaniel, 1996; Miles, Snow, Meyer & Coleman, 1978). Thus, this study posited that organizations that matched their strategy with the appropriate level of centralization of decision making and information usage would experience positive performance.

Past research has also demonstrated that fit between the recovery strategy and cause of decline leads to higher performance (Robbins & Pearce, 1992). However, extant research examined inductively-derived causes of decline. This study theoretically derived the cause of decline from the open-systems paradigm (Katz & Kahn, 1966), and posited

an organization's performance would be enhanced by matching their strategy with the causes of decline.

Strategy content and process, cause of decline, and performance data from 1987 to 1994 were collected for 66 hospitals. Moderated multiple regression failed to support the positive performance implications of either type of fit. Various potential explanations for the lack of support for the positive performance implications of fit were offered. These explanations included: 1) the choice of strategy is not crucial to turnaround performance; 2) the two types of fit are necessary but not sufficient for enhanced performance; 3) turnaround processes are too idiosyncratic to generalize; and 4) a conceptualization of fit other than the one posited in this study may be more appropriate.

As with all studies, this study suffered from some limitations. These limitations included, the number of respondents per organization, limited statistical power, limited generalizability of the results, potential retrospective and survival biases, and untested feedback loops.

Although this study's hypotheses were not supported, there are many related issues to be researched. These include the roles of the environment, organizational resources, and other strategy processes in organizational turnaround. Further, the discrepancy between archival and

perceptual measures of performance noted in this study, illustrates the need for researchers to better understand the dependent variable in turnaround studies.

REFERENCES

- Alexander, J.A. & Amburgey, T.L. 1987. The dynamics of change in the American hospital industry: Transformation or selection? **Medical Care Review**, 44: 279-321.
- Alexander, J.A., Fennell, M.L. & Halpern, M. T. 1993. Leadership instability in hospitals: The influences of board-CEO relations and organizational growth and decline. Administrative Science Quarterly, 38: 74-99.
- Amason, A. C. 1996. Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. Academy of Management Journal, 39: 123-148.
- Anderson, C.R. & Zeithaml, C.P. 1984. Stage of the product life cycle, business strategy, and business performance. Academy of Management Journal, 27: 5-24.
- Andrews, K.R. 1971. The concept of corporate strategy. Homewood, IL: Irwin.
- Astley, W.G. 1984. Toward an appreciation of collective strategy. Academy of Management Review, 9: 526-535.
- Barker, V.L. 1992. Corporate turnarounds as strategic reorientations: A field study of turnaround attempts from firm-based decline. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.
- Barker, V.L. & Mone, M.A. 1994. Retrenchment: Cause of turnaround or consequence of decline? **Strategic Management Journal**, 15: 395-405.
- Barney, J. 1986. Strategic factor markets: Expectations, luck, and business strategy. **Management Science**, 42: 1231-1241.
- Barney J. 1991. Firm resources and sustained competitive advantage. Journal of Management, 17: 99-120.
- Bartunek, J.M. 1988. The dynamics of personal and organizational reframing. In R. E. Quinn and K.S. Cameron (Eds.), Paradox and transformation: Toward a theory of change in organization and management. Cambridge, MA: Ballinger.
- Bentler, P.M. 1985. Theory and implementation of EQS: A structural equations program. Los Angeles: BMDP Statistical Software.

- Bentler, P.M. 1990. Comparative fit indexes in structural models. **Psychological Bulletin**, 107: 238-246.
- Bentler, P.M. & Bonett, D.G. 1990. Significance tests and goodness of fit in the analysis of covariance structures. **Psychological Bulletin**, 88: 588-606.
- Bibeault, D.G. 1982. Corporate turnaround: How managers turn losers into winners. New York: McGraw-Hill.
- Birnbaum, P.H. 1985. Political strategies of regulated organizations as functions of contest and fear. **Strategic Management Journal**, 6: 135-150.
- Boeker, W. & Goodstein, J. 1991. Organizational performance and adaptation: Effects of environment and performance on changes in board composition. Academy of Management Journal, 34: 805-826.
- Bollen, K.A. 1989. A new incremental fit index for general structural equation models. Sociological Methods and Research, 17: 303-316.
- Bourgeois L.J. & Eisenhardt, K.M. 1987. Strategic decision processes in Silicon Valley: The anatomy of a "living dead". California Management Review, 30: 143-159.
- Boyd, B.K., Dess, G.G., & Rasheed, A.M. 1993. Divergence between archival and perceptual measures of the environment: Causes and consequences. **Academy of Management Review**, 18: 204-226.
- Brockner, J. 1988. The effects of work layoffs on survivors: Research, theory and practice. In B. M. Staw and L. L. Cummings (Eds.), Research in Organizational Behavior, Volume 10. Greenwich, CT: JAI Press.
- Brockner, J., Davy, J. & Carter, C. 1985. Layoffs, self-esteem, and survivor guilt: Motivational, attitudinal, and affective consequences. Organizational Behavior and Human Decision Processes, 36: 229-244.
- Burns, T. & Stalker, G.M. 1961. The management of innovation. London: Tavistock.
- Camerer, C. 1985. Redirecting research in business policy and strategy. **Strategic Management Journal**, 6: 1-16.

- Cameron, K.S. 1986. Effectiveness as paradox: Consensus and conflict in conceptions of organizational effectiveness. **Management Science**, 32: 539-553.
- Cameron, K.S., Sutton, R.I., and Whetten, D.A. 1988. Issues in organizational decline. In K.S. Cameron, R.I. Sutton, and D.A. Whetten (Eds.), Readings in organizational decline: 3-19. Cambridge, MA: Harper & Row.
- Cameron, K.S., Whetten, D.A. & Kim, M. 1987. Organizational dysfunctions of decline. **Academy of Management Journal**, 30: 126-138.
- Carroll, G. & Delacroix, J. 1982. Organizational mortality in the newspaper industries of Argentina and Ireland: An ecological approach. Administrative Science Quarterly, 27: 169-198.
- Cascio, W.F. 1993. Downsizing: what do we know? What have we learned? **Academy of Management Executive**, 7: 95-104.
- Chandler, A.D. 1962. Strategy and structure: Chapters in the history of the industrial enterprise. Cambridge: Massachusetts Institute of Technology.
- Child, J. 1972. Organizational structure, environment, and performance: The role of strategic choice. **Sociology**, 6: 1-22.
- Clement, J.P., D'Aunno, T. & Poyzer, B.L. 1993. The financial performance of diversified hospital subsidiaries. **Health Services Research**, 27: 741-763.
- Cleverley, W.O. & Harvey, R.K. 1992. Competitive strategy for successful hospital management. **Hospital & Health Services Administration**, 37: 53-69.
- Cook, T.D. & Campbell, D.T. 1979. Quasi-experimentation: Design and analysis issues for field settings. Boston: Houghton Mifflin.
- Cohen, J. 1977. Statistical power analysis for the behavioral sciences. New York: Academic Press.
- Cronbach, L. 1987. Statistical tests for moderator variables: Flaws in analysis recently proposed. **Psychological Bulletin**, 102: 414-417.

- D'Aunno, T. & Sutton, R.I. 1992. The responses of drug abuse treatment organizations to financial adversity: A partial test of the threat-rigidity thesis. **Journal of Management**, 18: 117-131.
- D'Aveni, R.A. 1989. The aftermath of organizational decline: A longitudinal study of the strategic and managerial characteristics of declining firms. Academy of Management Journal, 32: 577-605.
- D'Aveni, R.A. & MacMillan, IC 1990. Crisis and the content of managerial communications: A study of the focus of attention of top managers in surviving and failing firms. Administrative Science Quarterly, 35: 634-657.
- Daft, R.L. & Lengel, R.H. 1986. Organizational information requirements, media richness, and structural design. Management Science, 32: 554-571.
- Daft, R.L. & Macintosh, N.B. 1981. A tentative exploration into the amount and equivocality of information processing in organizational work units. Administrative Science Quarterly, 26: 207-224.
- Daft, R.L. & Weick, K.E. 1984. Toward a model of organizations as interpretive systems. Academy of Management Review, 9: 284-295.
- Dean, J.W. & Sharfman, M. P. 1996. Does decision process matter? A study of strategic decision-making effectiveness. Academy of Management Journal, 39: 368-396.
- Dess, G.G. & Davis, P.S. 1984. Porter's (1980) generic strategies as determinants of strategic group membership and organizational performance. **Academy of Management Journal**, 27: 467-488.
- Dess, G.G., Ireland, R.D. & Hitt, M.A. 1990. Industry effects in strategic management research. **Journal of Management**, 16: 7-27.
- DeWitt, R.L. 1993. The structural consequences of downsizing. Organizational Science, 4: 30-40.
- Dillman, D.A. 1978. Mail & telephone surveys: The total design method. New York: Wiley.
- Dutton, J.E. & Dukerich, J. 1991. Keeping and eye on the mirror: The role of image and identity in organizational adaptation. Academy of Management Journal, 34: 517-554.

- Dutton, J.E., Fahey, L. & Narayanan, V.K. 1983. Toward understanding strategic issue diagnosis. **Strategic Management Journal**, 4: 307-323.
- Eisenhardt, K.M. & Bourgeois, L.J. 1988. Politics of strategic decision making in high-velocity environments: Toward a mid-range theory. Academy of Management Journal, 31: 737-770.
- Fahey, L. & Christensen, H.K. 1986. Evaluating the research of strategy content. **Journal of Management**, 12: 167-183.
- Feldman, M.S. & March, J.G. 1981. Information in organizations as signal and symbol. **Administrative Science Quarterly**, 26: 171-186.
- Fiol, M. 1991. Managing culture as a competitive resource: An identity-based view of sustainable competitive advantage. **Journal of Management**, 17: 191-211
- Fischhoff, B. & Beyth, R. 1975. I knew it would happen: Remembered probabilities of once-future things.

 Organizational Behavior and Human Performance, 13: 1-16.
- Freeman, R.E. 1984. Strategic management: A stakeholder approach. Marshfield, MA: Pitman.
- Freeman, S.J. & Cameron, K.S. 1993. Organizational downsizing: A convergence and reorientation framework. Organization Science, 4: 10-29.
- Galbraith, J. 1973. **Designing complex organizations**. Reading, MA: Addison-Wesley
- Garnick, D.W., Luft, H.S. Robinson, J.C. & Tetreault, J. 1987. Appropriate measures of hospital market areas. **Health Services Research**, 22: 69-89.
- Ginn, G.O. 1990. Strategic change in hospitals: An examination of the response of the acute care hospital to the turbulent environment of the 1980s. **Health Services Research**, 25: 565-591.
- Ginsberg, A. & Venkatraman, N. 1985. Contingency perspectives of organizational strategy: A critical review of the empirical research. Academy of Management Review, 10: 421-434.

- Goes, J.B. & Meyer, J.G. 1990. Patterns of strategic change, environmental change, and performance: A longitudinal study of California hospitals. In Dorothy P. Moore (Ed) Academy of Management Best Papers Proceedings: 85-89. Madison, WI: Omnipress.
- Goes, J.B. & Zhan, C.L. 1995. The effects of hospital-physical integration strategies on hospital financial performance. **Health Services Research**, 30: 651-678.
- Golden, B.R. 1992. The past is the past or is it? The use of retrospective accounts as indicators of past strategy. **Academy of Management Journal**, 35: 848-860.
- Govindarajan, V. 1988. A contingency approach to strategy implementation at the business-unit level: Integrating administrative mechanisms with strategy. Academy of Management Journal, 31: 828-853.
- Green, S. 1992. The impact of ownership and capital structure on managerial motivation and strategy in management buy-outs: A cultural analysis. **Journal of Management Studies**, 29:513-535.
- Gresov, C. 1989. Exploring fit and misfit with multiple contingencies. Administrative Science Quarterly, 34: 431-453.
- Guterman, S., & Dobson, A. 1986. Impact of the Medicare prospective payment system for hospitals. **Health Care** Financing Review, 7: 97-114.
- Hage, J. 1965. An axiomatic theory of organizations. Administrative Science Quarterly, 10: 289 320.
- Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W.C. 1982. Multivariate data analysis with readings, 3rd Edition. New York: Macmillan.
- Hall, R.I. 1984. The natural logic of management policy making: Its implications for the survival of an organization. Management Science, 30: 905-927
- Hambrick, D.C. 1981. Environment, strategy and power within top management teams. Administrative Science Quarterly, 26: 253-275.
- Hambrick, D.C. 1983. High profit strategies in mature capital goods industries: A contingency approach. Academy of Management Journal, 26: 687-707.

Hambrick, D.C., Geletkanycz, M.A. & Fredrickson, J.W. 1993. Top executive commitment to the status quo: Some tests of its determinants. **Strategic Management Journal**, 14: 401-418.

Hambrick, D.C. & Schecter, S.M. 1983. Turnaround strategies for mature industrial-product business units. Academy of Management, 26: 231-248.

Hannan, M.T. & Freeman, J. 1977. The population ecology of organizations. American Journal of Sociology, 82: 929-964.

Hannan, M.T. & Freeman, J. 1984. Structural inertia and organizational change. American Sociological Review, 49: 149-164.

Hardy, C. 1987. Investing in retrenchment: Avoiding the hidden costs. California Management Review, 29: 111-125.

Harrigan, K.R. 1980. Strategies for declining businesses. Lexington, MA: Heath.

Hedberg, B.L.T. 1981. How organizations learn and unlearn. In P.C. Nystrom and W.H. Starbuck (Eds.), Handbook of organizational design: 3-27. New York: Oxford University Press.

Hirsch, P.M. 1975. Organizational effectiveness and the institutional environment. **Administrative Science Quarterly**, 20: 327-344.

Hofer, C.W. 1980. Turnaround strategies. Journal of Business Strategy, 1: 19-31.

Hofer, C.W. & Schendel, D. 1978. Strategy formulation. St. Paul, MN: West Publishing.

Hoffman, R.C. 1989. Strategies for corporate turnarounds: What do we know about them? **Journal of General Management**, 14: 46-66.

Hrebiniak, L.G., Joyce, W.F. & Snow, C.C. 1989. Strategy. structure, and performance: Past and future research. In C.C. Snow (Ed.), Strategy, organization design, and human resource management: 3-54. Greenwich, CT: JAI Press.

Huber, G.P., O'Connell, M.J. & Cummings, L.L. 1975. Perceived environmental uncertainty: Effects of

- information and structure. Academy of Management Journal, 18: 725-740.
- Huber, G.P., Miller, C.C. & Glick, W.H. 1990. Developing more encompassing theories about organizations: The centralization-effectiveness relationship as an example. Organization Science, 1: 11-40.
- Huber, G.P. & Power, D.J. 1985. Retrospective reports of strategic level managers: Guidelines for increasing their accuracy. Strategic Management Journal, 6: 171-180.
- Huff, A.S. and Reger, R.K. 1987. A review of strategic process research. **Journal of Management**, 13: 211-236.
- Inkson, J.H.K., Pugh, D.S. & Hickson, D.J. 1970. Organization context and structure: An abbreviated replication. Administrative Science Quarterly, 15: 318-329.
- Jaccard, J., Turrisi, R. & Wan, C.K. 1990. Interaction effects in multiple regression, Newbury Park, CA: Sage
- Jennergren, L.P. 1981. Decentralization in organizations. In P.C. Nystrom and W.H. Starbuck (Eds.), Handbook of organizational design: 39-59. Oxford: Oxford University Press.
- Jick, T.D. 1979. Mixing qualitative and quantitative methods: Triangulation in action. Administrative Science Quarterly, 24: 590-601.
- Johnson, E.A. & Johnson, R.L. 1986. Hospitals under fire: Strategies for survival. Salem, MA: Aspen.
- Johnson, R.A. & Wichern, D.W. 1988. Applied multivariate statistical analysis. Englewood cliffs, NJ: Prentice-Hall.
- Jörskog, K.G. & Sörbom, D. 1993. LISREL VIII: Analysis of linear structural relationships by maximum likelihood, instrumental variables and least squares methods, 8th Edition. Morresville, IN: Scientific Software.
- Kahneman, D. & Tversky, A. 1979. Prospect theory: An analysis of decisions under risk. **Econometrica**, 47: 263-291.
- Kahneman, D. & Tversky, A. 1982. Variants of uncertainty. Cognition, 11: 143-157.

- Katz, D. & Kahn, R.L. 1966. The social psychology of organizations. New York: John Wiley & Sons, Inc.
- Keats, B.W. & Hitt, M.A. 1988. A causal model of linkages among environment dimensions, macro-organizational characteristics, and performance. Academy of Management Journal, 31: 570-598.
- Ketchen, D.J. & Shook, C.L. 1996. The application of cluster analysis in strategic management research: An analysis and critique. **Strategic Management Journal**, 17: 441-458.
- Ketchen, D.J., Thomas, J.B. & McDaniel, R.R. 1996. Process, content, and context: Synergistic effects on organizational performance. **Journal of Management**, 22: 231-257.
- Ketchen, D.J., Thomas, J.B. & Snow, C.C. 1993. Organizational configurations and performance: A comparison of theoretical approaches. Academy of Management Journal, 36: 1278-1313.
- Kiesler, S. & Sproull, L. 1992. Managerial response to changing environments: Perspectives on problem sensing from social cognition. Administrative Science Quarterly, 27:548-570.
- Koberg, C.S. 1987. Resource scarcity, environmental uncertainty, and adaptive organizational behavior. Academy of Management Journal, 30: 798-807.
- Lawrence, P.R. & Dyer, D. 1983. Renewing American industry. New York: Free Press.
- Li, J. 1995. Foreign entry and survival: Effects of strategic choices on performance in international markets. **Strategic Management Journal**, 16: 333-351.
- Lutz, S. 1994. Columbia/HCA nabs Healthtrust. Modern Healthcare, 24: 2-3.
- Lutz, S. 1995. Columbia agrees to divestitures: Merger cleared. Modern Healthcare, 25: 4.
- MacKay, D.M. 1969. Information, mechanism, and meaning. Cambridge, MA: MIT Press
- McKelvey, B. 1988. Organizational decline from the population perspective. In K.S. Cameron, R.I. Sutton, and

- D.A. Whetten (Eds.), Readings in organizational decline: 399-410. Cambridge, MA: Harper & Row.
- McKinley, W. 1987. Complexity and administrative intensity: The case of declining organizations. Administrative Science Quarterly, 32: 87-105.
- McKinley, W. 1993. Organizational decline and adaptation: Theoretical controversies. Organization Science, 4: 1-9.
- Melin, L. 1985. Strategies in managing turnaround. Long Range Planning, 18: 80-86.
- Meyer, A.D. 1982. Adapting to environmental jolts. Administrative Science Quarterly, 27: 515-536.
- Meyer, A.D. 1988. Organizational decline from the organizational perspective. In K.S. Cameron, R.I. Sutton, and D.A. Whetten (Eds.) Readings in organizational decline: frameworks, research, and prescriptions: 411-416. Cambridge, MA: Ballinger.
- Meyer, A.D. 1991. What is strategy's distinctive competence? Journal of Management, 17: 821-833.
- Miles, R.H. 1982. Coffin nails and corporate strategies. Englewood Cliffs, NJ: Prentice-Hall.
- Miles, R.E. and Snow, C.E. 1978. Organizational strategy, structure, and process. New York: McGraw-Hill.
- Miles, R.E., Snow, E.C., Meyer, A.D. & Coleman, H.J. 1978. Organizational strategy, structure, and process. Academy of Management Review, 3: 542-562.
- Miller, D. 1981. Toward a new contingency approach: The search for organizational gestalts. **Journal of Management Studies**, 18: 1-26.
- Miller, D. & Friesen, P.H. 1983. Strategy-making and the environment: The third link. Strategic Management Journal, 4: 221-235.
- Miller D. & Friesen, P.H. 1984. The case for configuration. In D. Miller and P.H. Friesen (Eds.), Organizations: A quantum view. Englewood Cliffs, NJ: Prentice-Hall.
- Miller, D. & Mintzberg, H. 1983. The case for configuration. In G. Morgan (Ed.), Beyond method:

Strategies for social research: 57-73. Newbury Park, CA: Sage.

Milliken, F.J. & Lant, T.K. 1991. The effects of an organization's recent performance history on strategic persistence and change: The role of managerial interpretations. In P. Shrivastava, A.S. Huff & J.E. Dutton (Eds.), Advances in strategic management, 7: 129-156. Greenwich, CT: JAI Press.

Mintzberg, H. 1978. Patterns in strategy formation. Management Science, 24: 934-948.

Mintzberg, H. 1987. Crafting strategy. Harvard Business Review, 65: 66-75.

Mintzberg, H. & Waters, J.A. 1985. Of strategies, deliberate and emergent. **Strategic Management Journal**, 6: 257-272.

Molinari, C. Morlock, L. Alexander, J. & Lyles, C.A. 1993. Board composition and financial viability. **Health Services Research**, 28: 357-377.

Mohr, L. B. 1982. **Exploring organization behavior**. San Francisco: Jossey-Bass

Monge, P.R., Cozzens, M.D. & Contractor, N.S. 1992. Communication and motivational predictors of the dynamics of organizational innovation. **Organization Science**, 3: 250 - 274.

Montgomery, C.A., Wernerfelt, B., & Balakrishnan, S. 1989. Strategy content and the research process: A critique and commentary. Strategic Management Journal, 10: 189-197.

Nunnally, J. 1978. **Psychometric theory**, 2nd ed. New York: McGraw-Hill.

Nutt, P.C. & Milter, R.G. 1992. Contract management and institutional cost control. Hospital and Health Services Administration, 37: 115-130.

O'Neill, H.M. 1981. Turnaround strategies in commercial banking. Ann Arbor, MI: UMI Research Press.

O'Neill, H.M. 1986(a). Turnaround and recovery: What strategy do you need? Long Range Planning, 19: 80-88.

- O'Neill, H.M. 1986(b). An analysis of the turnaround strategy in commercial banking. **Journal of Management Studies**, 23: 165-188.
- O'Neill, H.M. 1994. Restructuring, re-engineering, and rightsizing: Do the metaphors make sense? **Academy of Management Executive**, 8: 9-11.
- Ozcan, Y.A. & Luke, R. D. 1993. A national study of the efficiency of hospitals in urban markets. **Health Services Research**, 27: 719-739.
- Pant, L.W. 1991. An investigation of industry and institution structural characteristics in corporate turnarounds. **Journal of Management Studies**, 28: 623-643.
- Pearce, J.A. & Robbins, D.K. 1993. Toward improved theory and research on business turnaround. **Journal of Management**, 19: 613-636.
- Pearce, J.A. & Robbins, D.K. 1994. Retrenchment remains the foundation of business turnaround. **Strategic Management Journal**, 15: 407-417.
- Perry, L.T. 1986. Least-cost alternatives to layoffs in declining industries. Organizational Dynamics, 12: 48-61.
- Pettigrew, A. & Whipp, R. 1991. Managing change for competitive success. Oxford: Basil Blackwell.
- Pfeffer, J. & Salancik, G.R. 1978. The external control of organizations: A resource dependence view. New York: Harper & Row.
- Porter, M.E. 1980. Competitive strategy: Techniques for analyzing industries and competitors. New York: Free Press.
- Price, J.L. 1968. Organizational effectiveness. Homewood, IL: Irwin.
- Priem, R.L. Rasheed, A.M.A., & Kotulic, A.G. 1995. Rationality in strategic decision processes, environmental dynamism and firm performance. **Journal of Management**, 21: 913-929.
- Provan, K.G. 1991. Receipt of information and influence over decisions in hospitals by the board, chief executive officers, and medical staff. **Journal of Management Studies**, 28: 281-298.

- Pugh, D.S., Hickson, D.J., Hinings, C.R. & Turner, C. 1968. Dimensions of organization structure.

 Administrative Science Quarterly, 18: 477-488.
- Rice, D. & Dreilinger, C. 1991. After the downsizing. **Training and Development**, May 1991: 41-44.
- Robbins, D.K. & Pearce, J.A. 1992. Turnaround: Retrenchment and recovery. **Strategic Management Journal**, 13: 287-309.
- Rousseau, D.M. 1985. Issues of level in organizational research: Multi-level and cross-level perspectives.

 Research in Organizational Behavior, 7:1-37.
- Rumelt, R.P. 1974. Strategy, structure, and economic performance. Boston: Harvard Business School.
- Rumelt, R.P. 1982. Diversification strategy and profitability. **Strategic Management Journal**, 3: 359-369.
- Russell, R.D. & Russell, C.J. 1992. An examination of the effects of organizational norms, organizational structure, and environmental uncertainty on entrepreneurial strategy. **Journal of Management**, 18: 639-656.
- Salancik, G. R. & Meindl, J.R. 1984. Corporate attributions as strategic illusions of management control. Administrative Science Quarterly, 29: 238-254.
- Schendel D.E. & Patton, G.R. 1976. Corporate stagnation and turnaround. **Journal of Economics and Business**, 28: 236-241.
- Schendel, D.E., Patton, G.R., & Riggs, J. 1976. Corporate turnaround strategies: A study of profit decline and recovery. **Journal of General Management**, 3: 3-11.
- Schoonhoven, C.B. 1981. Problems with contingency theory: Testing assumptions hidden within the language of contingency "theory". Administrative Science Quarterly, 26: 349-377.
- Schulz, R. & Johnson, A.C. 1983. Management of hospitals. New York: McGraw-Hill.
- Selznick, P. 1957. Leadership in administration, New York: Harper & Row.

- Settoon, R.P., Bennett, N. & Liden, R.C. 1996. Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. **Journal of Applied Psychology**, 81: 219-227.
- Shortell, S.M. & Morrison, E.M. & Friedman, B. 1990. Strategic choices of America's hospitals: Managing change in turbulent times. San Francisco, CA: Jossey-Bass.
- Smith, P.C. & Kendall, L.M. 1963. Retranslation of expectations: An approach to the construction of unambiguous anchors for rating scales. **Journal of Applied Psychology**, 47: 149-154.
- Snow, C.C. & Hrebiniak, L.G. 1980. Strategy, distinctive competence and organizational performance. Administrative Science Quarterly, 25: 317-336.
- Snow, C.C. & Thomas, J.B. 1994. Field research methods in strategic management. **Journal of Management Studies**, 31: 457-480.
- Starbuck, W.H. & Hedberg, B. 1977. Saving an organization from a stagnating environment. In H. Thorelli (Ed.), Strategy + structure = performance, pp. 249-258. Bloomington, IN: Indiana University Press.
- Starbuck, W.H., Greve, A. & Hedberg, B.L.T. 1978. Responding to crisis. **Journal of Business Administration**, 9: 111-137.
- Staw, B.M. 1976. Knee-deep in the big muddy: A study of escalating commitment to a chosen course of action.

 Organizational Behavior and Human Performance, 16: 27-44.
- Staw, B.M., Sandelands, L.E., & Dutton, J.E. 1981. Threat-rigidity effects in organizational behavior: A multilevel analysis. Administrative Science Quarterly, 26:
- Stone, E. F. 1988. Moderator variables in research: A review and analysis of conceptual and methodological issues. In G.R. Ferris & K.M. Rowland (Eds.), Research in personnel and human resources management, 6: 191-229. Greenwich, CT: JAI Press.
- Summer, C.E., Bettis, R.A., Duhaime, I.H., Grant, J.H., Hambrick, D.C., Snow, C.C., and Zeithaml, C.P. 1990. Journal of Management, 16: 361-398.

- Sutton, R.I. & Callahan, A.L. 1987. The stigma of bankruptcy: Spoiled organizational image and its management. Academy of Management Journal, 30: 405-436.
- Sutton, R.I. & D'Aunno, T. 1989. Decreasing organizational size: Untangling the effects of money and people. Academy of Management Review, 14: 194-212.
- Thomas, J.B. & McDaniel, R.R. 1990. Interpreting strategic issues: Effects of strategy and the information-processing structure of top management teams. Academy of Management Journal, 33: 286-306.
- Thomas, J.B., Clark, S.M., and Gioia, D.A. 1993. Strategic sensemaking and organizational performance: Linkages among scanning, interpretation, action and outcomes. Academy of Management Journal, 36: 239-270.
- Thompson, J.D. 1967. Organizations in action. McGraw-Hill, NY.
- Thorngate, W. 1976. In general vs. it depends: Some comments of Gergen-Schlenker debate. **Personality and Social Psychology Bulletin**, 2: 404-410.
- Tichy, N.M. & Devanna, M.A. 1986. The transformational leader. **Training Development Journal**, 40: 27-32.
- Tomasko, R.M. 1987. Downsizing: Reshaping the corporation for the future. New York: AMACOM.
- Tucker, L.R. & Lewis, C. 1973. The reliability coefficient for maximum-likelihood factor analysis. **Psychometrika**, 38: 1-10.
- Tushman, M.L. & Romanelli, E. 1985. Organizational evolution: A metamorphosis model of convergence and reorientation. Research in organizational behavior, 7: 171-222. Greenwich, CT: JAI Press.
- Tushman, M.L. & Nadler, D.A. 1978. Information processing as an integrating concept in organizational design. Academy of Management Review, 3: 613-624.
- Vancil, R.F. 1980. **Decentralization: Managerial ambiguity by design**. NY: Financial Executives Research Foundation.
- Venkatraman, N. 1989. The concept of fit in strategy research: Toward verbal and statistical correspondence. Academy of Management Review, 14: 423-444.

Venkatraman, N. & Prescott, J.E. 1990. Environmentstrategy coalignment: An empirical test of its performance implications. **Strategic Management Journal**, 11: 1-23.

Venkatraman, N. & Ramanujam, V. 1986. Measurement of business performance in strategy research: A comparison of approaches. Academy of Management Review, 11: 801-814.

Walsh, J.P. & Ungson, G.R. 1991. Organizational memory. Academy of Management Review, 16: 57-91.

Weick, K. 1976. Educational organizations as loosely coupled systems. Administrative Science Quarterly, 21:1-19.

Wernerfelt, B. 1984. A resource-based view of the firm. Strategic Management Journal, 5: 171-180.

Whetten, D.A. 1980a. Organizational decline: A neglected topic in organizational science. **Academy of Management Review**, 5: 577-588.

Whetten, D.A. 1980b. Sources, responses, and effects of organizational decline. In J.R. Kimberly and R.H. Miles (Eds.) The organizational life cycle, pp. 342-374. San Francisco, CA: Josey Bass

Yassai-Ardekani, M. 1989. Effects of environmental scarcity and munificence on the relationship of context to organizational structure. Academy of Management Journal, 32: 131-156.

Zammuto, R.F. & K.S. Cameron. 1985. Environmental decline and organizational response. In B.M. Staw and L.L. Cummings (Eds.), Research in Organizational Behavior, 7: 223-262. Greenwich, CT: JAI Press.

Zimmerman, F.M. 1986. Turnaround: A painful learning process. Long Range Planning, 19: 104-114.

APPENDIX A: COVER LETTER

February 20, 1996

Mr. John Smithhisler Chief Executive Officer Sunbelt Regional Medical Center 13111 Bast Freeway Houston, TX 77015

Dear Mr. Smithhisler:

As a result of changes in the hospital industry over the last decade an increasing number of hospitals have experienced financial challenges. However, to date, the topic of how hospitals respond to financial challenges has not been studied adequately.

Your hospital is one of a small number in which managers are being asked to describe both their hospital's response to financial challenges and the manner in which that response was developed and implemented. This survey will be used to develop recommendations for improving hospital performance, but will not be used for consulting activities. In order that the results truly represent the actions of hospitals that have faced financial challenges, each questionnaire should be completed and returned. The questionnaire should take approximately 15 minutes to complete. It is important that the questionnaires be completed by two managers who have been at the hospital since 1990. Thus, please have the two highest-level managers (including yourself, if applicable) that have been at the hospital since 1990 complete this questionnaire.

You and the other respondent(s) may be assured of confidentiality. The questionnaire has an identification number for mailing purposes only. This is so that we may check the hospital's name off of the mailing list when the questionnaires are returned.

If you are one of the respondents, you may receive a summary of the results by writing "copy of results requested" on the back of the return envelope, and printing your name and address below it. Please do not put this information on the questionnaire itself. If you are not one of the respondents, then you may receive a summary of the results by writing me.

I would be most happy to answer any questions you might have. Please write or call. My telephone number is (504) 388-6212. Thank you for your assistance.

Sincerely,

Chris Shook Project Director APPENDIX B: QUESTIONNAIRE



A STUDY OF HOW HOSPITALS RESPOND TO FINANCIAL CHALLENGES

Overview

This survey is designed to investigate how hospitals respond to financial challenges. The goal of this research is to better understand how hospitals react to changes in financial performance and develop recommendations for hospitals facing financial challenges.

Answering this survey doesn't involve research on your part and will take approximately fifteen minutes. Your timely response to this survey is important to the success of this effort.

College of Business
Department of Management
Louisiana State University
Baton, Rouge, LA 70803-6312



A Study of How Hospitals Respond to Financial Challenges

This study examines the responses of hospitals to financial challenges. It seeks to (1) identify the types of strategies hospitals used in an attempt to improve performance, and (2) gain an understanding of factors influencing strategic decisions. To gain a better understanding of the factors influencing strategic decisions you will be asked questions about: (1) the nature of your hospital's response; (2) the manner in which your hospital's response was developed and implemented; (3) the reason for recent financial challenges; and, (4) the characteristics of your hospital.

This survey is being used for purposes of research only and individual survey responses will be strictly confidential. The identification number on the survey is only used for mailing purposes. Summary results of this study will be made available to those participants who desire them.

This survey uses the term "financial challenges" to refer to the performance indicated by the low or negative return on assets ratio. A financial summary of the years 1988-1994 has been included below for your reference. This summary was derived from your Medicare Cost Reports and was obtained from the Center for Healthcare Industry Performance Studies. Please take a moment to review this summary before completing this survey.

Your cooperation is sincerely appreciated.

450126 Sun Belt Regional Medical Center				
	Financial Summar 1988	ry 1988-1994 1989	1990	1991
Return on Assets	3.67%	-0.390%	-5.256%	-0.776%
Operating Margin	7.08.%	-0.702%	-7.845%	2.88%
Occupancy	27.89%	28.491%	25.180%	24.214%
Cost Per Discharge	\$3811.43.	\$3868.32	\$3891.99	\$3896.96
Salary Per Full-Time Employee	\$33483.03.	\$31584.30	\$22911.60	\$21113.77
		1992	1993	<u>1994</u>
Return on Assets		6.982%	12.481%	18.773%
Operating Margin		7.114%	11.272%	16.642%
Occupancy		22.283%	42.512%	23.819%
Cost Per Discharge		\$3935.40	\$4474.42	\$3489.15
Salary Per Full-Time Employee		\$22868.76	\$25003.68	;; \$19109.42

. denotes missing data

I) THE NATURE OF YOUR HOSPITAL'S RESPONSE TO THE FINANCIAL CHALLENGES

Q1. To what extent did your hospital respond to the financial challenges (i.e., low or negative return on assets) by \dots

	•	(circle your answe					
		To a: Small		Great			
		Exte	nτ			Extent	
1.	developing new patient bases?	1	2	3	4	5	
2.	introducing innovative medical services?	1	2	3	4	5	
3.	expanding the range of medical services offered?	1	2	3	4	5	
4.	acquiring new medical technology to attract patients?	1	2	3	4	5	
5.	serving existing patient bases more efficiently?	1	2	3	4	5	
6.	offering existing medical services more efficiently?	1	2	3	4	5	
7.	limiting the range of services offered?	1	2	3	4	5	

II) HOW THE HOSPITAL'S RESPONSE WAS DEVELOPED AND IMPLEMENTED

 $\Omega 2$. When developing and implementing your organization's response to the financial challenges, to what extent:

	_	_			yo		inswer)
	1	o a:					Great
		1	Exte	-			Extent
١.	did one or two top hospital managers dominate decision making?		1	2	3	4	5
2.	did all members of the hospital's top management make strategic						
	decisions on a regular basis?		1	2	3	4	5
3.	was authority for making strategic decisions shared by all						
	top managers?		1	2	3	4	5
4.	did executives at the hospital's corporate parent make						
	strategic decisions for your hospital?	N/A	1	2	3	4	5
5.	did all top managers share responsibility for strategic decisions?		1	2	3	4	5
6.	could decision making authority be characterized as shared among	3					
	all top managers?	-	1	2	3	4	5
7.	was strategic decision making characterized by the "push and pul	ı -					
	of different interests (e.g., administrators, physicians)?		1	2	3	4	5
8.	was conflict an accepted outcome of strategic decision making?		1	2	3	4	5
9.	could strategic decision making in your hospital be characterized						
	as bargaining, negotiating, and compromising?		1	2	3	4	5
10.	did coalitions among top managers change over different strategic	:					
	issues?		1	2	3	4	5
11.	was there a systematic search for information during strategic						-
	decision making?		1	2	3	4	5
12.	~		1	2	3	4	5
	was there personal friction among group members?		1	2	3		5
	were personality clashes among group members evident?		1	2	3	4	5
	was tension within the group evident?		1	2	3	4	5
	were there disagreements over different ideas about how to impro	ve	•	•	Ŭ	7	•
	performance?	,,,	1	2	3	4	5
17	were there many differences of opinion about how to address the		•	•	•	7	•
• • • •	financial challenges?		1	2	3	A	5
18	did top managers have to work through many differences regarding		•	۲	J		3
10.	the hospital's strategy?	·y	1	2	3	4	5
	the moshital a strateAs:			2	3	4	5

Q3. When developing and implementing your response to the financial challenges, to what extent did you use the following sources of information?

uiu	you use the following sources of information:							
			{c	irçle	yo	ur a	inswer)	
		To a:	Sma	fi			Great	
		1	Exte	٦t			Extent	
1.	internal financial reports		1	2	3	4	5	
2.	internal operating reports		1	2	3	4	5	
3.	discussions among top managers		1	2	3	4	5	
4.	discussions among other employees		1	2	3	4	5	
5.	other sources internal to the hospital		1	2	3	4	5	
6.	newspaper articles		1	2	3	4	5	
7.	healthcare journals		1	2	3	4	5	
8.	government statistics		1	2	3	4	5	
9.	chamber of commerce statistics		1	2	3	4	5	
10.	marketing surveys		1	2	3	4	5	
11.	discussions with industry experts		1	2	3	4	5	
12.	discussions with consultants		1	2	3	4	5	
13.	managed care vendors		1	2	3	4	5	
14.	other hospitals owned by the same multi-hospital system	N/A	1	2	3	4	5	
	other sources external to the hospital		1	2	3	4	5	

Q4. <u>During</u> the hospital's performance decline, how important were each of the following performance comparisons in formulating your strategic response?

			10	cola			nswer)
		,	ery/		γU		erv Hiswei i
		Unim	•				portant
Com	parison with	• • • • • • • • • • • • • • • • • • • •					
1.	your hospital's past performance		1	2	3	4	5
2.	short-term performance aspirations of the hospital		1	2		4	5
3.	long-term performance aspirations of the hospital		1			4	
4.	hospitals in your multi-hospital system	N/A	1	2	3	4	5
5.	average performance in the industry nationwide		1			4	
6.	hospitals located in your community		1	2		4	
7.	hospitals that compete in a way similar to you		1	2	3		5
8.	hospitals experiencing similar performance to yours		1	2	3	4	5
Lool	ting beyond the health care industry, how important were compar	risons	with	١			
9.	firms in other service industries within your community		1	2	3	4	5
10.	· · · · · · · · · · · · · · · · · · ·		1	2	3	4	5
11.	highly reputable organizations described in the media		1	2	3	4	5
12.	- · ·		1	2	3	4	5
	each of the pairs below, please divide 100 points among the follo ortant they were as comparators in evaluating your hospital's perf			rdin	g to) ti i	w
1.	a. your hospital's past performance						
			_	_			
	b. your hospital's long-term performance aspirations						

100

a. your hospital's past performanceb. the performance of other hospitals

3. a. the performance of other hospitals

b. the performance of firms outside the health care industry

Q5. At the <u>present time</u>, how important are each of the following comparisons when evaluating whether or not your hospital's performance is at an acceptable level?

wne	ther of not your hospital's performance is at an acceptable level	1						
					: yo	ur a	inswer)	
			Very	1			Very	
		Ur	impo	orta	nτ	ı	mportan	16
Com	parison with							
1.	your hospital's past performance		1	2	3	4	5	
2.	short-term performance aspirations of the hospital		1	2	3	4	5	
3.	long-term performance aspirations of the hospital		1	2	3	4	5	
4.	hospitals in your multi-hospital system	N/A	ī	2	3	4	5	
5.	average performance in the industry nationwide		1	2		4		
6.	hospitals located in your community		i	2	_	4	_	
	and the state of t		i	2	3	4	-	
7.	hospitals that compete in a way similar to you			2	_	4	_	
8.	hospitals experiencing similar performance to yours		1	2	3	4	5	
Look	ing beyond the health care industry, how important are comparis	sons v						
9.	firms in other service industries within your community		1			4	-	
10.	local service firms experiencing similar performance to yours		1	2	3	. 4	• 5	
11.	highly reputable organizations described in the media		1	2	3	4	5	
	firms managed by people you know socially or professionally		1	2	3	4	5	
For e	each of the pairs below, please divide 100 points among the follow trant they are, <u>at present,</u> as comparators in evaluating your hos	wing pital's	perf	rdin orm	g to	ho e?	w	
1.	a. your hospital's past performance							
	b. your hospital's long-term performance aspirations							
		100						
2.	a. your hospital's past performance							
۷.	, , ,							
	b. the performance of other hospitals	100						
		100						
_								
3.	a. the performance of other hospitals							
	b. the performance of firms outside the health care industry							
		<u>100</u>						
	III) THE CAUSE OF THE HOSPITAL'S FINANCIAL (HALL	ENG	ES				
Q6	Please consider the cause(s) of the financial challenges. Rate th	ese fa	ctors	frc	m '	i to	5 in suc	ch
	a fashion as to indicate the causation of the hospital's financial unimportant, 5-extremely important)	challer	iges.	(1	·ext	ren	nely	
	Cost or availability of resources (e.g., staff, supplies, etc.)							
	_ Internal processes and operations (e.g., inefficiency, quality p	roblen	15}					
	 Demand for services offered (e.g., low demand for services, etc.) 	new co	mpe	tito			mmunit	γ.
	_ Reduced reimbursement rates				;	•		
	Increased market penetration of managed care activities							
	4							

Q7. To what extent were the following factors associated with the hospital's financial challenges (i.e. low or negative net income)?

	The state of the s	(circle your answ				answeri
		To a: Sma				Great
		Exte	nt			Extent
1.	high labor costs	1	2	3	4	5
2.	scarce supply of admitting doctors	1	2	3	4	5
3.	high prices of supplies	1	2	3	4	5
4.	scarce supply of nurses	1	2	3	4	5
5.	misdirected growth	1	2	3	4	5
6.	inefficient operations	1	2	3	4	5
7.	inadequate cost controls	1	2	3	4	5
8.	inadequate quality controls	1	2	3	4	5
9.	merger of competitors	1	2	3	4	5
10.	competitors' new service offerings	1	2	3	4	5
11.	new competitors in the community	1	2	3	4	5
11.	changed community demographics (e.g., aging population)	1	2	3	4	5
12.	low demand for service offerings	1	2	3 .	4	5
13.	increase in unreimbursed services	1	2	3	4	5

VI) YOUR ASSESSMENT OF THE HOSPITAL'S SUBSEQUENT PERFORMANCE

Q8. In general, how would you rate							
•		(ci	rcle	yo	ur a	answer	
		Very				Very	
		Poor				Good	
1. the effectiveness of your hospital's r	esponse to the financial decline?	1	2	3	4	5	
2. the current performance of your hos	pital?	1	2	3	4	5	

VIII) OTHER DEMOGRAPHIC INFORMATION

Q9. Please circle the word which best describes your hospital: ACUTE SPECIALTY TERTIARY

Q10.	What year did your hospital join Columbia/HCA Healthcare Corporation?
Q11.	What year was your hospital founded?
Q12.	How many years have you been at this hospital?
Q13.	What is your title/position?
Q14.	What year were you born?
Q15.	How many years of experience do you have in the healthcare industry?
016	Please circle the word(s) which best describes your expertise:

Is there anything else you would like to tell us about how your hospital responded to the financial challenges? If so, please use the back of this page for this purpose. Any comments you wish to make that you think may help us in future efforts to understand how hospitals respond to financial challenges will be appreciated. Your contribution to this effort is very greatly appreciated.

ACCOUNTING/FINANCE MARKETING OPERATIONS/MANAGEMENT CLINICAL

APPENDIX C: REMINDER POSTCARD

February 26, 1996

Last week a questionnaire asking how your hospital responded to financial challenges was sent to you.

If your hospital has already completed and returned it to us today, please accept our sincere thanks. If not, please do so today. Because it has been sent to only a small sample of hospitals, it is extremely important that yours also be included in the study if the results are to accurately represent hospitals that have faced financial challenges.

If by some chance you did not receive the questionnaire, or it got misplaced, please call me right now (504-388-6212), and I will get another one in the mail to you today.

Project Director

APPENDIX D: COVER LETTER FOR SECOND MAILING

March 11, 1996

Mr. John Smithhisler Chief Executive Officer Sunbelt Regional Medical Center 13111 East Freeway Houston, TX 77015

Dear Mr. Smithhisler:

I need your help! About three weeks ago I wrote to you asking how your hospital had responded to financial challenges. As of today, your completed questionnaires have not been received. Your hospital's response is vital to the success of this research project and, on a personal note, to the completion of my dissertation and my doctorate in management.

I am writing to you again because of the significance each questionnaire has to the usefulness of this study. Your hospital was selected through a sampling process in which only one in forty two hospitals are being asked to describe their hospital's response to financial challenges. In order that the results truly represent the actions of hospitals that have faced financial challenges, each hospital in the sample needs to respond. As mentioned in the last letter, the questionnaires should be completed by managers who have been at the hospital since 1990. Thus, please have the two highest-level managers (including yourself, if applicable) that have been at the hospital since 1990 complete this questionnaire.

In the event that your questionnaires have been misplaced, replacements are enclosed.

Your assistance is greatly appreciated.

Sincerely,

Chris Shook Project Director

P.S. A number of people have written to ask when results of this study will be available. I hope to have them out in May.

APPENDIX E: FAX COVER SHEET FOR THIRD ITERATION



Department of Management College of Business Administration Louisiana State University Baton Rouge, LA 70803-6312

Facsimile Correspondence

April ___, 1996

To: Mr. Stephen Royal, President and CEO Spring Branch Medical Center 450630

Fax#: (713) 722-3780

From: Chris Shook - Project Director

Fax #: (504) 388-6140 Tele #: (504) 388-6212

Number of Pages: 7 (including this cover sheet)

Message:

I am contacting you about my study of how hospitals respond to financial challenges. I have not yet received a your completed questionnaire.

This is the first study of this type that has ever been done. Therefore, the results are of particular importance to many hospital executives. However, the usefulness of the results depend on how accurately I am able to describe how hospitals responded to financial challenges. Past experience suggests that those hospitals which have not yet responded may have acted quite differently than those which have. Thus, your input is critical to the success of this study, and, on a personal note, to the completion of my doctoral dissertation.

It is for these reasons that I am sending this by facsimile. In case my other correspondence did not reach you, a replacement questionnaire is also being sent. May I urge you to have a manager that has been there since 1990 take fifteen minutes to complete it today and fax it back to me at (504) 388-6140?

Your contribution to the success of this study will be appreciated greatly.

Confidentiality Notice
This faceimile transmission and the documents accompanying it may contain work product and/or privileged and confidential information intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this telecopy is strictly prohibited. If you have received this telecopy in error, please immediately notify us by telephone and return the original message to us at the above via the United States Postal Service. Thank

APPENDIX F: COVER LETTER FOR FOURTH MAILING

PO Box 17550 Louisville, Kentucky 10217 Jelephone 502/646,7111

Audubon Regional Medical Center

June 10, 1996

Mr. John Smithhisler, Chief Executive Officer Sunbelt Regional Medical Center 13111 East Freeway Houston, TX 77015

Dear Mr. Smithhisler:

Researchers at Louisiana State University have undertaken a research project to better understand how hospitals respond to financial challenges. The goal of this research is to construct a model of strategic responses to declining financial performance and develop recommendations for hospitals facing financial challenges. As you may know, your hospital was included in the sample and mailed a survey a few weeks ago, but your completed survey has not been received.

As Chief Executive Officer at Audubon Regional Medical Center, I know that there are many demands on your time. However, may I ask a favor? If you have been at this hospital since 1990, please take the dollar bill attached to the enclosed survey and go buy yourself a coke to drink while taking a few minutes to complete the enclosed questionnaire. If you haven't been there since 1990, please pass it along to one of your managers who has and ask them to complete it. When finished, return the survey in the enclosed postage-paid envelope.

I greatly appreciate your help.

Sincerely,

Michael L. Louviere

President and Chief Executive Officer

VITA

Christopher L. Shook was born the son of Ronald and Delores Shook on August 6, 1962, in Sidney, Nebraska. He earned his bachelor of science degree in Business Adminstration with an emphasis in Accounting from the University of Northern Colorado, in Greeley, Colorado. He was granted licensure as a Certified Public Accountant by the State of Colorado in 1985. He recieved his master of business administration degree from the University of Mississippi in 1989. He then fulfilled the requirements for a doctor of philosophy degree in Business Administration (Management) at Louisiana State University in 1997.

To date, Christopher has published four journal articles and presented several meetings papers. His research interests include strategic management in the health care and organizational decline contexts, strategy processes, organizational configurations, and methodological issues in strategy research. Christopher joined the faculty of the Department of Management at Northern Illinois University in June 1996.

DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Christopher L. Shook	
Major Field: Business Administrati	ion (Management)
Title of Dissertation: Fit and Org	ganizational Turnaround:
An Examination of the Performance In	mplications of Strategy Content
and Process Fit and Strategy and Cau	se of Decline Fit Approved:
	Major Professor and Chairman
	Dean of the Graduate School
	EXAMINING COMMITTEE:
	Will Sup
	Mulbert
	In fa
	Soak
Date of Examination:	
February 28, 1997	