Practices and characteristics of effective executives in technology-based multinational corporations: analysis of Anglo-American, Nordic-European and Far-Eastern managers

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PRACTICES AND CHARACTERISTICS OF EFFECTIVE EXECUTIVES IN TECHNOLOGY-BASED MULTINATIONAL CORPORATIONS: ANALYSIS OF ANGLO-AMERICAN, NORDIC-EUROPEAN, AND FAR-EASTERN MANAGERS

by

James George Brianas

A Doctoral Thesis
Submitted in partial fulfillment of the requirements for the award of Doctor of Philosophy - Ph.D. of the Loughborough University of Technology

March 1987

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ABSTRACT

This is a study that examines the practices and characteristics of executive-level managers in technology-based multinational corporations. Two overriding questions are designed to be answered:

1. What do effective executive managers do?
2. How do top company executives perform their job relative to these effectiveness-based criteria?

These questions are answered in part in terms of the literature and in terms of field research performed on executive managers. The research has focused on the examination of managers in environments characterized by a high degree of change.

From a synthesis of research-based skills and abilities on effective executives identified through extensive literature search an "Executive Management Inventory" (EMI) was developed. Subsequent to testing and validation, the EMI was used to measure work performed by corporate managers in the international environment. The sample forming the data-base of this research comprised executive managers, principally General Managers, employed in multinational corporations headquartered in six nations worldwide:

- United States
- United Kingdom
- West Germany
- Sweden
- Japan
- Korea

The six nations were further classified into three regional clusters:

- Anglo-American
- Nordic-European
- Far-Eastern

Differences among these executive managers are statistically tested for significance. Interviews were also conducted with successful executives representing each of the six nations comprising the data-base. Not only are conclusions drawn in the conventional way, but inferences are also made with reference to the larger population.
Today's world is becoming global in character and competition. A critical force in this arena is the executive population of managers working in multinational companies. These executives and their companies are the leaders and trend-setters in the field of management and the world marketplace.

Since 1981, the author of this research has been intimately involved in this competitive environment while working as a manager overseas with a high technology, multinational corporation. Prior to that he worked several years in Washington, D.C. as a management analyst, trainer, and consultant with large government departments and served as an adjunct faculty member in Management with the University of Maryland. This experience, his formal education, plus his research and writings on leadership and management provide the background and interest he has in identifying and assessing what makes executive managers successful. This background has spanned experience from industrial engineering to behavioral science.

His 1973 article, "Behavioral Technology: A Challenge to Modern Management" published in the journal of PUBLIC PERSONNEL MANAGEMENT (see Appendix) identified a new discipline which he called "Behavioral Technology." He described it as "a harmonizing of man the human being and man the technical being." He saw a new breed of leader emerging to meet the challenges of the modern world, "a leader with vision and vitality" (Brianas pp. 297-298).

This research is intended to provide further understanding of leadership and hopefully additional impetus for Behavioral Technology by taking a look at what it is that successful executive managers do— their behavior, their managerial practices. This was derived from an extensive synthesis of published research results on successful senior managers, the first such synthesis likely performed and the first subsequently captured into a measurement tool. This is the third major measurement tool developed by the author.

The author’s recent location of employment, the Middle East, has provided an opportunity to deal with many companies and personnel from throughout the free world. With concerns voiced recently about the effectiveness of western management, as bolstered by declining rates of productivity growth and market
share, this environment provided an excellent laboratory to study real-life, corporate situations with executives and companies from several continents.

If a bias exists in the nature of the research it is with the direction taken in identifying characteristics of effectiveness. In an article published by the Institute of Management and Human Behavior in 1977, the author cited "the need for a contingent approach to effective management." That approach was built into a management style instrument developed by the author and discussed in the article. The instrument "does not prescribe," he stated, "the one best way to manage." It is consistent, though, with the author's "Theory of Organizational Relativity." The theory, cited in the article, states that "An organization's operating requirements and thereby its effectiveness are dependent upon the nature of those forces at work both within and without the organization" (Brianas p. 4). This contingent or situational approach to managerial effectiveness is built into the executive inventory developed specifically as part of this research.

It is this overall experiential history of the author that provides the framework and impetus for the research discussed herein. Included are his insights from founding and chairing a national management society and serving in the Executive Office of the U.S. President on the task force to assess the state-of-the-art of productivity improvement procedures.

The research is focused, and specifically on the effectiveness of:

Executive managers, in Multinational corporations, engaged in Technology-based work.

Assessment of no other level or kind of managerial job is either intended or implied.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Exhibits</td>
<td>viii</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>xi</td>
</tr>
<tr>
<td><strong>I. INTRODUCTION: RESEARCH ISSUES AND PARAMETERS</strong></td>
<td>1</td>
</tr>
<tr>
<td>A. FRAMEWORK OF THE THESIS</td>
<td></td>
</tr>
<tr>
<td>1. Purpose</td>
<td>1</td>
</tr>
<tr>
<td>2. Our Changing Environment</td>
<td>3</td>
</tr>
<tr>
<td>3. Establishing Research Parameters</td>
<td>5</td>
</tr>
<tr>
<td>B. ISSUES AND PROBLEMS/RESULTS FROM THE LITERATURE</td>
<td>8</td>
</tr>
<tr>
<td>1. What Do Managers Do?</td>
<td>8</td>
</tr>
<tr>
<td>2. Towards the Effective Executive</td>
<td>13</td>
</tr>
<tr>
<td>3. The Competitive Technology-Based Environment</td>
<td>16</td>
</tr>
<tr>
<td>C. RESEARCH DESIGN AND OBJECTIVES</td>
<td>23</td>
</tr>
<tr>
<td>1. Phase 1. Characteristics of Effective Executives</td>
<td>23</td>
</tr>
<tr>
<td>2. Phase 2. Instrument Development and Test</td>
<td>25</td>
</tr>
<tr>
<td>3. Phase 3. Field Research/Hypothesis Testing</td>
<td>30</td>
</tr>
<tr>
<td><strong>II. LITERATURE RESEARCH BASE: REVIEW AND ANALYSIS</strong></td>
<td>38</td>
</tr>
<tr>
<td>A. RESEARCH SOURCES</td>
<td></td>
</tr>
<tr>
<td>1. General Sources</td>
<td>38</td>
</tr>
<tr>
<td>2. Source Details</td>
<td>40</td>
</tr>
<tr>
<td>B. MANAGEMENT RESEARCH METHODOLOGIES: KEY LITERATURE FINDINGS</td>
<td>43</td>
</tr>
<tr>
<td>1. Trait Theory vs. Situationalism</td>
<td>43</td>
</tr>
<tr>
<td>2. Post-War Research on Managers</td>
<td>44</td>
</tr>
<tr>
<td>3. Effectiveness-Based Research: Seven Studies</td>
<td>48</td>
</tr>
<tr>
<td>C. RESEARCH-BASED MODELS OF MANAGEMENT BEHAVIOR: 1955 to 1984</td>
<td>52</td>
</tr>
<tr>
<td>1. Management Research: The Dilemmas</td>
<td>52</td>
</tr>
<tr>
<td>2. The Management Models</td>
<td>54</td>
</tr>
<tr>
<td>3. Effectiveness-Based Models: The Similarities</td>
<td>99</td>
</tr>
<tr>
<td>D. REVIEW OF TWENTY-FIVE INSTRUMENTS/DESCRIPTIONS OF MANAGEMENT, ORGANIZATION, AND LEADERSHIP PRACTICES: 1953 to 1982</td>
<td>103</td>
</tr>
</tbody>
</table>
VI. CONCLUSIONS

A. WHAT DO EFFECTIVE EXECUTIVES DO? 352

B. HOW DO WE OPERATIONALIZE OUR ABILITY TO ANALYZE EFFECTIVE BEHAVIOR? 355

C. MANAGEMENT PRACTICES AND BEHAVIOR HOLD A KEY TO THE SUCCESS OF EXECUTIVES 359

APPENDIX:

Attachment A. Article: "Behavioral Technology: A Challenge to Modern Management" 374
Attachment B. Executive Management Characteristics Identified by Author 383
Attachment C. Executive Management Characteristics Identified by Category 412
Attachment D. Article: "Mastering 'Dynamic Complexity': The Key to Managing Change" 455
Attachment E. Letter: School Superintendent 456
Attachment F. Japanese Translation: Executive Management Inventory 457
Attachment G. Cover Letter: Executive Management Inventory 472
Attachment H. Bibliography 473
# LIST OF EXHIBITS

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Management Research Methodologies of Seven Key Literature Sources</td>
<td>49</td>
</tr>
<tr>
<td>2. Research-Based Models of Management Behavior: 1955 to 1984</td>
<td>58</td>
</tr>
<tr>
<td>3. Relative Categorical Agreement/Similarity of Five Effectiveness-Based Management Models</td>
<td>101</td>
</tr>
<tr>
<td>5. Review of Eleven Doctoral Dissertations on Managerial Work and Effectiveness</td>
<td>115</td>
</tr>
<tr>
<td>6. Literature Sources: Characteristics of Effective Managers</td>
<td>126</td>
</tr>
<tr>
<td>7. Derivation of Characteristics of Effective Managers: Examples from Four Key Literature Sources</td>
<td>130</td>
</tr>
<tr>
<td>8. Executive Management Characteristics Identified by Author</td>
<td>135</td>
</tr>
<tr>
<td>9. Executive Management Characteristics Identified by Category</td>
<td>142</td>
</tr>
<tr>
<td>10. Instructions for Management Research</td>
<td>145</td>
</tr>
<tr>
<td>11. Categorical Definitions</td>
<td>146</td>
</tr>
<tr>
<td>12. Instructions for Identifying Executive Management Categories - Katz</td>
<td>150</td>
</tr>
<tr>
<td>13. Instructions for Identifying Executive Management Categories - Stewart</td>
<td>151</td>
</tr>
<tr>
<td>14. Tri-Divisional Model of Management Behavior</td>
<td>153</td>
</tr>
<tr>
<td>15. Tri-Divisional Categorization of Effective Management Behavior</td>
<td>154</td>
</tr>
</tbody>
</table>
17. Tri-Divisional Categorization of Effective Management Behavior by Detailed Sub-Divisions  179
18. Derivation of Inventory Items: Example from the Category 'Visualizing,' Item 2  180
19. Executive Identification by Standard Industrial Classification Codes of Industries  184
20. Executive Management Inventory Results: Seven Executives  187
21. Profile of Most to Least Characteristic Behavior of Seven Executives  192
22. Executive Responses by Tri-Divisional Categorization of Effective Management Behavior  195
23. Response Profile - Executive Management Inventory - Executives 1 through 7  198
24. Matrix of Individual Response Levels of 7 Executives to 72 Management Practices/Behavior on a 10-Point Scale  207
25. Individual Response Pattern of 7 Executives to 72 Management Practices/Behavior on a 10-Point Scale  208
26. Executive Interviews - 7 Executives  213
27. Calculation of the Reliability Coefficient of the Analytical Division of the EMI: An Example  242
28. Executive Management Inventory - Revised Edition 1966  244
29. Summary Results - Executive Management Inventory - By Regional Group  267
30. Summary Results - Executive Management Inventory - By National Group  288
31. Scale Profile - Executive Management Inventory  271
32. Ratio of Total Years of Management Education and Training to Total Years of Management Experience by National Group  280
33. Calculations - Statistical Test for Hypothesis #1  300
34. Calculations - Statistical Test for Hypothesis #2 302

35. Actual vs. Expected Effectiveness Levels of Far-Eastern Executives in Comparison to Nordic-Europeans and Anglo-Americans 304

36. Calculations - Post Hoc Statistical Test for Hypothesis #2 306

37. Calculations - Statistical Test for Hypothesis #3 309

38. Executive Interviews: American, British, Swedish, German, Japanese, and Korean Executives 323
ACKNOWLEDGEMENTS

An in-depth study such as presented in this thesis could not be successful without the assistance and cooperation of many people.

First and foremost is to acknowledge the sound, practical foundation in management analysis provided to this researcher during his earlier years working in Washington, D.C. This was provided by an Industrial Engineer (an Air Force pilot) plus this researcher's manager, both on loan from the U.S. Department of Defense, who served as mentors. They instilled the determination and the will to analyze and assess honestly and wisely organizational conditions and situations to promote improvements and overall management effectiveness.

While in the U.S. capital many opportunities arose to meet and share insights with noted educators, researchers, and practitioners in the field of Management. These included Rensis Likert, Peter Drucker, Norman R. F. Maier, Eric Trist, Robert Ford, Edward Lawler III, David Sirota, Michael Maccoby, Harold Sheppard and others. Subsequently as National Chairman of a management society this researcher was instrumental in fostering and promoting state-of-the-art discussions through conferences and symposiums with speakers from universities, government agencies, corporations, and unions. This is to acknowledge appreciation for such opportunities and the value of these and scores of other people to the work and efforts of this research. This, his work and research, and experience overseas provided the framework for this doctoral work.

Of the many people more directly associated with this research two pre-eminent scholars need mentioning. The first is Dr. Rosemary Stewart, Dean of the Oxford Centre for Management Studies (now Templeton College), Oxford. Her assistance and interest is mirrored in the several letters posted across the miles to and from this researcher. In one she stated, "I am naturally interested that you are planning work in this very interesting area" (of executive effectiveness). A subsequent follow-up meeting at Oxford was further enlightening. Her insights on the work of managers and advice on conceptualizing effectiveness are graciously appreciated.

Dr. Stanley Seashore, pre-eminent in organizational behavior and survey research, was the second scholar. He currently is Emeritus with the University of Michigan's Institute for Social Research at Ann Arbor. His assistance through a telephone discussion half-way around the world plus follow-up correspondence were indeed generous. The survey research methodologies proposed by him ranging from common sense approaches to highly scientific ones helped guide the development
of the survey instrument herein. He stated in one letter, "I enclose a chapter from one of our recent books. It describes in some detail the procedures we used for the development and scaling of a questionnaire. The methods are pertinent to your case --."

From the work of managers discussed with Dr. Stewart to the methodologies of survey research discussed with Dr. Seashore, a framework evolved that guided this research and provided confidence in the developmental processes followed.

Further on in the research a fortunate meeting with Dr. Roger Bennett at Oxford Polytechnic, intimately involved with management effectiveness, proved very beneficial. His insights and writings on effectiveness seemed, like a quirk of fate, to solidify the tripartite process of (1) Managerial work, (2) Its effectiveness, and (3) Methods for measuring it, which were followed in this research. Discussions with him were valuable and much appreciated.

The colleagues and associates of this researcher -- experienced managers, executives, educators, and trainers -- are to be thanked for their assistance. This included Dr. Ahmed Dia with the United Nations and a Florida State University graduate who served as External Supervisor, Dr. Stephen Twining, an Educator and a graduate of the University of Michigan, Mr. Ted Tipping, Corporate Training Manager from the U.K., several other colleagues, plus Russell Smith, Chief of the Commercial Section with the U.S. Consulate, Commercial Attachés from other countries, and those executives who responded to the survey research including the six who willingly spent several interview hours with this researcher.

Library personnel on three continents including publishing houses and management authors themselves are to be thanked -- in the United Kingdom, United States, and Saudi Arabia. They provided the numerous sources important to this research.

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These acknowledgements would not be complete without citing the assistance of this researcher's strongest supporters -- his young family. Their understanding of the importance of this research, only a father could cherish.

The support and assistance of all who made this research possible is warmly acknowledged. It has been immeasurable.
CHAPTER I

INTRODUCTION:

RESEARCH ISSUES AND PARAMETERS
I. INTRODUCTION: RESEARCH ISSUES AND PARAMETERS

A. FRAMEWORK OF THE THESIS

At the outset, I would like to provide the conceptual framework of the thesis -- its purpose and the key reasons that guided its development, focused its attention, and provided the plan for systematically presenting its findings.

1. Purpose

The overriding emphasis of this research is on the work performed by executive-level managers. The management literature finds this area replete with problems, confusion, and contradictions.

The purpose of this study is to analyze this problematic area by focusing on top managers working in organizational environments characterized by a high rate of change. This change is particularly evident in the highly competitive, technology-based multinational environment.

I argue that:

1. A lack, as identified in the literature, at attempts to synthesize existing research-based results on effective management practices has helped to perpetuate the problems of executive work, its confusion and contradictions. One major
result of this research is to conduct such a synthesis.

2. Published research instruments designed to measure the work or styles of managers -- their practices and behavior -- are basically narrow in intent, measuring aspects of management behavior; often they have little, if any, validation results, are often developed as profit-making ventures, or have been out-dated by a changing, technology-based society. Through a synthesis of existing research on effective executive practices and characteristics a new instrument will be developed. (This does not preclude review and analysis of existing published instruments to assess their applicability to this research.)

3. Management practices and behavior hold a key to the success of executives in general, and globally to the success of Japanese firms and the Continental European firms in comparison with Anglo-American firms. Through application of the new instrument to multinational executives I propose to test the significance of such premises. I expect to find that today's dynamic, changing environment requires top managers with commensurate skills and abilities to be able to deal effectively with today's challenges.

My main methods of study include:

1. Literature searches -- manual and computer-based.
2. Use of management experts -- academics, practitioners, professionals.
3. Field research -- first-hand input from management practitioners "on the firing line."
Ph.D Thesis

I intend to examine the differences that exist between and among executives from major industrialized nations from around the free world. From the examination of a number of variables the intent will be to isolate those practices and characteristics that are significantly different. These differences will be important in providing critical linkages in our further understanding of management behavior.

2. Our Changing Environment

We live in a world often characterized by terms such as "growth," "advancement," "complexity," and "rapid change." With change comes the commensurate need to understand its implications and its impact on people and society as a whole.

Due to the critical role of the manager in determining "whether our social institutions serve us well or whether they squander our talents and resources" (p. 61), Henry Mintzberg (1975) a McGill University professor has further stated, "No job is more vital to our society than that of the manager" (p. 61). Yet the same author feels that as much as the field of management is devoted to progress and change it for more than half a century has not seriously addressed the basic question: "What do managers do?" (p. 49).

D. Ronald Daniel (in Pascale and Athos 1981) a McKinsey & Company Managing Director stated:
"We are, I believe, at the beginning of a period where significant new research into the practice of management is essential" (p. 15).


Technology-based firms, particularly hi-tech firms, are on the cutting edge of change. To remain competitive in today's dynamic world requires a high degree of awareness to change and innovation in the environment. This environmental concern is key to the research of Burns and Stalker (1961 and 1966) who refer to it as "the technological basis of production and to the situation" (p. vii). They feel:

"There is an overriding management task in first interpreting correctly the market and technological situation, in terms of its stability or of the rate at which conditions are changing, and then designing the management system appropriate to the conditions and making it work" (p. viii).

They call this activity "direction" and it is critical to the identification of "mechanistic" and "organic" systems of organization. It is this direction, interpreted correctly by the "managers-in-chief," that largely determines, they feel, the effectiveness of the organization as a whole.
Concerns and insights such as those voiced above, to be discussed in detail further on in the "Introduction" of this thesis, provided the framework that helped guide the development of this research.

First, is the change occurring in society -- often at dramatic rates.

Second, is the vital role of the manager in society.

Third, is the need for significant new research into the practice of management.

Fourth, is the continuing concerns of the world economy.

Fifth, is the technology-based sector of the economy which is in the forefront of change in the world, and

Sixth, is the key role played by top executives in determining the effectiveness of organizations.

These are the reasons, as derived from the literature, which helped to focus the attention of this research.

3. Establishing Research Parameters

Managers form a very large population worldwide. They in turn impact on various levels of personnel within their organization, and (depending on their own management level and work requirements) outside the organization. The implications of research in this area are therefore very broad with wide-ranging practical and theoretical impact on the field of management. The parameters of the manager population, though,
are too broad and require limits to assure:

1. The population under study is critical.
2. A void in the management research is filled.
3. That the survey effort is manageable.
4. Relevant statistical techniques can be meaningfully applied.
5. Enhancement and sharpening of important concepts or relationships are possible, and
6. That predictions and generalizations have relevance to broader principles and theories of management.

Three criteria will therefore be used to limit the bounds of the research. They include the study of:

1. Executive-level management
2. Technology-based industries
3. Multinational organizations

The plan of this thesis is designed so as to present the reader with research findings on the above using a 3-phased systematic process. Each phase is interdependent yet each is designed to provide a significant contribution to better understanding executive-level management.

Phase 1.
To identify what it is that effective executives do.

Phase 2.
To develop and test an instrument designed to measure what executives do using effectiveness-based criteria.
Phase 3.

To apply the instrument to regional groups of executives worldwide in technology-based, multinational corporations.

The specific issues and problems that crystalized the direction that the research would follow and basically its raison d'être, follow in the second part of this "Introduction."
B. ISSUES AND PROBLEMS/RESULTS FROM THE LITERATURE

In MANKIND AT THE TURNING POINT: THE SECOND REPORT TO THE CLUB OF ROME, Mesarovic and Pestel (1974) take a global view of the impact of rapid change and successions of crises transcending national boundaries. They see this as "the clearest indication that humanity is at a turning point in its historical evolution" (p. vii). In the previous part of this "Introduction" we saw this theme echoed in the field of management by Daniel (in Pascale and Athos 1981) stating we are now in a period where significant new research into management is essential. Mintzberg (1975) also reiterated the above saying that for half a century we have not really addressed the issue of "What do managers do?"

1. What Do Managers Do?

Over three decades ago, Robert Katz (1955) in a HARVARD BUSINESS REVIEW article stated:

"There is surprisingly little agreement among executives or educators on what makes a good administrator. The executive development programs of some of the nation's leading corporations and colleges reflect a tremendous variation in objectives" (p. 33).

He then began to identify what good executives do. Their successful performance, he felt, rests on three basic skills: Conceptual, Social, and Technical (p. 34). The soundness of
his approach made the article an HBR classic as identified in its reprint nearly 20 years later (1974).

The confusion and disagreement over what makes a successful executive continued to persist. Educational programs were identified as key culprits. Livingston (1971) for example stated:

"Managers are not taught in formal educational programs what they need to know to build successful careers in management" -- (and) if academic achievement is equated with success in business, the well-educated manager is a myth" (p. 79).

In discussing the manager's job, Mintzberg (1975) stated management schools have for the most part,

"...not trained managers. -- (The schools) need to identify the skills managers use, select students who show potential in these skills, put the students into situations where these skills can be practiced, and then give them systematic feedback on their performance" (p. 61).

Mintzberg noted that the four words -- plans, organizes, coordinates, and controls -- have dominated management vocabulary since the French industrialist Henry Fayol first introduced them in 1916, and tells us little about what managers actually do (p. 49). He feels that:

"Considering its central importance to every aspect of management, there has been surprisingly little research on the manager's work and virtually no systematic building of knowledge from one group of studies to another" (p. 53).
"It is time to strip away the folklore about managerial work, and time to study it realistically so that we can begin the difficult task of making significant improvements in its performance" (p. 61).

The question of "What do managers do?" is accentuated by paradoxes in management. Adherence to "modern" management principles, for example, may be the reason for failure of American managers to keep their companies technologically competent over the long run. Hayes and Abernathy (1980) believe this to be the case due to increased reliance

"...on principles which prize analytical detachment and methodological elegance (to maximize short-term ROI) over insight, based on experience, into the subtleties and complexities of strategic decisions" (p. 70).

This same problem of "short-term ROI" continues to be voiced through late 1986 by Spencer (November 1986). Mirroring international competition to be discussed in section "3" of this "Introduction," his article emphasizes;

"We must learn to compete with Europeans and Asians, patient players who value market development more than quarterly figures. -- As a result of the unquestioned dominance of short-term shareholder value over other corporate goals, U.S. companies find themselves operating at a disadvantage when competing against foreign companies" (p. 20).

Kotter (1982) believes the problem rests with "conventional wisdom" held by managers which raises serious questions about systems of management as well as management education. He believes that top managers do not function in crisply defined environments. They do not fit the stereotype of performing
functions of planning, organizing, staffing, directing, and controlling. As such, he feels that a rather large gap exists between the conventional wisdom on management functions, tools and systems on the one hand, and actual managerial behavior on the other (p. 156).

This "gap" in understanding the job of a manager is mirrored in a "sensitivity gap" differentiating successful from less successful managers.

"Sensitivity may seem a strange term to use with high-potential people; it seems at odds with those commonly identifiable traits considered desirable in management --. Never-the-less, sensitivity is the essential in many managerial activities -- sensitivity to oneself -- to others -- to the environment (which unsuccessful managers lacked) --. The further you go up, the greater the sensitivity you must have to what is going on -- at all levels of your organization" (Quick and Higginson 1982 pp. 59 and 63).

The critical element of sensitivity to oneself and the environment (and managers' lack of understanding and awareness of it) is also found in the vast array of literature on leadership and management style and on what is required to be successful. Managers seem to generally lack the ability to effectively analyze, diagnose, and otherwise understand the forces around them -- themselves, their employees, and the greater environment -- and behave appropriately as the situation demands (Tannenbaum and Schmidt 1958 and 1973,
Ph.D Thesis


In a recent article (July 1984) originally part of a conference questioning management as a well-defined discipline, Rosemary Stewart, Templeton College (formerly Oxford Centre for Management Studies), stated:

"The argument of this paper is that we need to understand what it is that managers do before we can decide what managers should know and how they can best acquire this knowledge" (p. 325).
(This, she stated, despite) "..seventy-five years of management education to draw upon" (relating to the 75th anniversary of the Harvard Business School in 1983)(p. 324).

That concerns over leadership is a critical issue in management today is also voiced by the Editor of the TRAINING AND DEVELOPMENT JOURNAL, Patricia Galagan. She writes (1984):

"Leadership is a hot media topic these days -- they (the leaders) know how to turn visions into reality -- (but) they must (also) persuade others to set aside their ego ideals to the leader's. This calls for a kind of interpersonal wizardry that few people, even visionaires, possess" (p. 4).

These issues and problems cited in the management literature:

* Lack of understanding of the actual job of a manager,

* Paradoxes on what comprises effective management,

* Lack of managerial sensitivity to one’s job environment,

* Lack of accurately assessing forces impacting on a manager’s job, and
Leadership as a critical issue but also as an ideal few can achieve, all raise serious questions about (1) the management education and training process, (2) our ability to assess accurately and to add significantly to the body of knowledge in the field of management, (3) whether management as an art is overtaking management as a science, and (4) whether in this constantly changing, growing and advancing society of modern man that we as humans have the ability to understand our own complexity and to behave in ways considered reasonable, positive, and effective for the benefit of ourselves and our organization!

Attempts to answer these questions, important as they are, are beyond the scope of this research. But attempts to fill in some of the gaps identified above are not. The gaps point up some of the significant problems facing management today.

2. Towards the Effective Executive
The dilemma of 'What Do Managers Do?' calls into question the corollary question of 'What Should Managers Do to be Effective?' Both questions are critical to this research yet both are problematic.

As Mintzberg (1975) previously stated:

"There has been surprisingly little research on the manager's work and virtually no systematically building of knowledge from one group of studies to another" (p. 53).
Ph.D Thesis

(Confounding the problem is that we find that) "...the manager’s job is enormously complicated and difficult" (p. 54).

In CONTRASTS IN MANAGEMENT, Rosemary Stewart (1976) found that "Managerial work is varied and complex" (p. 2). Glover (1979) in his Ph.D. thesis covering MANAGERIAL WORK went so far as to state that "the function of managing is so diverse generally that the title ‘manager’ seems almost meaningless" (p. 11).

Such diversity and complexity confronted Campbell et al (1970) as shown in their landmark book, MANAGERIAL BEHAVIOR, PERFORMANCE, AND EFFECTIVENESS. They "found the area of managerial effectiveness to be far more complicated than we had originally realized or imagined" (p. xii).

This complexity is also echoed in Sayles’ (1979) LEADERSHIP: WHAT EFFECTIVE MANAGERS REALLY DO -- AND HOW THEY DO IT. He states:

"The reality of organizational life at executive levels is a work process that seems at odds with the ‘why’ and ‘what’ the professional managers bring to the job. Managers want to have a neat, static, compartmentalized world of clear goals, clearly identified resources, and obvious performance measures and instead they find almost the diametric opposite. -- In addition to being hectic, fragmented, and sharply different from society’s portrait, the manager’s job is also contradictory." (p. 11).

Yet despite the complexity and contradictions in a manager’s job, Drucker (1967) in the EFFECTIVE EXECUTIVE emphatically states:
"To be effective is the job of the executive.
-- Yet men of high effectiveness are conspicuous by their absence in executive jobs" (p. 1).

In their PERSPECTIVES ON MANAGERIAL EFFECTIVENESS, Brodie and Bennett (1979) state:

"In research terms we know the field (of management effectiveness) is complex and problematical. There are differences of view about what constitutes effective management" (p. 12).

This concept was also carried forth in a symposium, TOWARD MANAGERIAL EFFECTIVENESS published in 1981 with Machin, Stewart, and Hales (eds.). They state:

"...the fact remains that enormous range of definitions of the term have been offered over the past few decades and there is still no widespread acceptance by either managers or academics of a 'best way' to define or to measure, managerial effectiveness" (p. vii).

They further state:

"'Managerial effectiveness' can never become a purely empirical issue because what constitutes 'management' and what constitutes 'effectiveness' are value judgments" (p. 143).

Despite the wide diversity of opinions, complexities, and possible contradictions confronting management effectiveness, researchers continue to add to the body of knowledge in attempts to clarify further and to understand the field. Katz (1955) a forerunner on effectiveness, is one example as is Chester Barnard (1948). The role of Peter Drucker (1967, 1970, 1977, and others) is indisputable. Mackenzie's (1969) “MANAGEMENT PROCESS IN 3-D" is another example. Others, not
previously identified, include Argyris (1971 and others), Bennis (1984), Brianas (1973), Burgoyne and Stuart (1976), Goldsmith and Clutterbuck (1984), Hersey and Blanchard (1972 and 1977), Kotter (1977 and 1982), Levinson (1978 and 1980), Likert (1961), Lorsch (1979), Maccoby (1981), Maidique and Hayes (1984), Marshall and Stewart (1981), Morse and Lorsch (1970), Pascale and Athos (1981), Peters (1979), Peters and Waterman (1982), Reddin (1970), Schein (1970), Tannenbaum and Schmidt (1973), plus several other researchers. These are identified not to exhaust the field but to show the enormity of the problem facing any attempts to bring together varying concepts, theories, models and practices of management yet with underlying characteristics amenable to a process of synthesis -- what Mintzberg referred to as a "systematic building of knowledge from one group of studies to another." This will be elaborated upon in Chapter II, "Literature Research Base: Review and Analysis," following this chapter.

3. The Competitive Technology-Based Environment
The impact of managerial practices and behavior is not felt more keenly than in the dynamic, constantly changing environment of technology-based industries, particularly the hi-tech industries. To remain competitive requires awareness to change and how it impacts on one's company and industry.
High technology firms are at the cutting edge of change -- of management and technological innovation. This includes hi-tech industries such as biotechnology, computers, semiconductors, pharmaceuticals, and aerospace. These companies, particularly the American, have often been used, in the competitive international arena, as models to emulate.

But the last decade and a half has shown a marked decline in the image of American companies as models. They are no longer unequivocally regarded as the exemplars of best management practice, as some of the following testimonies make clear. For example,

Franko (1978) has stated:

"In 1959, an American company was the largest in the world in 11 out of 13 major industries" (as identified through SIC codes -- Standard Industrial Classification). -- By 1976, the United States was leading in only 7 out of 13. Three of the non-American leaders in 1976 were German, one was British-Dutch, one was British, and one was Japanese. -- The number of U.S. companies among the world's top 12 declined in all industry groups except aerospace between 1959 and 1976. U.K. companies displaced other countries on three industries but lost ground in three others. Continental European companies increased their representatives among the top 12 in 9 out of 13 industries. The Japanese scored gains in eight" (p. 95).

Franko further feels that,

"...the main event in international business during the past decade has been the dramatic gain in the international competitive position achieved by non-American, and particularly
Continental European and Japanese companies" (p. 95). (Not only has there been) "...much more rapid growth in industrial productivity in both Japan and the Continent than in the United States and United Kingdom -- (but the) Continental European and Japanese capabilities in product and process innovation have grown considerably relative to those in the United States and the United Kingdom" (pp. 97-98).

Hayes and Abernathy (1980) believe that the business and economic character of the world is changing. They feel:

"American management, especially in the two decades after World War II, was universally admired for its striking effective performance. But times change. An approach shaped and refined during stable decades may be ill-suited to a world characterized by rapid and unpredictable change, scarce energy, global competition for markets, and a constant need for innovation. This is the world of the 1980's, and probably the rest of the century" (p. 68).

They ask,

"What exactly have American managers been doing wrong? Our managers (they feel) still earn generally high marks for their skill in improving short-term efficiency, but counterparts in Europe and Japan have started to question America's entrepreneurial imagination --" (p. 68).

Also the growth in labor productivity within the major powers of the west, including Japan, has been lowest in the United States and the United Kingdom (Hayes and Abernathy 1980 p. 68).

The same authors feel that it is the managerial...

"...gospel -- of American managers which encourages a preference for analytic detachment rather than insight -- (and) short-term cost reduction rather than long-term development which played a major role in undermining the vigor of American industry" (p. 68).
Ph.D Thesis

This short-term focus and analytical aloofness was previously mentioned but bears repeating due its importance to existing problems. What these same authors call this new "management orthodoxy" of "methodological elegance" is not effective in coming to grips with the "subtleties and complexities of strategic decisions." To be competitive in the multinational environment requires commitment to technological innovation and technologically superior products. These are much valued by Continental European (and Japanese) managers probably driven by the necessity to export to other national markets or perish (pp. 70 and 76).

In studying 120 companies in seven countries, including 16 companies in-depth, Gluck, Kaufman, and Walleck (1980) found that "strategic management" played the critical role in winning increased market shares. Complex multinational corporations such as General Electric, Northern Telecom, Mitsubishi, and Siemens have used this approach and they have found:

"Instead of behaving like large unwieldy bureaucracies, they have been nimbly leapfrogging smaller competitors with technical or market innovations, in true entrepreneurial style" (p. 154).

In their comparison of American and Japanese practices, Pascale and Athos (1981) provide insight into how American executives can improve their problems. They state:

"American managers, as a group, need to reduce their pulse rate. They need to include different folk heroes. They need to drink in
their organizational experience and discern more deeply what makes things work. From that wisdom can come, which is, in the end, perhaps the greatest reward from a life of managerial work, and the quality most needed for organizations to become great ones" (p. 180).

Tichy et al (1982) believe that looking to Japan is not the answer to America's economic and management problems. They feel:

"The long run competitiveness of American industry will require considerably more sophisticated approaches to the human resource input" (p. 47). "When business is castigated and when American industry is unfavorably compared to that of Japan or West Germany, two major factors are underscored: (1) our lack of a long-term perspective in management; and (2) our lack of skill in managing people" (p. 60).

According to Scott (1984):

"Loss of market share and profitability over a sustained period signal an unmistakable decline in (American) competitiveness -- in the last 15 years the deterioration has become more widespread and severe -- action must be based on sound diagnosis of our international competitive position" (p. 77).

We must look, Scott feels, at our competitors from East Asia realistically and,

"...be willing to admit there's a problem and then take some risks in experimenting with a national strategy to avoid the even greater risk of continued decline" (p. 91).

UK firms have also traditionally regarded the USA as a model of management excellence. But any idea that executive excellence is the unique preserve of the Anglo-Saxon countries is further debilitated by the observable decline of the UK (as the previous pages have alluded to). Recent studies have confirmed this.
Ph.D Thesis

For example, the New York-based Conference Board in a 1985 study (FINANCIAL TIMES August 1985) found that "Economic expansion in Britain and the U.S. is lagging far behind other leading industrialized nations." A "programme of learning" is what Malcolm Trevor (MANAGEMENT NEWS September 1985) says is needed as "'an urgent, practical response to severe industrial weakness such as the UK is suffering from now.'" As Japan learned after World War II by picking up workable ideas and using them, so can Britain "provided half-understood Japanese practices are not blindly transplanted to the UK."

Sir Hugh Cortazzi (June 1885), former British ambassador to Japan, also advocates cautious learning by warning:

"Japanese industry is neither omniscient nor unbeatable. It is dangerous and self-defeating to argue that because the country's social system is different, British industry is by definition unable to compete in domestic and foreign markets. A better approach is to isolate the qualities which are responsible for the crushing competitive performance of Japan; and to enquire how British industry could adapt them for use in its own, very different conditions" (pp. 88-89).

Not only in comparison to Japan, but also to its EEC counterparts, British firms lag behind. Chaplin (October 1985) believes that,

"A radical rethink of some very basic practices, from delivery performance to office procedures, is urgently required to match EEC competitors" (p. 101).

And these EEC competitors are in turn looking to the east.
Ph.D Thesis

Philips, Western Europe's largest electronics company, is looking at Japan closely, and according to the INTERNATIONAL HERALD TRIBUNE (December 1985) is now, "...hitting back at the Japanese by using Japanese methods. -- 'In our industry, a company official stated, 'we want to survive.'"

Not only the Japanese, but "The Koreans are Coming" as a recent cover story in BUSINESS WEEK stated (December 23, 1985).

"Samsung Spearheads Korea's Global High-Tech Attack" is another recent article on the inroads being made by the South Koreans (INTERNATIONAL MANAGEMENT October 1985). That article states (p. 38):

"While Western manufacturers fret themselves into a frenzy over continuing inroads into their markets by the Japanese, another force is raising its head and is starting to worry the Japanese in the same way. It is called South Korea and it is beginning to make its international mark in high-tech --."

With all this competition, it is British managers who must be in the forefront to spur the economic survival (MANAGEMENT TODAY February 1986). Cabinet Minister Peter Walker in talking to the British Institute of Management stated, "...if we were to have a revival of the country's fortunes there was only one element that was going to provide it -- the managers of British industry and commerce. It is only if we achieve a radical, revolutionary change in their skills, their qualifications, their application, their enthusiasm, their dynamism -- that we are going to transform the overall scene" (p. 93).

It is to these managers in multinational companies competing in the international marketplace that this research now turns.
Ph.D Thesis

C. RESEARCH DESIGN AND OBJECTIVES

As mentioned in an earlier part of this "Introduction" (I.A.3, "Establishing Research Parameters"), the research findings are presented through a 3-phased systematic process.

1. Phase 1. Characteristics of Effective Executives

   Objective: To identify what it is that effective executives do -- their practices and characteristics. It is based on extensive search of the literature covering a period of three decades prior to this research.

   Through computer-based and manual procedures a systematic review and analysis of the literature will be made as it relates to successful management. (Note: For the purposes of this research, successful and effective will be synonymous.) This establishes the criterion-referenced base of "effectiveness" critical to the overall research. Two criteria were designed to satisfy this base. The first is that the literature sources used (i.e. the practices and characteristics defining successful or effective managers) be research-based as opposed to being purely theoretical notions of effectiveness. Second, that the research be accomplished directly through first-hand observation or understanding (by the researchers) of managers, particularly executive managers.

   Critical to Phase 1 is identification of practices and characteristics with Burns and Stalker's (1961 and 1966)
"organic system" of management. They state:

"If the form of management is properly to be seen as dependent on the situation the concern is trying to meet, it follows that there is no single set of principles for 'good organization', an ideal type of management system which can serve as a model to which administrative practice should, or could in time approximate" (pp. vii-viii).

They further state:

"Organic systems are those which are best adapted to conditions of change. -- The code of conduct characteristic of organic systems -- those better fitted to survive and grow in changing conditions -- comprehends more eventualities than that necessary in concerns under stable conditions. More information and considerations enter into decisions, the limits of feasible action are set more widely" (p. 11).

The "market and technological situation," according to Burns and Stalker, are key to the concerns' stability or instability. Interpreting this "environment" correctly is critical to the type of management system best-suited to their survival.

The "environment" chosen herein is the changing environment of technology-based industries. The organic and fluid practices and characteristics peculiar to such an environment are the focus of Phase 1. These practices and characteristics comprise the resource-base leading to the development of a new survey instrument, the Executive Management Inventory (EMI), which comprises Phase 2 following.
2. Phase 2. Instrument Development and Test

Objective: To develop and test an instrument to measure what executives do using effectiveness-based criteria developed in Phase 1. Management instruments in print covering a period three decades prior to this research will be reviewed and analyzed.

Preliminary investigation of management indices available for the purposes of this research reveals that what survey tools do exist are somewhat to only marginally related to this study. For example, the plethora of available instruments on "management style" and marketed through journal advertisements, seminars, etc. measure a critical but often limited aspect of a manager's job. (Note: The 7-S model of successful management of Pascale and Athos 1981 shows style as only one of seven variables.) Other possible instruments are Edwin Fleishman's (1960) "Leadership Opinion Questionnaire" or Hersey and Blanchard's (1973) "Leadership Effectiveness and Adaptability Description." These instruments are known as validated as well as standardized and therefore important to this study.

Instruments such as Blake and Mouton's (1965) "Managerial Grid" and Jay Hall's et al (1973) "Styles of Management," though based on the "one best way to manage" theory, will also be reviewed.

Technological advances and their impact on the working world must also be considered in assessing what instruments are
Ph.D Thesis

impactful and relevant to today’s environment. Prior research, for example, may need to be "up-dated" or reconsidered in light of rapid advancements and changing circumstances. Lee (1971) has stated that technological changes increased the complexity of work such that it can not be supervised as could the simpler tasks of previous periods.

Search of the literature points to more recent efforts to identify and assess "What is it that managers do?" and "How well do they do it?" These recent research efforts (published since 1960) reflect, no doubt, the high interest shown in the field of management, particularly in the western world, to concerns over what comprises effective and successful management. These research efforts are particularly important to this study and form the critical framework for the design and development of a data-gathering instrument for this research. Their results (including possible instruments developed by them) will be used, as appropriate, for this research. Two critical sources for instruments yet unpublished include:

Maidique and Hayes (1984) on their six general themes covering successful management of high-technology U.S. companies.

Two other sources to be reviewed include:

Boyatzis (1982) and his model for effective management performance.

Heller and Wilpert (1981) on their study of competence of senior managers in eight countries.

Other sources useful and helpful will also be reviewed. It is the intent of this research to utilize existing and proven instruments (indices, inventories, or questionnaires) as a measure of effective performance. But as cautioned by Mintzberg (1975) on his discussion of research in managerial work:

"Considering its central importance to every aspect of management, there has been surprisingly little research on the manager's work, and virtually no systematic building of knowledge from one group of studies to another" (p. 53).

With this caution in mind the approach of this research will be:

1. To obtain and utilize relevant instruments in whole, in part, or in combination, and if this is not possible or the instruments are not pertinent,

2. To design and develop a new and psychometrically sound instrument (the objective ultimately pursued).

Authors who performed research and applied their research results through use of a new diagnostic tool they have developed will be contacted. These include Maidique and Hayes (1984) in their analysis of hi-tech firms and Pascale and Athos (1981) both referred to above. Requests will be made for
copies of their instruments and analysis made for possible use, if permitted by the authors.

Where use of such an instrument(s) is not possible, one will be developed from the literature specifically for the purpose of this research. Procedures assuring the validity and reliability of the instrument would be required. Rooting the instrument into previous research findings and existing inventories would provide content and synthetic validity (Schneider 1976 p. 131). Test-retest for reliability is mentioned in the survey application steps covered later in this section.

Two stages of the literature search that provide the foundation for the design and development of the instrument are as follows:

Qualitative stage: Identification of the characteristics or determinants of effective or successful managers (a Phase 1 process).

Quantitative stage: (a) Sorting (and elimination) of the characteristics based on Stewart's criteria of managerial work -- Analytical, Social, and Emotional R --, and (b) content analysis based on nominal classification (scaling) for dividing characteristics into mutually exclusive categories or categorical variables (a Phase 1 process providing integration with instrument development of Phase 2).

Each categorical variable or dimension of effective performance chosen for inclusion in the instrument brings together,
therefore, characteristics of managers having related implications. The basic purpose is to identify managers who behave in certain ways and can be described in a characteristic manner. The logic here is one of interpretation not factorial to meet all psychometric properties (see, for example, Gough 1975 on the interpretation of the CPI -- California Personality Inventory).

The instrument will be divided into three principal parts:

PART I. Comprised of demographic and organizational variables identified as pertinent measures of or related to effective performance (possibly 10 items).

PART II. Comprised of the practices and characteristics of effective or successful managers as derived from the literature (possibly 60 items). This represents the most critical part of the instrument and upon which the ultimate meaningfulness of Phase 3 of this research depends.

PART III. Comprised of open-ended questions and statements (possibly 2) designed to supplement the statistical results of Parts I and II.

Written instructions will be provided and the survey designed for computer processing. A Likert-type scale will be used for Parts I and II.

Several steps are proposed to finalizing the contents and the overall design of the survey instrument as well as the distribution of it to the population sample. They include but are not limited to the following:
1. Identification and sorting of characteristics.

2. Content analysis input from management educators and practitioners.

3. Preparation of draft instrument.

4. Review of draft instrument by the Director of Research and Research Supervisor.

5. Preparation of the final draft.

6. Identification of the population test sample -- 5 to 10 executives from different hi-tech corporations.

7. Distribution of instrument to population sample.

8. Returns screened and computer tabulated.

9. Interviews with executives subsequent to questionnaire completion.

10. Test-retest (4 to 6 week time spread) to establish instrument reliability (significance of the reliability coefficient).

11. Instrument revised based on results from 8, 9, and 10 plus re-review by 4 above.

12. Final instrument printed (and translated, as required, to meet the needs of the regional clusters).

3. Phase 3. Field Research/Hypothesis Testing

Objective: To apply the final instrument to groups of executives worldwide in technology-based, multinational corporations. Focus will be on assessing the practices and characteristics of the Chief Executive Officer (President, General Manager, Managing Director, Project Manager, etc.) in an international environment.
The field research is interested in assessing the practices and characteristics of the senior managers in aggregate (results of the total population sample) and by regional and national group. Since there are exponentially several hundred hypotheses that could be tested by virtue of the large number of variables particularly in Part II of the survey instrument, the intent will be to test theories only with overall implications to this research. This will be accomplished by testing aggregate results -- the 60 or more variables in Part II as a whole -- plus testing a breakdown of the variables into the tri-divisional model -- Analytical, Social, and Emotional R -- developed as part of this research. Within these, regional groups -- Anglo-American, Nordic-European, and Far-Eastern executives -- will also be tested. The intent of the above is to obtain differences that are significant at a level determined acceptable not a difference that just occurred by chance.

A further intent is to discuss any underlying implications or plausible theories that may arise as a follow-on to the overall hypothesis testing. This is designed to explore differences that may arise from analysis of any of the numerous variables or any of the national groups comprising the regional clusters.
Ph.D Thesis

The first theory to be tested is that "Executive managers are generally less effective (effectiveness as the dependent variable) than good management practices and behavior of corporate executives would prescribe." These are the practices and characteristics that have been built into the instrument -- Executive Management Inventory (EMI) -- developed for this research. The first hypothesis to be tested is:

Hypothesis #1:

Executive managers in technology-based multinational corporations have an effectiveness level different (lower) than that identified for effective performance on-the-job.

Since it is unlikely that most executives are super-managers (for example, Drucker 1967, "...men of high effectiveness are conspicuous by their absence in executive jobs" p. 1) the chances of rejecting this hypothesis and accepting the null hypothesis of equality of means is small.

In testing the significance of the difference of the values in Hypothesis #1 the "t test for means" will be used.

Subsequent to testing the differences of our sample in aggregate the next step would be to test the theory that the Far-Eastern and Nordic-European executives are more effective (according to the literature) than the Anglo-American (U.K. and U.S. managers). This leads to the following hypothesis:
Hypothesis #2:

Executive managers in technology-based multinational corporations from Anglo-American regions have an effectiveness level different (lower) than the level identified for Nordic-European and Far-Eastern regions.

"Single-factor analysis of variance" will be used to test this hypothesis.

The third and last hypothesis tested will cover the tri-divisional model of effectiveness. Three divisions or categories were used in grouping the variables in the EMI based on Stewart (1982). They are "Analytical," "Social," and "Emotional R." With extensive emphasis placed over the past decades on Analytical (or Conceptual), and Social (or Human) skills (Katz 1955 and 1974), the dynamics of today's technology-based industries necessitate skills and management behavior commensurate with it. That new category of behavior is "Emotional R" (originally labeled Emotional Resilience by Burgoyne and Stuart 1976). The hypothesis to be tested is:

Hypothesis #3

Executive managers have an inadequate (lower) level of Emotional R skills and abilities in comparison to Analytical and Social skills.

"Single-factor analysis of variance" will also be used to test this hypothesis.

In addition to the principal statistical tests above, other
Ph.D Thesis

statistical techniques will be considered on the criteria of value added. They are as follows:

1. Upon calculation of the F-ratio determining the significance level (at .05) among the three regional groups of executive managers, it may be of interest to know how each mean of these groups differs from each other (beyond calculations for Hypothesis #2). This would involve use of follow-up or post hoc tests to lessen Type I error (rejection of a null hypothesis that probably should not be rejected).

2. Demographic and organizational variables (educational level, training received, companies worked for, etc.) and the relationships they potentially provide often shed significant insight into the characteristics of the population under study. Correlation (r) would be the statistical procedure applied. Assuming a high positive correlation, one may conclude that predictive qualities exist.

It is intended that the statistical models and tests used be consistent with mathematical deductions called for by the research. This includes a determination of what characteristics of the manager population are of interest, what population comparisons might be made, and what type of measurement scale is involved. Use of the most appropriate statistical procedures and relevant criteria of analysis are critical in attempting to reason from the statistical results to the population under study (statistical inference); that is, from the variables symbolized in the statistical models or tests to the variables observed in the real world (from which the models were originally conceptualized). The tests
Ph.D Thesis

recommended in this research are intended to provide a meaningful framework from which to further assess the statistical procedures most likely to maximize the intended results.

Sampling Procedures

The population under study is executive managers in technology-based, multinational organizational environments, principally those engaged in hi-tech activities -- a rather homogeneous population. To minimize contamination of this population the intervening variable of work location (host country within which multinational companies perform their work) will be consistent among the sample.

The Kingdom of Saudi Arabia has during the past decade been experiencing significant expansion and modernization. As such, hundreds of technology-based, multinational firms from throughout the free world are located within that host country (including this researcher's own company). Those firms engaged in work related to technology (production, transfer, sale, etc.) will comprise the sample base for the present study. This includes but is not limited to the following SIC coded industries (from the Standard Industrial Classification Manual 1972):
The criteria for sample selection among the firms will be further stratified into three regional groups (consistent with the issues and problems cited in the literature) comprising the following:

Group 1. Anglo-American managers - United States and United Kingdom

Group 2. Nordic-European managers - Germany (West) and Sweden

Group 3. Far-Eastern managers - Japan and Korea (South)

Selection will be made with the assistance of respective commercial personnel in foreign embassies and consulates. This will be stratified according to:

(1) Corporate size of 15 or more personnel in the host country,

(2) A base of 3 or more executive managers for each company, and

(3) Corporate longevity comprising a minimum of 2 years continuous business in the host country.

Corporations thus identified will be randomly selected to comprise the following sample:
Ph.D Thesis

<table>
<thead>
<tr>
<th>Group</th>
<th>Regional Clusters</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Anglo-Americans (AA)</td>
<td>30</td>
</tr>
<tr>
<td>II</td>
<td>Nordic-Europeans (NE)</td>
<td>30</td>
</tr>
<tr>
<td>III</td>
<td>Far-Easterners (FE)</td>
<td>30</td>
</tr>
</tbody>
</table>

Total Sample Size: 90

National groups within regional clusters will be identified to provide in-depth analysis and understanding where appropriate. The number of nations for each regional cluster is designed to include a minimum of two.
CHAPTER II

LITERATURE RESEARCH BASE:

REVIEW AND ANALYSIS
II. LITERATURE RESEARCH BASE: REVIEW AND ANALYSIS

A. RESEARCH SOURCES

1. General Sources

Several sources were used in identifying the literature relevant to this research. The principal sources which provided the substantive input included:

1. BRITISH BOOKS IN PRINT -- through January 1984, J. Whitaker & Sons Ltd., London.


In support of these principal sources several other sources (universities, libraries, bookstores, professors, executives, etc.) were used whether to obtain a copy of a single literature reference -- journal article, book etc. -- several references or for interview purposes. These included:

1. The British Library, Wetherby, England


3. Boston University, Boston, Mass.
Ph.D Thesis

7. Bureau of Business Research, The Ohio State University, Columbus, Ohio
8. Survey Research Center, The University of Michigan, Ann Arbor, Michigan
11. Stanford University, Stanford, Calif.
12. The City University, London, England
13. University of Hawaii, Honolulu, Hawaii
14. The University of Western Australia, Nedlands, Western Australia
15. Center for Creative Leadership, Greensboro, North Carolina
16. Teleometrics International, Houston, Texas
17. Organizational Tests Ltd., Fredericton, Canada
18. Dartnell Corporation, Chicago, Illinois

Both these principal and support sources are identified in order to provide proper perspective as to the breadth of sources explored; i.e. to provide the background from which,
as an accountant, to judge the fairness and accuracy of the "balance sheets" of this research. Attempts were made to assure that relevant materials were made available, first of all, to identify published as well as relevant unpublished materials that impact on management effectiveness irrespective of whether this researcher agreed or disagreed with the material. Secondly, to assess the nature and intent of any related doctoral dissertations and theses to assure that the same or similar subject-matter was not previously researched. Every attempt was made to achieve these goals but no doubt some sources were inadvertently omitted or not readily available for review. Such shortcomings as well as those sources used are the responsibility of this researcher.

The above sources were further supplemented by contacts either by phone or in-person with key academics in the field of Management. These academics are noted for their expertise and research on management effectiveness, behavior, and development or survey research methodologies. They have been previously identified in the "Acknowledgements" section of this thesis.

2. Source Details
Several thousand references were scanned both manually and by computer. Of the "British Books in Print," for example, 2400 pertinent management references were identified by computer.
Ph.D Thesis

Of this number 116 were found relevant to this research. Key words to isolate the relevant references included "Technology," "Effectiveness," "Executive," and "Multinational."

From the "Personnel Literature" source, 5235 references covering a 20-month period, January 1982 to August 1983, were manually scanned. These monthly publications abstracted management references covering 75 topics from "Attitude Surveys" to "Workplace Planning" including "Executives -- Abilities and Characteristics." Of the 5235 references 300 were found relevant.

To assess what previous doctoral dissertations were written on executive managers a computer scan was made by University Microfilms International. As of mid 1984 their on-line records totaled 842,500. These included dissertations since 1861 (when doctoral degrees were first granted in the United States).

The scan requested by this researcher covered a 25-year period, 1958 to 1983. One hundred seventy five references were found relating to executive managers. Of this number 10 doctoral dissertations were examined in detail. Specifics on these findings, plus an eleventh, are covered in "Part E" of this "Literature Research Base" chapter. In "Part D," the results from a review of 25 questionnaires for possible use in this research are also presented. The final references used by this
Ph.D Thesis

research (460) are found in the "Bibliography" (with addendum) shown in the "Appendix."

What follows is an examination of several management research methodologies derived from the literature. These methodologies are critical in establishing the framework or model to be used by this research in identifying and categorizing the practices and characteristics of executive managers.
Roger Bennett in his book MANAGEMENT RESEARCH (1983) states, "Research is a part of scientific endeavor. It is that part which explores the unknown (e.g. unknown facts, unknown applications of theory) and contributes to building knowledge and theory from which practical action can be developed" (p. 1). He further defines research as "a systematic, careful inquiry or examination to discover new information or relationships and to expand/verify existing knowledge for some specified purpose" (p. 24).

1. Trait Theory vs. Situationalism

The purpose of this research is to examine and identify the work behavior of executive level managers and test our findings in the real world. The real world chosen is the changing environment of technology-based, multinational corporations. This is the environment which Burns and Stalker (1961 and 1966) state calls for an "organic" system of management.

This situational approach to management and leader effectiveness was a departure from the trait theory which dominated management thought from the turn of the century to the 1940's (Bass 1981 p. 73). These traits included physical characteristics, social background, intelligence, personality,
plus task and social characteristics of the person (pp. 75-76). With the publication of Stogdill's "Personal Factors Associated with Leadership: A Survey of the Literature" in 1948, a turning point seemed to occur in the study of leadership. "Before this date universal traits of leadership were emphasized. After the publication of this paper specific situational analysis took over, in fact dominated the field, much more than argued by Stogdill. -- both individual traits and situational assessments as well as the interaction between them are important--" (p. 43).

The importance of situationalism is undeniable. It is critical to this research. References to it are found throughout this thesis. Yet proper perspective, as shown in the above paragraph, is maintained to assure fair consideration of research, pro or con, which may impact on it.

2. Post-War Research on Managers
One of the first major post-war studies on manager behavior was conducted by Ohio State University beginning in 1945. This included follow-on work performed on first-line supervisors at the International Harvester Company. A questionnaire was subsequently developed called the "Supervisor Behavior Description" followed by a "Leadership Opinion Questionnaire."
As described in Sutermeister’s PEOPLE AND PRODUCTIVITY (1969), "Originally there was a pool of 1,800 items about leader behavior but this was reduced to 150 items on the basis of expert judgment of the staff. A group of 300 Air Force crew members had answered the 150 items with reference to their commanders. These data then were analyzed to determine the underlying factors which were characteristic of leadership—" (pp. 380-381). Subsequent analysis led to the development of the infamous two-factor theory for identifying manager behavior, "consideration" and "initiating structure," which has impacted on management practice for nearly four decades (p. 382).

Some of the "action-oriented" research on managers, as opposed to "theory-oriented" (see Bennett 1983 pp. 32-40), are discussed below. As with the Ohio Studies they are cited as important sources in helping to develop the direction and overall framework of this research.

Mintzberg ("The Manager’s Job: Folklore and Fact" 1975) provided a summary of several research methodologies covering level of managers. These include:

Sune Carlson, EXECUTIVE BEHAVIOR, 1951.
Developed a diary method to study work characteristics of 9 Swedish managing directors. Each kept a detailed log of his activities.
Ph.D Thesis


Leonard Sayles, MANAGERIAL BEHAVIOR, 1964. Studied the work content of middle- and lower-level managers in a large U.S. corporation using what he referred to as an "anthropological" approach. He moved freely in the company collecting whatever information struck him as important.

Rosemary Stewart, MANAGERS AND THEIR JOBS, 1967. Used Carlson's diary method to study 160 top and middle managers of British companies during a 4-week period. Attention focused on differences in their work.

Other studies of interest to this research include analysis of multinational firms and their managers as well as research on productivity. Three such studies follow.

Hulme and Maydew in their BUSINESS HORIZON'S article, "A View of the Top" (October 1972), examined the process of organizing at the top especially for the larger multinational corporation. The Office of the President was used as a benchmark. They conducted two research studies. The first was a study of the top management organization conducted in 3 phases:

1. Search and analysis of the management literature on multiple top management organization published in North America and Europe.

2. Interviews with selected authorities on top management organization.
3. Interviews with principal executives in North America and Europe with experience in multiple top management.

Fifteen American firms took part in in-depth interviews plus two European firms (Dutch and Swedish).

The second study covered an in-depth assessment of 47 multinational companies in America and Europe. Key executives were interviewed. This was conducted by Prahalad and Doz. Their article, "An Approach to Strategic Control in MNC's," SLOAN MANAGEMENT REVIEW (Summer 1981), covered their 6-year study. A pilot study of a diversified materials and chemicals company in 1974 was followed by a study of 11 companies in the process of shifting from subsidiary autonomy to headquarter control and centralized strategy making. The evolution of each company was documented through internal documents and interviews with involved executives at headquarters and subsidiaries. Interviews numbered 20 to 60 per company. A chronology of management mechanisms were developed from these.

The third study concerned a 2-year productivity analysis, June 1980 to May 1982, of 236 top level executives. This was found in Judson's "The Ackward Truth About Productivity," HARVARD BUSINESS REVIEW (September-October 1982). The executives represented 36 different industries with 37% of the executives working in Fortune 500 companies. Most of the executives were CEO's, Vice-Presidents of all sorts, and GM's.
These "action-oriented" studies covered managers "on the firing line," who were responsible for the day-to-day and overall operation of their various firms. Though many of the studies were not directly concerned with executive effectiveness they all pointed to Bennett's (1983) definition of research that "contributes to building knowledge and theory from which practical action can be developed" (p. 1). These research methodologies aided in better understanding the overall improvement needs of management and setting the stage for developing effectiveness characteristics of managers which comprises the critical 1st phase of this research.

3. Effectiveness-Based Research: Seven Studies
What follows is a summary of seven studies and the research methodologies used by each in identifying characteristics of successful top managers. These seven are shown as examples of the key research-based studies upon which the successful characteristics used in this research are based. These seven are identified in Exhibit 1 on the pages following. In Chapter III of this thesis the numerous authors (including these seven), their specific impact on the development of effectiveness characteristics, as well as the characteristics themselves, will be covered.

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NOTE: Many of the expressions found in the more lengthy "Exhibits" or "Attachments" of this research may reflect intended brevity.
<table>
<thead>
<tr>
<th>Subject-Title</th>
<th>Author</th>
<th>Method</th>
</tr>
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<tbody>
<tr>
<td>&quot;The Art of High-Technology Mgmt.&quot;</td>
<td>Modesto A. Maidique</td>
<td>Over past 2 decades interviewed formally and informally over 250</td>
</tr>
<tr>
<td>Sloan Mgt Review Winter 1984</td>
<td>Robert H. Hayes</td>
<td>executives including 30 CEO's from a wide cross section of high-tech</td>
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<td></td>
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<td>industries — biotechnology, semiconductors, computers, pharmaceuticals,</td>
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<td></td>
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<td>and aerospace. About 100 execs were interviewed in 1983 as part of a</td>
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<tr>
<td></td>
<td></td>
<td>large-scale study of product innovation on the electronics industry. Question: What are the strategies, policies, practices and decisions that result in successful mgt of high technology enterprises?</td>
</tr>
<tr>
<td>&quot;What Effective GM's Really Do&quot;</td>
<td>John Kotter</td>
<td>Study conducted between 1976-81 focused on group of 15 successful</td>
</tr>
<tr>
<td>HBR Nov-Dec 82</td>
<td></td>
<td>general managers in 9 corporations located in cities across the U.S.</td>
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<tr>
<td></td>
<td></td>
<td>Were involved in broad range of industries. pg. 158. 3 visits to GM's</td>
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<tr>
<td></td>
<td></td>
<td>over 6 to 12 months. Each GM interviewed 5 hours each time, observed</td>
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<td>daily routine, interviewed dozen or so key people working w/ exec.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Questionnaires filled and documents studied. Hard &amp; soft indexes for measuring performance used.</td>
</tr>
<tr>
<td>In Search_of Excellence: Lessons from America's Best Run Companies 1982</td>
<td>Thomas J. Peters, Robert H.</td>
<td>Covers research conducted in McKinsey &amp; Co. over 4 yr period, 1977-80,</td>
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<td></td>
<td>Waterman Jr.</td>
<td>on problems of mgmt effectiveness. In 1978-80 sample of 62 companies</td>
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<td></td>
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<td>chosen. Intensive interviews with half. All followed in literature for</td>
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<td>25 yrs prior to the study. 43 met final success criteria. 21 of these</td>
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<td></td>
<td>studied in-depth. Companies first chosen based on being &quot;considered to</td>
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<td></td>
<td></td>
<td>be innovative and excellent by an informed group of observers on the</td>
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<td>business scene.</td>
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Represented various industry segments. 2nd, to qualify as top performer company had to be in top half financially on 4 out of 6 measures. 3rd, experts rated companies' innovativeness. The 7-S framework was developed and used in reaching conclusions. 22 attributes of excellence were identified. Reduced to 8 to minimize complexity.

The Act of
Japanese Mgmt:
Applications for
American
Executives 1981
Richard T. Pascale
Anthony G. Athos

Outcome of substantial investment by McKinsey and Company in applied research over a 3 year period 1977-80. Included review of entire literature and current thought about org. effectiveness. Extensive collaboration among management colleagues and extensive interviews with numerous executives plus uses of secondary sources covering execs.

"The Managers Job:
Folklore and Fact"
HBR Jul-Aug 75
Henry Mintzberg

Five American CEO's of middle to largesized organizations: A consulting firm, tech. co., hospital, consumer goods co., and school system. Used structured observation during one intensive week of observation for each exec. Recorded every piece of mail and every verbal contact. Designed to capture data on work characteristics and job content. Analyzed 890 pieces of incoming mail & outgoing and 368 verbal contacts.

"What Makes a
Company Successful?"
Business Horizons
June 1971
Henry O. Golightly

Study covered 7 of America's leading corps, including American Airlines. Do the corporate high achievers have any "secrets" that other companies can benefit from knowing? Yes, companies covered different industries. Linking element was their overall good performance. All were classified in rapidly changing industries. Major focus was the Chief Executive of each. Key of each company: effective use of full human potential, their communication of philo. & goals + appropriate rewards.
Conclusions have been reached after working closely with many managers in many different companies. Research was not the purpose of our relationship. We were collaborating to solve some real problem. Personal sample of general managers has grown to include several dozen with different management styles and varying degrees of success. The basic ideas have been validated in several ways. A procession of books and articles published since 1967 supports the findings on the skills of the GM and the working environment in which he or she can thrive. Hundreds of students in advanced management programs have put the findings to good test.
C. RESEARCH-BASED MODELS OF MANAGEMENT BEHAVIOR: 1955 to 1884

1. Management Research: The Dilemmas

In 1966, Campbell et al of the University of Minnesota and Yale University "interviewed key personnel in industry, government, and university settings in order to document and describe current practices and research investigations directed toward identifying, developing, and motivating managers" (Campbell et al 1970 p. xi). This was designed as a "comprehensive search for available knowledge concerning the identification and enhancement of managerial effectiveness" (p.xi). As previously cited in this thesis (I.B.2.) they "found the area of managerial effectiveness to be far more complicated that we had originally realized or imagined" (p. xii).

Yet Campbell's landmark book, MANAGERIAL BEHAVIOR, PERFORMANCE, AND EFFECTIVENESS (1970), was instrumental in identifying many of the discontinuities and problems of effectiveness in the management literature. They stated:

"Quite frankly, most research has been rather simpleminded. Criteria of managerial 'success' have consisted chiefly of global ratings, promotion rates, or corrected salary indexes; little attention has been given to differences in the behavioral demands of different managerial jobs, and the significance of such differences has not been related to different patterns of effectiveness" (p. 473).

Nearly a decade later, Brodie and Bennett's (eds) "Perspectives
Ph.D Thesis on Managerial Effectiveness" (1979) based on a symposium initiated by the British Manpower Services Commission sought to answer the questions, "How effective are managers? How effective can they become?" They stated that "these are two basic questions which go to the heart of some of the most serious challenges which face contemporary societies, not least the United Kingdom" (Introduction). Further cited was the need for more research into this problematic area of effectiveness.

"There is an urgent need for improvements in managerial performance in the UK, but the subject of managerial effectiveness is currently a maelstrom of definitions and concepts. There is a lack of simple, applicable methods of monitoring management effectiveness so that appropriate methods of management development can be identified unequivocally. More knowledge is needed concerning the determinants of managerial effectiveness and the MSC considers that more research is required in this field" (p. 8).

They further identify the critical need for practical application of results to the workplace.

"It is not a matter of research for its own sake, but research which is capable of practical use within a finite span. The jargon created by experts for discussion between themselves has its place, but the ideas must also be converted into plain language for dissemination to practitioners in the form of useful and practical concepts and tools" (p. 9).

Both Campbell et al (1970) and Brodie and Bennett (1979) provide a meaningful review of the literature on management effectiveness and also their own "models" of the management process. The Campbell model identifies the interactive
determinants of managerial behavior -- Individual characteristics, Job behavior, and Organizational results -- which served as a framework in guiding their research of the literature on management effectiveness (p. 11). The Brodie and Bennett model "combines the variables and relationships which systems and contingency thinking call for -- and goes beyond the variables put forward by others" (p. 17). Their framework for viewing management effectiveness includes both psychological and organizational concepts such as the manager's personality and behavior, job objectives and task targets, as well as environmental and situational variables.

The work of McCa11 Jr. et al, STUDIES OF MANAGERIAL WORK: RESULTS AND METHODS (1978) from the Center for Creative Leadership, and Glover's review of the literature found in MANAGERIAL WORK: THE SOCIAL SCIENTIFIC EVIDENCE AND ITS CHARACTER (1979) identify further research or methods used in looking at, assessing, and understanding the nature and the complexity of management work.

2. The Management Models
A critical consideration throughout this thesis has been our attempt to focus on research-based material from the literature in our discussions of what managers do. What follows in this section is a review of specific research-based models or frameworks of management practices and behavior. Thirteen
models are presented. Identified in Exhibit 2, they cover a 30-year period -- 1955 to 1984. They have been selected based on their "action-orientation," providing a possible practical framework from which to view and meaningfully group the effectiveness-based characteristics derived through this research. This work is critical, then, to this research.

Exhibit 2 first provides on 2 pages a listing (an introduction) of the 13 models. The published source is also identified as is the focus of each research model. Following this are the descriptions, covering 13 pages, of each author's specific model. In essence, the models identify those categories of work and their definition which comprise (or should comprise) the job of a manager. Definitions or descriptive terms for each model were developed from each author's writings. Preceding each of the 13 models is a brief discussion of the author(s) and the respective model.
### Exhibit 2. RESEARCH-BASED MODELS OF MANAGEMENT BEHAVIOR: 1955–1984

<table>
<thead>
<tr>
<th>Author/Researcher</th>
<th>Published Sources</th>
<th>Research Focus</th>
</tr>
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<tbody>
<tr>
<td>1955 and 1974</td>
<td>An HBR Classic</td>
<td></td>
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<tr>
<td>1967 and 1984</td>
<td>An HBR classic</td>
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<tr>
<td>1969</td>
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<td>1975</td>
<td></td>
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<tr>
<td>1976</td>
<td></td>
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<tr>
<td>Leonard Sayles</td>
<td>Leadership: What Effective Managers Really Do... and How They Do It,</td>
<td>Management Personality &amp; Effectiveness</td>
</tr>
<tr>
<td>1979</td>
<td>McGraw Hill Company, 1979</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>A National Best-Selling Book</td>
<td></td>
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</tbody>
</table>
Edward Roberts and Alan Fusfeld  
1981  
"Staffing Innovative Technology-Based Organization,"  
Sloan Management Review,  
Spring 1981

John Kotter  
1982  
"What Effective General Managers Really Do,"  
Harvard Business Review,  
November-December 1982

Thomas Peters and Robert Waterman, Jr.  
1982  
In Search of Excellence: Lessons from America's Best-Run Companies,  
Warner Books,  
1982  
A National Best-Selling Book

Rosemary Stewart  
1982  
Choices for the Manager: A Guide to Managerial Work and Behavior,  
McGraw Hill Book Company,  
1982  
A Follow-up to Her 1976 Award-Winning Book

Modesto Maidique and Robert Hayes  
1984  
"The Art of High-Technology Management,"  
Sloan Management Review  
Winter 1984

Hi-Technology Management Effectiveness

Management Effectiveness

Organization & Management Effectiveness

Management Job Content

Hi-Technology Organization & Management Effectiveness
The goal of Robert Katz was to identify what an executive can and should do not what he is. His approach was one of the first that moved away from the traditional trait theory of identifying an ideal executive to one answering the question: "What observable skills does an effective executive demonstrate?" (p. 90).

Katz identified three basic skills that he believed are needed by every successful manager, in varying degrees, according to their level of management. They are:

- Conceptual Skills
- Human Skills
- Technical Skills

He developed his skills-based model as an "outgrowth of firsthand observations of executives at work coupled with study of current field research in administration" (p. 91).

At the top level, "conceptual skill becomes the most important ability of all" (p. 96) while "technical skill may be almost nonexistent" (p. 94). "Human skill, the ability to work with others, is essential to effective administration at all
levels" (p. 95). He even suggested that his "three-skill concept suggests immediate possibilities for creating management teams of individuals with complimentary skills. -- make up an executive committee -- the skills of each member making up for deficiencies of the others" (p. 97).

Katz admitted that these skills are so interrelated that in practice "it is difficult to determine where one ends and another begins" (p. 94). But this should not deter, he felt, the value of looking at them separately.

This lack of clear-cut simplicity among various and sundry prospective variables alluding to a manager's behavior has been one critical underlying feature surrounding a manager's job -- particularly top managers. Katz cited this in 1974 in his commentary 20 years after his 1955 article. He stated:

"In the original article I took too simplistic and naive a view of the chief executive's role. My extensive work with company presidents and my own personal experience as a chief executive have given me much more respect for the difficulties and complexities of that role. I now know that every important executive action must strike a balance among so many conflicting values, objectives, and criteria that it will always be suboptimal from any single viewpoint" (p. 102).

The Katz model for viewing and understanding managerial work has stood the test of time. The soundness of his approach is testified by its reprint in the HARVARD BUSINESS REVIEW in 1974, as stated above, 20 years after his article first
Ph.D Thesis

appeared. In the first six months prior to its reprint in 1974 nearly 4,000 copies of the original article were requested.

His model greatly influenced the framework used for categorizing the characteristics identified through this research.
CONCEPTUAL SKILL

Seeing the enterprise as a whole and the total situation relevant to it; visualizing the relationship of one's business to the industry, community and the political, social, and economic forces of the nation as a whole; establishing and carrying out policy decisions, coordinating and integrating all the activities and interests of the organization toward a common objective. Involves always thinking in terms of:

Relative emphasis and priorities among conflicting objectives and criteria

Relative tendencies and probabilities rather than certainties

Rough correlations and patterns among elements rather than clear-cut cause-and-effect relationships.

HUMAN SKILL

Working with and through people as part of one's own group and in intergroup relationships; understanding and motivating individuals and groups, being sensitive to and aware of their needs, and aware of one's own attitudes, assumptions and beliefs and its impact on others. Also includes:

Communicating one's own ideas and attitudes to others

Understanding what others are trying to say

Encouraging participation and self-expression

Recognizing perceptions of supervisors, equals, and subordinates

Sensitivity to possible reactions of various courses of action

Building cooperative effort and teamwork

Re-evaluating and learning from experiences

TECHNICAL SKILL

Understanding of and proficiency in a specific kind of activity, particularly one involving methods, processes, procedures, equipment, techniques or other things. Involves specialized knowledge, facility in the use of the tools and techniques of the discipline, and is indispensable to an efficient operation.
This is another model of management behavior which has stood the test of time. Originally published nearly 20 years ago, requests for copies of this article continue to come in at an impressive rate requiring a reprint of the article in 1984.

When Wrapp first published what he called "common characteristics of successful executives" in 1967 these "precepts of good management were considered heretical. The author's successful general manager is an opportunist and a muddler who does not spell out detailed company objectives or master plans, one who seldom makes forthright statements of policy, one who often gets personally involved in operating matters" (p. 8).

His "skills or talents" of a successful executive are as follows:

- Keeping well informed
- Focusing time and energy
- Playing the power game
- Appearing imprecise
- Muddling with a purpose
Wrapp reached his conclusions on successful executives "after working closely with many managers in different companies. In truth, the managers were not preselected with research in mind. -- We were collaborating to solve some real problem" (p. 10).

In his retrospective commentary published with the 1984 reprint of his article, Wrapp stated:

"I remember that I gave an early draft to three friends for their comments. One, a widely read, successful CEO, called me the same day to say, 'This is the first thing I have read that accurately describes what I do.' The other two, respected academicians, were able to manage at best a pair of stifled yawns. This was to be the pattern of responses to the article over the years -- widespread support from experienced general managers and a high level of skepticism from staff managers and teachers of management" (p. 20).

Wrapp further stated that "No matter how rich its other resources such as technical know-how, uniqueness of product, market monopoly, ample finances, or luck, an organization will not excel unless it is led by what are becoming increasingly rare individuals. -- Much has been learned about general management during the past two decades, but we are still novices" (pp. 20-21).
Exhibit 2-2
Wrapp
1967 and 1984

KEEPING WELL-INFORMED

Develops a network of info sources, cultivates them, keeps pipeline of info open (GM's early warning system)

FOCUSBING TIME & ENERGY

Concentrates unlimited number of significant issues having greatest long-term impact on company and contribute to total corporate strategy.

PLAYING THE POWER GAME

Sensitive to the power structure in the org; has sense of timing; uses cautious pressure and trial balloons.

APPEARING IMPRECISE

Give org. a sense of direction with open-ended objectives, avoid policy straightjackets, be open to continued changes.

MUDDLING WITH A PURPOSE

Spot opportunities and relationships in stream of operating problems and decisions. Discover new combinations; Conceptualizor, optimist, persistent, and creative. Change a way of life.

Mackenzie developed a detailed diagram showing different aspects of the management process. At the center of his diagram are three basic components with which every manager must work. They are:

- Ideas (Conceptual thinking)
- People (Leadership)
- Things (Administration)

He developed these elements after careful study and analysis of the works of many leading writers and teachers -- from Peter Drucker to Harold Koontz. They comprise the basic elements and activities of the executive's job.

While each of the three components are further broken down into specific functions and activities, he states:

"Three functions -- problem analysis, decision making, and communications -- are important at all times and in all aspects of the manager's job; therefore they are shown to permeate the work process. However, other functions are likely to occur in predictable sequence -- planning, organizing, staffing (etc.) A manager's interest in any one of them depends on a variety of factors -- as he concentrates, now on one function, then on another --" (p. 86).

Mackenzie, as did Katz, saw that managers rarely possess all
the qualities needed to be outstanding. The effective manager "if he recognizes this (his) deficiency, will staff is organization to compensate for it" (p. 80).

Mackenzie saw that for "many businessmen who are trying to keep up with management concepts, the literature must sometimes seem more confusing than enlightening. In addition to reflecting differences of opinion and semantics, it generally comes to the reader in fragments. (His aim) is not to give the executive new information, but to help him put the pieces together" (p. 80).
IDEAS (Conceptual Thinking)

Formulating notions, planning strategically, and predetermining a course of action through forecasting, setting objectives to determine desired end results, developing strategies to decide how and when to achieve goals, establishing priorities, sequencing and timing of programs, budgeting to allocate resources, and developing policies and procedures.

PEOPLE (Leadership)

Influencing people to accomplish desired goals to include choosing competent people, bringing about purposeful action toward desired objectives, and ensure progress toward objectives according to plan. Involves the functions of:

Staffing -- select, orient, train and develop personnel

Directing -- delegate, motivate, coordinate, and manage differences and change to encourage independent thought and creativity

Controlling -- establish reporting systems, develop performance standards, measure results, take corrective action, and reward through praise, remuneration and discipline.

THINGS (Administration)

Managing the details of executive affairs, organizing, the staff, and arranging and relating work for effective accomplishment of objectives through establishing organization structure, delineating relationships, creating position descriptions and establishing position qualifications.
In the ten years since Mintzberg published the above article (as well as his book, THE NATURE OF MANAGERIAL WORK, 1973) his ideas, generously quoted, have helped generate more research into the executive's job. (For example, see McCall & Segrist's, "In Pursuit of the Manager's Job: Building on Mintzberg," Center for Creative Leadership, March 1980.)

Mintzberg believes that if you ask a manager what he does he will probably say that he plans, organizes, coordinates, and controls. But if you watch what he does he actually does something different.

"The fact is that these four words, which have dominated management vocabulary since the French industrialist Henri Fayol first introduced them in 1916, tell us little about what managers actually do. -- My intention in this article is simple: to break away from Fayol's words and introduce him to a more supportable, and what I believe to be a more useful description of managerial work" (pp. 49-50).

Mintzberg went on to describe the manager's job in terms of various roles or organized sets of behaviors. He devised ten such roles grouped into three role categories.
He developed this concept of managerial work based on his own study of five different CEO's plus a review and synthesis principally of seven other major studies on various management levels including Sune Carlson (1951), Robert Guest (1956), Richard Neustadt (1960), Leonard Sayles (1964), and Rosemary Stewart (1967). While cutting across various levels of management and different types of organizations from governmental to industrial and school systems, he provides insight into the complexity of the job and what he believes it takes to be effective. He says, "the manager's effectiveness is significantly influenced by his insight into his own work. His performance depends on how well he understands and responds to the pressures and dilemmas of the job" (p. 60).
He feels that "Somehow in the rush to automate production, to use management science -- to apply the skills of the behavioral scientist -- the manager -- has been forgotten" (p. 50). "My description of managerial work," he states, "suggests a number of important management skills -- (but) above all, the manager needs to be introspective about his work so he can continue to learn on the job" (p. 61).
ENTREPRENEUR

Seeks to improve his unit to adapt it to changing conditions in environment. Like juggler, keeps many projects going.

MONITOR (for new ideas)

Perceptually scans environment for info. Interrogates liaison contacts & subordinates. Obtains info. from network - gossip heresy, etc.

LIAISON

Contacts outside his vertical chain of command to build up over informal, external info. system.

LEADER

Responsible for hiring & training own staff. Motivate. Org. vs. Individual needs. How formal authority is used.

SPOKESMAN

Sends info to people outside his unit. Speeches, lobbying boss, directors, shareholders, govt. etc.

RESOURCE ALLOCATOR

Deciding who gets what in his org. unit. Designing org. structure -- pattern of formal relations. Complex choices.

FIGUREHEAD

Duties of a ceremonial nature.

DISSEMINATOR

Share & distribute info to subordinates -- privileged info he has.

DISTURBANCE HANDLER

Involuntarily responding to high-pressure disturbances which cannot be ignored.

NEGOTIATOR

Works out a contract, a new strike issue, a grievance problem Authority to commit resources in "real time". Only he has nerve center info.
One basic question that Burgoyne and Stuart are concerned with in this article is "What are the kinds of skills and other qualities in managers that contribute to managerial success and performance in various forms" (p. 19). In their model of managerial skills and qualities, which they called "Hypothetical qualities of an effective manager," they present ten "cells" divided into three hierarchal levels (pp. 21-23). They are:

1st HIERARCHAL LEVEL
Command of basic facts
Professional knowledge

2nd HIERARCHAL LEVEL
Continuing sensitivity to events
Analytical, problem-solving, judgement skills
Social abilities
Emotional resilience
Proactivity

3rd HIERARCHAL LEVEL
Creativity
Mental agility
Balanced learning habits and skills
"This model," they state, "is a first attempt to link together a classification of managerial skills and qualities into a model. Getting as broad as possible a coverage of possible skills and qualities has taken precedence over tight operational definitions and establishing clearly that the categories are mutually exclusive" (p. 23).

Burgoyne and Stuart (who strongly favor "particularism" or "situationalism) went further to test their model on a group of 28 managers from one organization. From this, correlations were made against the ten cells using success/effectiveness criteria principally relating to the findings of Campbell et al (1970). From the study they were able to initially conclude that "the possession of qualities and skills in each of the areas correlated with one or more of the success/effectiveness criteria at a sufficiently high level to suggest that a model has some general validity" (p. 25).

For the purposes of the research discussed in this thesis, the work of Burgoyne and Stuart, though principally theoretical, has primary importance through the identification of a work category labeled "Emotional Resilience." This is a category picked up by another researcher (Stewart) and finally into this research which will be discussed further on.
Exhibit 2-5
Burgoyne and Stuart
1976

COMMAND OF BASIC FACTS

Specific knowledge of the organization and the environment needed to execute plans in the pursuit of purposes.

PROFESSIONAL KNOWLEDGE

Specific knowledge of a technical nature essential to managerial decisions. Includes use of the knowledge.

CONTINUING SENSITIVITY TO EVENTS

Perceptiveness and data gathering; getting "hard data" of facts and figures, "soft data" of people's feelings.

ANALYTICAL, PROBLEM-SOLVING, JUDGEMENT SKILLS

Analytical decision-making; alternatives, planned actions to achieve objectives and calculating R.O.I.

SOCIAL ABILITIES

Working with and through people, the group, and organization processes made up of people. Includes leadership, influencing, communicating, and using authority.

EMOTIONAL RESILIENCE

Maintaining sensitivity to events -- threatening data and situations -- and the ability to work effectively under pressure -- stressful situations.

PROACTIVITY

Inclination to respond purposefully to events; positively seeking to achieve.

CREATIVITY

Imagination, ability to come up with unique new approaches to situations, or useful new approaches from elsewhere.

MENTAL ABILITY

Thinking skills; general mental capacity for understanding complex situations, grasp problem quickly, and switch from one situation and problem to another.

BALANCED LEARNING HABIT AND SKILLS

Being dependent or independent, abstract or concrete, using various learning processes, and having a broad understanding of the skills and qualities of management.
The work of Leonard Sayles is based on years of accumulated field research; first-hand accounts of what managers do. His research has included organizations such as NASA and IBM as well as smaller firms and agencies. His purpose "is to try to summarize those formal and informal studies as they relate to managerial behavior and integrate this with other published work on leadership" (p. xiv).

"Managers become leaders," Sayles feels, "when they can master the behavioral skills necessary to fulfill the demanding requirements of most managerial positions. -- As a 'contingency' factor in the system, managers must be prepared for an ever-changing array of demands and disappointments. -- Only the managers who know how to shape behavior adroitly to fit these organizational demands can flourish and be effective" (p. 209).

Personality, he feels, is critical to a manager's success. But personality tests are poor predictors of success on-the-job. "What aspects of personality, then, are likely to bear on job success -- these approaches," he stated, "might be fruitful in predicting who will be successful" (p. 211):
Cognitive development
Orientation toward time
Interactional capabilities
Problem solving abilities

A successful manager, for example, is one who views the organization as "a complex system of dynamic and changing tension -- an open system" (p. 219) (Like the organic system of Burns and Stalker.) It is this the "creatively integrative" type whose style is typified by "changing parameters of the problem; working interfaces to modify organizational pressures" which to Sayles "represents the highest level of cognitive development" (p. 219).

The other aspects of his personality-oriented model are shown on the page following in Exhibit 2-6.
Perceiving and coping with ambiguity and contradictions by conceptualizing the organization as a complex system of dynamic and changing tension -- an open system.

**TIME_ORIENTATION**

Coping with past, present, and future states through a mix of time orientations composed of the following types:

**Thinking Types** - logical and consistent, think sequentially in ordering of future events.

**Feeling Types** - negotiating, warm and responsive, look backward to values, traditions and critical experiences.

**Intuitive Types** - synthesizers, sources of new strategies, capricious, able to see where others can not.

**Sensitive Types** - respond to nuances of the moment, quick to sense cues, concentrate their abilities on the present.

**INTERACTIONAL_CAPABILITIES**

Raw energy and elasticity to keep acting -- talking, organizing, or cajoling. Includes: Initiative, Quickness, Perseverance, Flexibility, Dominance, Listening ability, and Minimal stress.

**PROBLEM_SOLVING_ABILITIES**

Making things happen by doing and decision-making, the end result of a lengthy problem solving, organizational process involving:

**Problem or Opportunity Identification** -- the ability to be sensitive to vast quantities of information.

**Gaining Information** -- meeting with a wide variety of people to accumulate ideas, data and insights.

**Analysis** -- Unsystematic, less orthodox but more creative in digesting and pondering facts and clues.

**Decision Making and Implementation** -- generate agreement and excitement on a solution and its implementation.
The model by Levinson is the second of the 13 models presented in this section that is personality-based. Irrespective of this, Levinson leans toward a situational approach to management effectiveness. The 20 dimensions of behavior he describes are not intended to identify an ideal leader. "Some aspects of behavior," he states, "will be more significant for certain functions than for others --. It is therefore more useful to think of these dimensions not as individual measures or sums, but as configuration patterns or profiles. The appropriate question is, "What profile of dimensions best fits the profile of behavior required for the job description that I have drawn up?" (p. 119).

Levinson's 20 dimensions are divided into 3 categories:

Thinking
Feelings or relationship
Outward behavior characteristics

The dimensions are most useful, he feels, when used as a scale of characteristics in evaluating executive behavior. He further equates an executive to a diamond.

"A good executive is multifaceted like a diamond. The larger the number of facets, the more brilliantly it shines. -- (but) few diamonds are without flaws" (p. 119).
Exhibit 2-7
Levinson
1980

THINKING

Capacity to abstract - to conceptualize, to organize, and to integrate different data into a coherent frame of reference.
Tolerance for ambiguity - can stand confusion until things become clear.
Intelligence - has the capacity not only to abstract, but also to be practical.
Judgment - knows when to act.

FEELINGS AND RELATIONSHIPS

Authority - has the feeling that he or she belongs in boss's role.
Activity - takes a vigorous orientation to problems and needs of the organization.
Achievement - oriented toward organization's success rather than personal aggrandizement.
Sensitivity - able to perceive subtleties of others' feelings.
Involvement - sees oneself as a participating member of an organization.
Maturity - has good relationships with authority figures.
Interdependence - accepts appropriate dependency needs of others as well as of him or herself.
Articulateness - makes a good impression.
Stamina - has physical as well as mental energy.
Adaptability - manages stress well.
Sense of humor - doesn't take self too seriously.

OUTWARD BEHAVIOR CHARACTERISTICS

Vision - is clear about progression of his or her own life and career, as well as where the organization should go.
Perseverance - able to stick to a task and see it through regardless of the difficulties encountered.
Personal organization - has good sense of time.
Integrity - has a well-established value system which has been tested in various ways in the past.
Social responsibility - appreciates the need to assume leadership with respect to that responsibility.
This writing of Pascale and Athos was so popular that it became a national bestseller. The "Acknowledgements" to this book clearly show why the breadth and depth of their grass-roots research is of any consequence.

The research included extensive investment by McKinsey and Company in applied research over a 3-year period, 1977 to 1980. This included a review of the entire literature on organizational effectiveness plus extensive corporate interviews with American and Japanese executives and collaboration with management colleagues. One of the authors even was invited and lived with a Japanese businessman’s family in their home with countless hours spent discussing Japanese philosophy as it related to organizational life.

The model developed through this extensive research provided "a conceptual scheme so that their (the variables) interrelationships might be emphasized, and so that the 'fit' among the variables might be better understood" (p. 11). The model represents a simple but powerful insight into what makes enterprise succeed. -- Our practical experience with it confirms its validity" (p. 16).
What evolved was a 7-S framework of management effectiveness. This included:

- Strategy
- Structure
- Systems
- Staff
- Skills
- Style
- Superordinate Goals

Western companies tend to favor the first three S’s considered the “hard” elements while Japanese firms tend to favor the bottom four “soft” S’s. “The tremendous success of many Japanese companies comes through meticulous attention to the soft S’s which act as a lubricant in the organization machine to keep the hard S’s from grinding one another away” (Inside cover page).

The essence of the message put forth by Pascale and Athos is probably best summarized as follows:

"The Japanese image of a good decision maker is the man who can resist the drive for closure until he really sees what’s required. That is the ideal for the Japanese. The American ideal has more fast action. He is the type who is jumping into the sports car, climbing off an airplane, or marching into meetings. It’s an energetic, kinetic image. The Japanese image is contemplative — in a sense that it permits deeper perception. — Promising (American) managers come across 'full-of-go,' optimistic,
'never-say-no' types. In fact, a good way not to be promoted is to be seen as having sat in one's office and really thought deeply about things" (pp. 179-180).

Pascale and Athos believed that their goal was not to advance another new "model," but "to help executives develop a more effective way of perceiving and cutting through the complexity of their organizations" (p. 327).

Other collaborators in developing the 7-S model were Peters and Waterman. They were able to operationalize the model by identifying executive and organizational characteristics of effectiveness as opposed to the definitional elements of Pascale and Athos. Their framework will be discussed further in this section.
Exhibit 2-9
Pascale and Athos
1981

STRATEGY
Plan or course of action; allocation of scarce resources to reach identified goals.

STRUCTURE
Characterization of the org. chart -- functional, decentralized, etc.

SYSTEMS
Proceduralized reports and routinized processes.

STAFF
Description of important personnel categories within the firm.

SKILLS
Distinctive capabilities of key personnel.

STYLE
Characterization of how key managers behave in achieving org. goals. Cultural style of org.

SUPERORDINATE GOALS
(SHARED VALUES)
Significant meanings or guiding concepts that an org. imbues in its members.

Roberts and Fusfeld examine the functions that it takes to be effective in an innovative, technology-based organization. They identify five that they believe are critical:

- Idea Generating
- Entrepreneuring
- Project Leading
- Gatekeeping
- Sponsoring/Coaching

"These five critical functions," they state, "represent the various roles that must be carried out for successful innovation to occur" (p. 22). Also, no one person can carry out all the roles. A team effort (such as previously suggested by Katz and Mackenzie) is therefore important, and they state necessary, to this process.

The research upon which these roles were based was derived from surveys of numerous North American R&D and engineering organizations. From these several thousand individual profiles demonstrating patterns in the characteristics of the people who perform functions in the innovation process were developed. While "some people have sufficient breadth to perform well in
multiple roles" the authors emphasize that "In any unit or organization, people with different characteristics can work to compliment each other" (p. 24).

While focusing narrowly on the innovation process in technology-based industries (in comparison to the previous models broader in scope) Roberts and Fusfeld provide an interesting framework more consistent with the technology-based parameters of this research. Hence, the need to examine this and the entire 13 models presented in this section.
IDEA GENERATING

Analyzing/synthesizing info. about markets, technologies etc. from which is generated idea for new product/service.

ENTREPRENEURING

Recognizing, proposing, pushing, & demonstrating a new technical idea approach or procedure for formal mgmt. approval.

PROJECT LEADING

Planning & coordinating the diverse sets of activities and people involved in moving an idea into practice.

GATEKEEPING

Collecting & channeling info. about important changes in internal & external environments -- market, technology, etc.

SPONSORING/COACHING

Behind the scenes support, protection, advocacy and sometimes bootlegging of funds. Guiding & developing less experienced personnel.
Effective general managers "do not function in a crisply defined environment or direct through formally delineated organizational channels, or systematically set and follow formal plans -- in other words, they don't fit the stereotype" (p. 158). "It is hard to fit behavior into categories like 'planning, 'organizing,' 'controlling,' 'directing,' 'staffing,' and so on" (p. 159).

These perceptions fit the pattern evolving from continuous, organizational-based research efforts into the behavior of top managers. Kotter's research is based on a study of 15 successful general managers from 9 corporations representing a broad range of industries. The study was conducted between 1976 and 1981.

"To understand why effective GM's behave as they do," Kotter feels, "it is essential first to recognize the types of challenges and dilemmas found in most of their jobs the two most fundamental of which are:

Figuring out what to do despite uncertainty, great diversity, and an enormous amount of potentially relevant information.

Getting things done through a large and diverse
set of people despite having little direct control over most of them" (p. 160).

From this research Kotter has developed a tri-skill system used by effective executives in performing their work. It is:

Agenda setting
Network building
Agenda execution

Within these are ten specific behaviors such as 'goal development,' 'information gathering,' 'influencing,' etc. These behaviors which effective executives execute with great skill, are basically directed towards dealing with others. As he states it, "the whole approach to the job involves interacting with people" (p. 164).

Some of the important findings and implications from his research and the model developed include:

1. Contrary to the booming executive search business, corporations should grow their own executives.

2. Management training courses, both in universities and in corporations, probably overemphasize formal tools, unambiguous problems, and situations that deal simplistically with human relationships. These programs usually rely too much on theory.

3. Formal planning systems within which many GM's must operate probably hinder effective performance. A good planning system should help a GM create an intelligent agenda and a strong network that can implement it.

Kotter believes that his tri-skill model provides a more realistic framework for viewing the effective executive's job.
Exhibit 2-10
Kotter
1982

AGENDASETTING

GoalDevelopment
Develops loosely connected goals and plans (strategic) that address long, medium & short-term responsibilities -- covering a wide range of issues.

InformationGathering
Obtain info. continuously, formally and informally, aggressively. Ask questions skillfully.

DecisionMaking
Make agenda setting decisions both consciously (analytically) and unconsciously (intuitively).

MultipleAccomplishment
Focus on programs and projects accomplishing multiple objectives and provide consistency w/ plans.

NETWORKBLDG

RelationsDevelopment
Develop cooperative relations with all people he is dependent on.

ObligationSeeking
Make others feel legitimately obliged to them/dependent.

ReputationBLdg
Nurture professional reputation in eyes of others.

OrganizationChanging
Restructure/change org. & people to develop network. Lobby, create environment to work for greater good.

AGENDAEXECUTIONS

Influencing
Influence people to get things done -- use wide range of tactics.

Negotiation
Use resources to negotiate -- all available resources.
The work of Peters and Waterman comprises a major part of the extensive effort by McKinsey and Company into corporate and management effectiveness conducted during the last half of the 1970’s. The study originally included a sample of 62 companies chosen for their excellence. All were followed in the literature for 25 years. The final number of companies was reduced to 21. These were studied in-depth. Their subsequent book became a national bestseller.

The model used by Peters and Waterman was the same 7-S framework that they and Pascale and Athos helped to develop through McKinsey and Company. "In retrospect, what our framework has really done," Peters and Waterman believe, "is to remind the world that 'soft is hard'. It has enabled us to say, in effect, "All that stuff you have been dismissing for so long as the intractable, irrational, intuitive, informal organization CAN be managed. -- Here are some of the tools for managing it" (p. 11).

Peters and Waterman felt that with the multi-variable 7-S framework they helped expand management’s "diagnostic tool kit
by quantum steps. -- But at the same time we were short on practical design ideas --" (p. 11). They therefore expanded the McKinsey study to include the concept of innovation with excellence. Using the 7-S model as a framework for their interviews there emerged eight attributes (reduced for simplicity from 22) which characterize most nearly the distinction of the excellent, innovative companies --" (p. 13). They are:

- **Bias for action**
- **Close to customers**
- **Autonomy and entrepreneurship**
- **Productivity thru people**
- **Hands on, Value driven**
- **Stick to the knitting**
- **Simple form, Lean staff**
- **Simultaneous loose-tight properties**

"If there is one striking feature of the excellent companies, it is," they feel, "this ability to manage ambiguity and paradox. What our rational economist friends tell us ought not to be possible the excellent companies do routinely" (p. xxii).
Exhibit 2-11
Peters and Waterman
1982

BIAS FOR ACTION

Preference for doing something. Analytical in decision making but not paralyzed by it. Test out ideas. Use host of practical devices.

CLOSE TO CUSTOMER

Learning his preferences and catering to them. Unparalleled quality, service and reliability. Things that work & last. Listening to customer.

AUTONOMY & ENTREPRENEURSHIP

Breaking the corp. into small companies and encouraging them to think independently and competitively.

PRODUCTIVITY THROUGH PEOPLE

Best efforts of employees essential; they will share in the rewards of the company's success. Respect for individual.

HANDS ON, VALUE DRIVEN

Keeping in touch with the firm's essential business; walk the floors; visit plants; assess them on company's philosophy.

STICK TO THE KNITTING

Remaining with the business the company knows best.

SIMPLE FORM LEAN STAFF

Few admin layers, few people at the upper levels.

SIMULTANEOUS LOOSE-TIGHT PROPERTIES

Dedication to the central values of the company; tolerance of employees who accept those values. Push autonomy to the workroom floor.
In her book above, Rosemary Stewart states:

"The aim of this book is the ambitious one of trying to change how the reader thinks about managerial work. -- (it) is the culmination of 15 years of research and teaching on managerial work and behaviour. -- My interest in the research came from a belief that we needed a better understanding of managerial work, both in its common characteristics and more especially, in its variety" (p. vii).

Stewart presents a framework for looking at and understanding managerial work and behavior. It is based on three categories:

- Demands
- Constraints
- Choices

This framework was developed and published earlier by Stewart (1976) and has subsequently been tested with managers in numerous training programmes and also used in field research.

Stewart’s original hope

"...was to develop a single typology to differentiate managerial jobs. -- but I now think that managerial jobs are too varied and consist of too many different aspects for that to be useful. Rather, one needs to identify different characteristics for different purposes as well as to improve one’s understanding of the similarities in managerial jobs" (pp. 79-80).
In coming to grips with a model that can achieve this differentiation, Stewart incorporated the work of Katz (1955) and Burgoyne and Stuart (1978). From this she came up with three broad groups, a tri-divisional model, for identifying the abilities, knowledge, and skills required in managerial jobs. They are:

- Analytical Abilities
- Social Skills
- Emotional Resilience

Each of the three divisions has a number of subdivisions which are identified in the model.

In a personal discussion with Stewart (1985), this researcher discussed the use of such a model as a framework for understanding and discussing executive characteristics evolving through this research. While stating, "There is no scientific basis for this grouping" she did identify in her book that "The studies on which this book and its predecessor were based contribute to understanding three of Burgoyne's categories two of which are the same as Katz's" (p. 81). These three groups, therefore, have sound historical relevance in management (Katz, Burgoyne and Stuart, and Stewart) and are rooted in substantial research. This model has particular relevance to this research and greatly influenced the framework chosen for grouping, measuring, and analyzing the work of executive managers.
ANALYTICAL ABILITIES (Choices)

Includes five subdivisions:

1. Strategic decisions and choices made for one's unit, the nature of its output.
2. Strategic decisions and choices made for one's own work.
3. Boundary management to identify and modify these external factors affecting the operation of one's unit.
4. Assessment of one's own strengths and weaknesses.
5. Assessment of the actual and potential contribution of others.

SOCIAL SKILLS (Contacts)

Includes relationships with others under the following five headings:

1. Supervision
2. Boss
3. Peers
4. External contacts
5. Group working in being part of one or more teams of people.

EMOTIONAL RESILIENCE (Stress Tolerance)

Includes the ability to tolerate certain potentially stressful aspects of the job as divided into:

1. Exposure of one's job where an individual must run the risk of being known to have performed badly or to have made mistakes.
2. Ambiguity in decision-taking, the need to select between uncertain alternatives.
3. Interpersonal constraints where actions are constrained by the need to work with, and consult, many different people.
In the nearly 20 years since a Frenchman, J. J. Servan-Schreiber, in his book, THE AMERICAN CHALLENGE (1967), expressed concern over the superiority of technology-based American firms, Maidique and Hayes believe "Today, the situation is perceived to have changed drastically. The concern now is that the gap is reversing: the onslaught of Japanese and/or European challenges is threatening America's technological leadership" (p. 17).

But as some other authors have urged, Maidique and Hayes believe that there is no need to look overseas for models of successfully managed companies. From their extensive studies of well-managed, high-tech American firms, "the authors identified those characteristics they believe make a company successful and grouped them into six themes" (p. 17-18).

Business focus
Adaptability
Organizational cohesion
Entrepreneurial culture
Sense of integrity
Hands-on top management

Their findings covered research conducted over the past two
decades with small and large high-technology firms involving over 250 executives, including 30 CEO's in a broad cross section of high-tech industries. About 100 of these executives took part in interviews held during 1983 as part of a product innovation study.

As they proceeded in their research, the authors were faced with a paradox:

"Some of the behavioral patterns that these (successful) companies displayed seemed to favor promoting disorder and informality, while others would have us conclude that it was consistency, continuity, integration, and order that were keys to success. -- Our originally static framework, therefore was gradually replaced by a dynamic framework within whose ebbs and flows lay secrets of success" (p. 18).
Exhibit 2-13
Maidique and Hayes
1984

**BUSINESS FOCUS**
Concentration on single product line or related products.

**ADAPTABILITY**
Willingness and the will to undertake major and rapid change; Sensitivity to market needs.

**ORGANIZATIONAL COHESION**
Tap energy & creativity of the whole org. Trust, respect and sense of commonality of purpose.

**ENTREPRENEURIAL CULTURE**
Small corporate divisions. Encourage risk-taking, tolerate failure; have outside project interests.

**SENSE OF INTEGRITY**
Honesty, fairness, openness; ethical; integrity comes first. Blend of strength & humility. Solid trust.

**HANDS-ON TOP MGMT**
Understand fundamentals of their technology and interact directly with their people about it. Ask lots of questions.
3. Effectiveness-Based Models: The Similarities

Of the previous 13 models descriptive of managerial work, several were specifically designed to identify the skills and practices of "effective" managers. Five have been identified for purposes of comparative analysis. They are:

1. H. Edward Wrapp 1967
2. Henry Mintzberg 1975
3. John P. Kotter 1982
5. Modesto A. Maidique and Robert H. Hayes 1984

Consistent with their effectiveness-base, each of the five models were skills-oriented and provided sufficient categories of behavior (5 to 10) to make a comparative analysis possible. These five were previously identified in Chapter II.B. as "key research-based studies upon which the successful characteristics used in this research are based." (For example, while comprising only 7% of the published sources used in identifying successful characteristics these five contributed 24% of the characteristics ultimately identified.)

Through analysis of each category in the models and the meanings ascribed to them by each author an analysis was made of the similarities and dissimilarities among them. An attempt was basically made to assess the congruencies existing among
the various categories of behavior. If congruencies or similarities were sufficient, a possible composite framework or model of effective managerial behavior could be used in this research. Exhibit 3 following shows the results of this analysis.

The descriptions used by the various researchers in attempting to define or describe their categories was, unfortunately, rather consistent with the confusion as well as the complexity peculiar to the field. Differences in terminology added to the confusion. Irrespective of this there were areas of similarity sufficient to identify them as categories in which the 5 models appear to agree. These categories plus those in which there appears to be partial agreement are as follows:

CATEGORIES OF AGREEMENT

Information (Well-Informed)
Network (Contacts/Relations)
Adaptable (Flexible)
Influence (Obligate/Pressure)

CATEGORIES OF PARTIAL AGREEMENT

Competitiveness (Business Focus)
Values (Integrity/Cooperation)
Driving Will (Action/Drive)

While not used as a framework for the questionnaire development phase of this research, this composite 7-variable model ultimately was used in interviewing six successful general
Exhibit 3. RELATIVE CATEGORICAL AGREEMENT/SIMILARITY
OF FIVE EFFECTIVENESS-BASED MANAGEMENT MODELS*

<table>
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<tr>
<td><strong>4 CATEGORIES OF AGREEMENT</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
| Information  
| Network  
(Contacts/Relations) | Well Liaison | Relations Development | Hands-On, Value Driven | Hands-On Top Mgmt |
| Adaptable  
(Flexible) | Appearing Entrepreneur | Goal Development | Simultaneous Loose-tight properties | Adaptability |
| Influence  
(Obligate/Pressure) | Power Game Leader, Disseminator, Resource Allocator | Obligation Seeking, Influencing | Productivity Org. Cohesion |
| **8 CATEGORIES OF PARTIAL AGREEMENT** | | | | |
| Competitiveness  
(Business Focus) | Focusing Entrepreneur | Multiple Accomplishment | Close to Customer, Stick to Knitting | Business Focus |
| Values  
(Integrity/Cooperation) | X Leader | Relations Development | Productivity Org. Integrity Hands-On, Value Driven Org. Cohesion |
| Driving Will  
(Action/Drive) | X | X Organization Changing | Autonomy, Entrepreneurial Simple Form Lean Staff |

* Similar category titles do not imply similar definitions or meanings.
Ph.D Thesis

managers. This is described further on in the field research part of this thesis, Chapter V.

What follows is a review of 25 instruments of possible value as measurement devices for this research.
D. REVIEW OF TWENTY-FIVE INSTRUMENTS/DESCRIPTORS OF
MANAGEMENT, ORGANIZATION, AND LEADERSHIP PRACTICES: 1953 to
1982

1. The Instruments

Phase 2 of the 3-phased systematic research process of this
thesis involves the assessment and development of an instrument
to measure managerial work. Part of this phase includes a
search of the literature to identify and assess existing
instruments. This search led to the identification of 25 such
instruments. They extend over a 30-year period, 1953 to 1982.
The 25 are summarized in Exhibit 4.

As can be seen from the titles in the exhibit, the instruments
cover the general realm of management, organization, and
leadership. All were found pertinent, though, in whole or in
part to an identification of managerial practices and behavior.

Various sources were used in identifying the instruments. This
included literature references, training seminar material, as
well as advertisements for purchasing copies. Two invaluable
literature sources are cited below.

HANDBOOK OF RESEARCH DESIGN AND SOCIAL
MEASUREMENT, 4th ed., Delbert C. Miller,
<table>
<thead>
<tr>
<th>Instrument</th>
<th>Author(s)</th>
<th>Date</th>
<th>Items</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The Leadership Ability Evaluation</td>
<td>Russell Cassel, Edward Stancik</td>
<td>1982</td>
<td>50</td>
<td>4-Response Alternatives</td>
</tr>
<tr>
<td>2. Power Management Inventory</td>
<td>Jay Hall, James Hawker</td>
<td>1981</td>
<td>70</td>
<td>Forced Choice and 11-Point</td>
</tr>
<tr>
<td>3. Management Appraisal Survey</td>
<td>Jay Hall, et al</td>
<td>1980</td>
<td>60</td>
<td>10-Point</td>
</tr>
<tr>
<td>4. Mintzberg-Based Management Questionnaire</td>
<td>Center for Creative Leadership</td>
<td>1980</td>
<td>75 &amp; 46</td>
<td>7-Point</td>
</tr>
<tr>
<td>5. Management-Style Diagnosis Test</td>
<td>W.J. Reddin</td>
<td>1977</td>
<td>64</td>
<td>Forced Choice</td>
</tr>
<tr>
<td>6. Multi-Level Management Survey</td>
<td>Clark Wilson</td>
<td>1977</td>
<td>104</td>
<td>5-Point</td>
</tr>
<tr>
<td>7. Management Style Matrix</td>
<td>James Brianas</td>
<td>1977</td>
<td>40</td>
<td>9-Point</td>
</tr>
<tr>
<td>9. Organization Behavior Describer Survey</td>
<td>Roger Harrison, Barry I. Oshry</td>
<td>1976</td>
<td>25</td>
<td>5-Point</td>
</tr>
<tr>
<td>10. The Management Styles Profile</td>
<td>Bernard Bass, Enzo R. Valenzi</td>
<td>1975</td>
<td>159</td>
<td>5-Point</td>
</tr>
<tr>
<td>12. Survey of Organizations</td>
<td>Institute for Social Research</td>
<td>1974</td>
<td>129</td>
<td>5-Point</td>
</tr>
<tr>
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<td>16</td>
<td>Styles of Management Inventory</td>
<td>Jay Hall, et al</td>
<td>1973</td>
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<td>17</td>
<td>Management Diagnosis Chart (per Likert)</td>
<td>American Society</td>
<td>1967</td>
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<td>18</td>
<td>Grid Organization Development Phase I</td>
<td>Robert Blake</td>
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<td>Forced Choice</td>
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<td>Jane Mouton</td>
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<td>Personal Growth Inventory</td>
<td>Michael Blansfield</td>
<td>1965</td>
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<td>Gordon Lippitt</td>
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<td>1962</td>
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<td>Leadership Opinion Questionnaire</td>
<td>Edwin A. Fleishman</td>
<td>1960</td>
<td>5-Point</td>
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<td>22</td>
<td>Profile of Organizational Characteristics</td>
<td>Rensis Likert</td>
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<td>'Rate Your Supervisor' Evaluation Form</td>
<td>P.W. Maloney</td>
<td>1959</td>
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<td>J.R. Hinricks</td>
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<td>25</td>
<td>Supervisory Behavior Description Questionnaire</td>
<td>Edwin A. Fleishman</td>
<td>1953</td>
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Specific copies of the instruments, where possible, were obtained for further analysis. Several were obtained from the companies or universities which hold the copyright ownership. All published instruments were readily made available to this researcher. Four unpublished instruments, not included in the 25 but identified through recent literature sources, were requested from the authors for review. These included researchers from Stanford University, the Universities of Hawaii and Western Australia, and the Center for Creative Leadership. NONE of these unpublished instruments or information related to them were forwarded to this researcher irrespective of follow-up requests.

Dr. Stanley Seashore, previously identified in the "Acknowledgements," was on the other hand very accommodating. Through his assistance an instrument, "Survey of Organizations," developed by Bowers and Taylor through the University of Michigan’s Survey Research Center, was forwarded to this researcher. In a telephone discussion, Seashore (University of Michigan, Institute for Social Research, 1984) alluded to instrument development costs, which can run to half a million dollars, as a possible reason for the reluctance of researchers to share their unpublished materials. Dr. Seashore
Ph.D Thesis

did share, though, both his time and his insights into survey research methodology with this researcher.

2. Instrument Analysis

Included in the 25 instruments are those which espouse the "one best way" to manage theory. They include, for example, the instrument of Blake and Mouton, those of Jay Hall (a student of Robert Blake), and the instruments of Rensis Likert. Though contrary to the situational or contingency orientation of this research, these instruments are valuable reference sources. The situational-based instruments are also included such as those of Reddin, Brianas, and Hersey and Blanchard. While attempts were made to assess a broad cross-section of relevant instruments, there are some which no doubt have been excluded. One, for example, is the work of a well-known contingency theorist, Fred Fiedler. "For Fiedler, the effectiveness of a given pattern of leader behavior is contingent upon the demands imposed by the 'situation'" (Bass 1981 p. 32). His work on leadership since the 1950's led to the development of a still controversial measure, that of a person with whom one works least effectively -- the LPC -- Fiedler's Least Preferred Co-Worker questionnaire. The questionnaire is based on rating 18 trait items such as friendly-unfriendly, cooperative-uncooperative, on one's least-preferred co-worker using an 8-point scale (pp. 341-342). This instrument was not obtained nor reviewed in further detail.
Ph.D Thesis

Many other instruments were obtained including those originating from the original Ohio State Leadership Studies involving pioneers such as Edwin A. Fleishman, John Hemphill, and Alvin Coons (in Sutermeister 1969, Morrison et al 1978, Bass 1981, and Miller 1983). The studies began to look at the leader's behavior as determinants of success and not the trait approach of earlier years.

The Ohio State Leadership Studies of post World War II led to the development of two typologies of leader behavior (previously mentioned) that has greatly influenced, and continues to influence the field of management. These typologies (factors or types) are "Initiating Structure" and "Consideration."

At the same time, the studies of the Survey Research Center of the University of Michigan identified two clusters of characteristics for differentiating management behavior. They were "Production Orientation" and "Employee Orientation" (Hersey and Blanchard 1973 p. 72). McGregor's classic Theory X and Theory Y assumptions about people (pp. 46-48) perpetuated the 2-factor theory of behavior. Others such as Blake and Mouton through their Managerial Grid popularized these concepts using their "Concern for Production" and "Concern for People" dichotomy (p. 75).
Ph.D. Thesis


Several survey instruments reviewed by this researcher use this 2-factor theory as a framework. Not only those authors identified above but also the work of Hersey and Blanchard (Leader Effectiveness and Adaptability Description - 1973), William J. Reddin (Management Style Diagnosis Test - 1977) and Jay Hall et al (Management Appraisal Survey - 1980, and others) use this basic concept. Some like Hersey and Blanchard and Reddin expand it and use it as a situational concept while others like Blake and Mouton or Jay Hall use it as a universal concept.

Continuous work, though, with the Ohio State studies have resulted in expansion of the original 2-factor theory to a multi-factor theory (Bass 1981 pp. 363-369). Along with
Ph.D Thesis

Initiating Structure and Consideration, they have included 8 other factors (excluding 2 similar) proposed by Ralph Stogdill in 1959 (see also Stogdill 1963):

- Representation
- Role retention
- Tolerance of freedom
- Persuasiveness
- Tolerance of uncertainty
- Demand reconciliation
- Superior orientation
- Predictive accuracy

But with all the research and subsequent confusion surrounding factors which can be used to identify the behavior of managers, Bass (1961, quoting Stogdill 1970 p. 17) seems to rationalize it as follows:

"If one prefers a two-factor theory of leader behavior, initiation of structure and production emphasis appear to define one of the factors. Tolerance of freedom and tolerance of uncertainty tend to define the other. Consideration makes some contribution to the second factor, while representation and persuasiveness contribute to the first" (p. 367).

Four questionnaires were devised by the Ohio State staff to capture the results of this research. All four were reviewed by this researcher. They include:

Supervisory Behavior Description Questionnaire, 46 items - 1953

Leader Behavior Description Questionnaire, 40 items - 1957
Leadership Opinion Questionnaire, 40 items - 1960
Leader Behavior Description Question - Form XII, 100 items - 1962

All four are similar with respect to the items described. The last one, though, LBDQ - Form XII, incorporates the multi-factor conceptual framework. Of all the 24 management instruments reviewed by the Center for Creative Leadership (Morrison et al March 1978) it was only this one plus two others that received positive reviews. The basis of their judgment were four criteria (pp. 6-7):

- Basic description and characteristics used
- Linkage to theory and/or research
- Psychometric properties
- Management training and development uses

"No questionnaire was judged better," they stated, "in all four areas. Three instruments were rated better than the others in three of the four areas: the LBDQ - XII, MLMS, and PROFILE" (pp. 21-22).

It was interesting that several of the instruments widely used in management training programs, found in professional management or training journals, and often cited in the literature, were found by them not to meet the minimal criteria cited above. They include (p. 22):
Ph.D Thesis

Hersey and Blanchard's "Leader Effectiveness and Adaptability Description
Jay Hall's et al "Styles of Management Inventory," and
William Reddin's "Management Style Diagnosis Test"

In light of the impact that situational and contingency theory has had on management since World War II, it seems rather ironic that only one of the 24 instruments was designed for "middle- and upper-level managers," three for "first-line managers" and the rest "not limited to certain levels or functions of management" (p. 11). They also stated with respect to the instruments that "Psychometric data are insufficient or contradictory" and that "The most striking commonality among the instruments is their general lack of a solid theoretical/empirical base" (p. 11).

These findings were consistent with all the instruments reviewed as part of this research. Hence, as argued in the "Introduction" to this thesis, "Published research instruments designed to measure the work or style of managers -- their practices and behavior -- are basically narrow in intent, measuring aspects of management behavior, often have little, if any, validation results, are often developed as profit-making ventures, or have been out-dated by a changing, technology-based society." As also stated, "Through a
synthesis of existing research on effective executive practices and characteristics a new instrument will be developed." This new instrument will be designed for a specific management group (executive managers) and for specific industries (those characterized by a high degree of change -- the technology-based industries). This development will be discussed in Chapter III following the review of doctoral dissertations covered next.
E. PREVIOUS DOCTORAL DISSERTATIONS ON EFFECTIVE EXECUTIVES: 1958 to 1983

1. Dissertations Examined
To assess the nature of previous doctoral dissertations that may be relevant to this research a computer search was requested from University Microfilms International. From their several thousand "Dissertation Abstracts Online," 175 references were identified. Of this, 10 dissertations were obtained and reviewed in detail. An eleventh copy was obtained from The City University library. A list of these eleven are found in Exhibit 5. Highlights of some of the more significant findings will be presented.

All of the research found in the dissertations with the exception of one included some kind of measurement methodology. The exception was the work by Ian Glover. His thesis, "Managerial Work: The Social Scientific Evidence and its Character," principally based on extensive literature search of those "who work in manufacturing in the UK and North America," provides an interesting framework for viewing the other doctoral work. He states:

"... 'management' is a messy and complicated affair, riddled with culture bound assumptions and extremely difficult for the observer to understand -- (and) I regret having used the term 'manager' so often -- the function of
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<th>AUTHOR</th>
<th>DATE</th>
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<td>The Influence of Certain Structured Variables on the Relationship</td>
<td>Dennis J. Gillen</td>
<td>1981</td>
<td>University of Maryland</td>
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<td>Between Managerial Effectiveness and Unit Effectiveness</td>
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<td>Chain Hotel General Managers in the U.S.: An Exploratory Analysis of Their</td>
<td>Mario Jose Arnoldo</td>
<td>1981</td>
<td>Cornell University</td>
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<td>Job Perceptions and Personal and Property Characteristics</td>
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<tr>
<td>Management Systems and Organizational Effectiveness in Selected Multi-</td>
<td>Abdulrahman Al-Jafary</td>
<td>1979</td>
<td>University of Oklahoma</td>
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<td>national Organizations in the Arabian Gulf Region</td>
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<tr>
<td>Managerial Work: The Social Scientific Evidence and its Character</td>
<td>Ian Arthur Glover</td>
<td>1979</td>
<td>The City University</td>
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<td>Managerial Behavior and Level of Performance: An Empirical Study</td>
<td>Howard R. Mead, Jr.</td>
<td>1978</td>
<td>University of South Carolina</td>
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<td>Cross Cultural Characteristics of Successful Multinational Managers</td>
<td>Frederica Hope Dunn</td>
<td>1978</td>
<td>Boston University</td>
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<td>Effectiveness and Satisfaction as a Function of Managerial Style and</td>
<td>Henry Herrington Beam</td>
<td>1975</td>
<td>University of Michigan</td>
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<td>Technological Complexity in a Navy Work Environment</td>
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<td>A Comparative Analysis of Selected Characteristics of America's Airline</td>
<td>Robard Yongue Hughes</td>
<td>1975</td>
<td>Mississippi State University</td>
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<td>Executives for the Years 1952-1972</td>
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<tr>
<td>Personal Characteristics, Organizational Practices, and Managerial</td>
<td>Gerald Robert d'Amboise 1974</td>
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<td>Effectiveness: A Comparative Study of French and English-speaking</td>
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<td>Chief Executives in Quebec</td>
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<td>U.S. Businessmen's Perceptions of U.S. and Foreign National Manager</td>
<td>Carl Huish Christansen 1971</td>
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<td>Donald Ervin Williams 1968</td>
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<td>Effective Versus the Less Effective Manager</td>
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Ph.D Thesis

managing is so diverse generally that the title 'manager' seems almost meaningless --. It might, however, have been enough -- to have substituted the much more neutral term 'job holder' on many if not all suitable occasions" (pp. 11-12).

Though firmly put, Glover’s comment on management as "a messy and complicated affair" has in large part been borne out by this research. This has been cited in Chapter I of this thesis in which "confusion and inconsistencies" seemed to be the norm, and in this chapter, Chapter II, with the confusion on the diversity of management models and doubts raised on the efficacy of many survey instruments. Now this section in which a review of pertinent dissertations shows a diversity of research in a relatively homogeneous area of management effectiveness (further evidence supportive of Mintzberg’s - 1975 - finding of "virtually no systematic building of knowledge from one group of studies to another" p. 53).

The dissertations, though, have added an important dimension to this research through their own findings and documented results valuable to this research and the field of management. Two dissertations directly affecting this research will be discussed. They cover contingency management theory.
2. Contingency Management #1

The 1961 dissertation by Gillen "attempted to develop and test a contingency model of general management. The contingency was based on the organic-mechanistic continuum of management characteristics which was first described by Burns and Stalker (1961)." The major hypothesis tested was that "Managerial effectiveness will have less effect on units with mechanistic characteristics as opposed to units with organic characteristics" (p. 97). His research results subsequently supported this hypothesis.

Gillen used the "trait, behavioral, and situational approaches" to studying management effectiveness. Basically, two questionnaires were used in his research: Ghiselli's "Self Description Inventory" in which 64 pairs of words are used in describing oneself, plus 22 items using Mahoney's descriptors of subordinate units. Some related items on the units were also included. A sample of 103 managers was used with their effectiveness judged through ranking by their supervisors.

Gillen provides good documentation surrounding contingency theory -- how the properties of the situation and that of the persons affect leadership -- quoting Miner (1978), "It is apparent that some type of contingency approach to effective management is needed" (p. 34), reflecting Miner's comments after his review of the literature on management behavior and
characteristics. Gillen also discusses Stogdill (1974) who believes that situational factors play a major modifying effect on the relationship between leadership or management effectiveness and traits, and in directly quoting him, "The conclusion that personality is a factor in leadership differentiation does not represent a return to the trait approach; it does represent a sensible modification of the extreme situationalist point of view!" (p. 16).

The contingency used in Gillen’s study is, as mentioned, the organic-mechanistic continuum. This is used in "moderating the relationship between managerial effectiveness and unit effectiveness" (p. 58). The finding that managers of organic units have greater influence on the effectiveness of their units than managers of mechanistic units has implications for the relative effectiveness of the executives from the technology-based companies in this research.

3. Contingency Management #2

The second dissertation to be discussed also covers contingency theory. It is Beam’s research into effectiveness and satisfaction as a function of management style and technological complexity. Beam stated:

"Pragmatically, this research seeks to identify those managerial practices which are most likely to result in a high state of effectiveness --. The theoretical reason -- derives from the recent interest in the field
Ph.D Thesis

of organization theory concerning the effect of technology on management practices, effectiveness, and satisfaction" (p. 2).

Beam therefore formulated a contingency theory approach to management "which assumes there is no single best (universal) way to manage all persons. Rather the most effective style is a function of one or more variables, in this case the technology involved in the situation" (p. 8).

Two questionnaires were used in this research of Beam. One is an organizational practices instrument developed for a U.S. Navy study by the Institute for Social Research. Beam used 240 items from this instrument. Results from the original Navy study were also used by Beam as input for his research. The second questionnaire, based on 42 items, involved the judgment of technological level for 42 Navy enlisted jobs. From this second instrument an "Index of Technological Complexity" was derived for the 42 jobs.

Beam hypothesized that personnel in jobs with High Technological Complexity "are most effective and satisfied when they are treated in accordance with the tenets of Theory Y/System 4" -- and personnel in Low Technological Complexity jobs "are most effective and satisfied when they are treated in accordance with tenets of Theory X/System 1 --" (pp. 73-74).

To Beam's surprise these hypotheses were rejected. The level
of technological complexity was a poor predictor of leadership style preference. "None of the enlisted (job) ratings have a strong preference for Theory X. Rather, all prefer a moderate amount of Theory Y" (p. 91). The contingency theory was not sustained.

Beam concluded:

"...the Navy's most effective work groups are those which are managed with a high emphasis on the needs of people (Theory Y) coupled with an adequate structuring of work (Theory X). This indicates the contingency model approach could be profitably replaced with a universalist approach which emphasized Theory Y to motivate performance and adequate amount of structure and order to work. Such an approach would closely resemble Likert's System 4 style of management" (p. 123).

We will recall earlier in this chapter, section B, that Ralph Stogdill's 1948 article, "Personal Factors Associated with Leadership: A Survey of the Literature," was a turning point in moving from using traits as determinants of leadership effectiveness to the use of situational factors. Bass (1981) stated that Stogdill felt the field of management went too far in accepting situationalism and excluding traits (plus the behavioral approach).

Hence the confusion and inconsistencies in the field of management, the discipline which Ian Glover calls "a messy and
Ph.D Thesis

complicated affair" (p. 11). A goal of this research is to pull much of the management research together in better understanding management behavior particularly in the changing and highly competitive technological environment of the multinational corporation. This synthesis of the research and the subsequent development, testing, and field application of an "Executive Management Inventory" follow in the next chapters.
CHAPTER III

EXECUTIVE MANAGEMENT PRACTICES

AND CHARACTERISTICS
III. EXECUTIVE MANAGEMENT PRACTICES AND CHARACTERISTICS

A. IDENTIFICATION OF EFFECTIVENESS-BASED PRACTICES AND CHARACTERISTICS: THE QUALITATIVE PROCESS

This chapter of the thesis comprises Phase 1 of the research presentation on executive managers. As stated in the "Introduction," the primary goal of this phase is "to identify what it is that effective executives do;" that is, the skills, abilities, and qualities that characterize successful executive managers. (You will recall that for the purposes of this research successful and effective are considered synonymous.)

To achieve this goal an extensive literature search was performed using the sources identified in the previous chapter. This established the "qualitative" stage or process of the literature search. Boundaries were defined and criteria established for identifying these management characteristics.

This part essentially begins the "field research" phase of this investigation (as opposed to "laboratory research"). As Bouchard (1983) states, "The experimentalist disparages field research and calls for rigor while the applied practitioner ridicules the sterility of the laboratory and calls for relevance" (p. 364). Bouchard further identifies five methods...
Ph.D Thesis

of field research. They are (pp. 360-403):

   Interviewing
   Questionnaires
   Participant Observation
   Systematic Observation
   Unobtrusive Measures

This researcher uses three of the above: Interviewing, Questionnaires, and Systematic Observation. While none are error-free, he finds "Participant Observation" to be "epistemologically suspect" (p. 385), and "Unobtrusive Measures" as "extremely heterogenous and ill-defined" (p. 399). The interview and questionnaire methods will be covered in the next chapter, Chapter IV.

To minimize errors of content, context, and bias (Bouchard 1983 pp. 394-396) and in that sense to assure a high degree of relevance to work actually performed by managers identified as effective, the critical criterion of this phase was that only research-based management characteristics derivied from the workplace will be included. The literature search yielded 67 publications authored by 66 different researchers. About 40% of the publications were derived from the period 1980 to 1984, 30% during 1975 to 1979, 15% 1970 too 1974, and the balance dating to 1955 -- spanning a 30-year period of management research. Some of the authors yielded only one characteristic of effectiveness. Others as many as 37. The specific authors
and the number of characteristics derived from their published research are shown in Exhibit 6.

Some of the publications originally considered as important sources of manager effectiveness were upon closer analysis not included. Two of these are:

THE COMPETENT MANAGER by Richard E. Boyatzis, John Wiley & Sons, 1982, and

COMPETENCE AND POWER IN MANAGERIAL DECISION-MAKING by Frank A. Heller and Bernard Wilpert, John Wiley & Sons, 1981.

The Boyatzis book boasted "Grounded in a large scale intensive study of over 2000 managers, this book establishes for the first time the essential characteristics of the competent manager" (Inside cover). Further analysis of the material revealed, though, that in lieu of actual job behavior from the workplace (a criterion) the competencies were derived through group sessions in training programs. The process, particularly of the impact that group dynamics may have, was for the purposes of this research questionnable. To avoid possible contamination of our research base, this source was not included.

The second example of an excluded source is the book of Heller and Wilpert. They studied the decision-making process of 129 "successful" companies in 8 countries including 1500 managers. Success for the managers was defined by them "as a
### Exhibit 6. LITERATURE SOURCES: CHARACTERISTICS OF EFFECTIVE MANAGERS

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<th>Author(s) of Publication</th>
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<td>3. Quick and Higginson</td>
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<td>5. Peters</td>
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<td>7. Mintzberg</td>
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<td>8. Peters and Waterman</td>
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<td>9. Wrapp</td>
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<td>11. Quinn</td>
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<td>18. Brouwer</td>
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<td>19. Hayes and Abernathy</td>
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<td>20. Drucker</td>
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<td>21. Gluck, Kaufman, &amp; Walleck</td>
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<td>22. Machin, Stewart, &amp; Hales</td>
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<td>31. Sutermelstein</td>
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<td>32. Skinner &amp; Sasser</td>
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<td>34. Hersey &amp; Blanchard</td>
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<td>50. Dz</td>
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<td>51. Hulme and Maydew</td>
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<td>52. Marshall &amp; Stewart</td>
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<td>53. Prahalad &amp; Dz</td>
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<td>54. Redding</td>
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<td>55. Rummel &amp; Heenan</td>
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<td>57. Tosi and Carroll</td>
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<td>59. Butler &amp; Deardon</td>
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<td>64. George Jr.</td>
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<td>65. International Management</td>
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<td>66. Tannenbaum and Massarick</td>
<td>57</td>
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<tr>
<td>67. Thackray</td>
<td>58</td>
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</tbody>
</table>

126
Ph.D Thesis

characteristic which combines a person's age with his level in the organization. -- our sample of firms was chosen to represent economically successful companies and one can assume that, in general, senior managers in such organizations are also successful" (p. 130). These assumptions also raised questions as to the validity of their success criteria. Hence, this source was also excluded.

The 67 sources actually used, which were reviewed closely, were (in comparison to the above two) more firmly grounded in sound research. This is important in satisfying the "criterion problem" which Guion (in Dunnette 1963 p. 646) states is "the most traditional problem in the various facets of industrial and organizational psychology --." By "criterion" we mean a "predicted measure for judging the effectiveness of persons, organizations, treatments, or predictors of behavior, results, and organizational effectiveness" (Smith in Dunnette 1983 p. 745).

Criterion is what Schneider (1976) calls "standards of excellence." He further defines it plurally as "behaviors against which employees are judged -- those factors that constitute 'doing the job well'" (p. 48). And according to Bouchard (1983) "Accurate and comprehensive descriptions of behavior will enable researchers to deal with the criterion problem in a meaningful way" (p. 392).
Grounding investigations into sound research, conceptually and methodologically, is therefore critical to the validity of the results or predictions from the investigations. Smith explains the "problem of criteria" by stating:

"The first requirement of a criterion is that it be relevant to some important goal of the individual, the organization, or society. Determination of relevance is, however, a matter of judgment. Some group or person must decide which activities are most relevant to success. Once these activities have been identified, efforts must then be directed toward developing psychometrically sound awareness of these activities. The measure of criterion should be neither contaminated with irrelevant variance nor deficient in terms of measuring the important objectives of the organization and of the people in it" (in Dunnette 1983 pp. 746).

Smith further states:

"We cannot emphasize too strongly that observation of actual behavior on the job or, if necessary, off the job is the core of establishment of a successful criterion" (p. 753).

Through analysis of the literature, this researcher is comfortable with the 67 sources used and confident that the resultant practices and characteristics of effectiveness as derived from them are sound scientifically. They are also consistent conceptually with a valid criterion framework and the effectiveness-based models discussed in the previous chapter.
Examples of how the effectiveness characteristics were derived from the reference sources will identify the first step of the "Qualitative" stage. Four key references will be used in doing this. They are: Henry Minstberg, John Kotter, Thomas Peters, plus Modesto Maidique and Robert Hayes. All are found among the top 10 of the 67 authors previously listed. Exhibit 7, on the following four pages, shows the derivation of 29 such effectiveness characteristics. Following each characteristic is the exact literature source or reference from which it was derived.
Exhibit 7.
DERIVATION OF CHARACTERISTICS OF EFFECTIVE MANAGERS:
EXAMPLES FROM FOUR KEY LITERATURE SOURCES

<table>
<thead>
<tr>
<th>Author/Research</th>
<th>Effectiveness Character</th>
<th>Literature Source—Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Has strategic data bank in his mind.</td>
<td>p.52 &quot;the strategic data bank of the organization is not in the memory of its computers but in the minds of its managers.&quot;</td>
<td></td>
</tr>
<tr>
<td>#4 Look out for new ideas.</td>
<td>p.56 &quot;the president (executive) is constantly on the lookout for new ideas.&quot;</td>
<td></td>
</tr>
<tr>
<td>#5 Strategy for understanding and responding to pressures and dilemmas of the job. Need to be introspective.</td>
<td>p.60 &quot;the manager's effectiveness -- depends on how well he understands and responds to the pressures and dilemmas of the job. Thus managers who can be introspective about their work are likely to be effective at their jobs.&quot;</td>
<td></td>
</tr>
<tr>
<td>#8 Work at unrelenting pace.</td>
<td>p.50 &quot;managers work at unrelenting pace --&quot;</td>
<td></td>
</tr>
<tr>
<td>#9 Activities -- brevity, variety, discontinuity.</td>
<td>p.50 &quot;their (the managers) activities are characterized by brevity, variety, and discontinuity --&quot;</td>
<td></td>
</tr>
<tr>
<td>#11 Jump from issue to issue. Respond to need of moment/job pressures.</td>
<td>p.51: &quot;managers -- seem to jump from issue to issue, continually responding to the needs of the moment.&quot;</td>
<td></td>
</tr>
<tr>
<td>#13 Favor verbal media -- telephone calls, meetings.</td>
<td>p.52 &quot;Managers strongly favor verbal media -- namely telephone calls and meetings.&quot;</td>
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<tr>
<td>#14 Cherish soft information -- gossip, hearsay, speculation (may be tomorrow's fact).</td>
<td>p.52 &quot;Managers seem to cherish 'soft' information, especially gossip, hearsay, and speculation. Why? The reason is its timeliness; today's gossip may be tomorrow's fact.&quot;</td>
<td></td>
</tr>
</tbody>
</table>
p.160 "Effective executives develop agendas that are made up of loosely connected goals and plans that address their long-, medium-, and short-term responsibilities."

p.161 "Effective GM’s allocate significant time and effort -- to developing a network of cooperative relationships among those people they feel are needed to satisfy their emerging agendas."

p.162 "They try to make others feel legitimately obliged to them by doing favors or by stressing their formal relationships."

p.162 "They carefully nurture their professional reputation in the eyes of others."

p.164 "Of all the patterns visible in daily behavior, perhaps the most difficult to understand -- are that the executives do not plan their days in advance in much detail but instead react --"

p.161 "Excellent performers I have studied develop agendas based on more explicit business strategies that address longer time frames and that include a wider range of business issues. They do so by more aggressively seeking information from others (including ‘bad news’)."

p.162 "Effective GMs also often develop their networks by moving, hiring and firing subordinates."

p.163 "‘Excellent’ performers ask, encourage, cajole, praise reward, demand, manipulate, and
React in opportunistic way to flow of events around them.

Respond to major issues with trial balloons.

Important decisions emerge only after top mgmt has vacillated for months or years.

Disorderly bits of info are opportunities to fine tune his org. sense of direction - the general strategic direction.

Tolerates interruption because he does not wish to discourage the flow of current info.

Foray into detail as a shield against surprise.

Communicator, persuader, consummate opportunist.

Adept at grasping and taking advantage of each item in the random succession of time & issue fragments that crowd each day.

generally motivate others with great skill in face-to-face situations.

GM's -- react in an opportunistic and highly efficient way to the flow of events around them.

Top managers typically respond to major issues with trial balloons.

Most really important decisions emerge only after top managers have vacillated for months or years.

The senior executive who aspires to shape events and to leave a mark of excellence behind (knows that) disorderly bits of the choice process make available to the senior executive a set of opportunities to impart a thrust to, or to fine tune, his organization's sense of direction -- the general strategic direction they are trying to impart --

The chief executive tolerates interruption because he does not wish to discourage the flow of current information.

Top managers regularly use forays into detail as a shield against surprise.

The effective executive as a communicator, a persuader, and, above all, a consummate opportunist.

He (the effective executive) is adept at grasping and taking advantage of each item in the random succession of time and issue fragments that crowd his day.
p.172 "The task of the senior executive, then, is not to impose an abstract order on an inherently disorderly process, but to become adept at the sorts of intervention by which he can nudge it in the desired direction and to some degree control its course."

p.20 "Successful firms balance well-defined business focus with the willingness, and the will, to undertake major and rapid change when necessary." (Success category 'Adaptability').

p.21 "To succeed, the energy and creativity of the whole organization must be tapped. Anything that restricts the flow of ideas, or undermines the trust, respect, and sense of a commonality of purpose among individuals is a potential danger." (Success category 'Organizational Cohesion').

p.25 "Although these (successful) firms have clearcut business objectives, such as growth, profits and market share, they consider them subordinate to higher order ethical values. Honesty, fairness, and openness -- that is, integrity -- are not to be sacrificed for short-term gain."
A total of 548 characteristics ultimately were identified through the literature search. The entire 548 are listed in the "Appendix" as Attachment B. The source from which each characteristic was derived -- author, source title, and publication -- are also shown. The characteristics (skills, abilities, and qualities) are designed collectively to provide a comprehensive picture of the effective executive manager as derived from organizationally-based research. The terminologies used are those of the authors.

Exhibit 8, on the page following, provides a summary of these characteristics by identifying, in sequential order as found in the Appendix, the number of characteristics by author. Examples of the kinds of characteristics used and how they were derived were shown in Exhibit 7.

As stated at the end of the previous chapter, Chapter II, "A goal of this research is to pull much of the management research together in better understanding management behavior--" In the beginning of this chapter we stated, "To minimize errors of content, context, and bias and in that sense to assure a high degree of relevance to work actually performed by managers identified as effective, the critical criterion of this phase (Phase 1) was that was that only research-based management characteristics derived from the workplace will be included." This is critical to the development of the
<table>
<thead>
<tr>
<th>Author</th>
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<td>Kotter</td>
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<td>Pascale</td>
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<td>Pascale and Athos</td>
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<td>Quick and Higginson</td>
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<td>Katz</td>
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<td>Peters</td>
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<td>Morse and Lorsch</td>
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<td>Tosi and Carroll</td>
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<td>George Jr.</td>
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<td>Stewart</td>
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<td>Marshall and Stewart</td>
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<td>Machin, Stewart, &amp; Hales</td>
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<td>Tannenbaum &amp; Schmidt</td>
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<td>Doz</td>
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<td>Prahalad and Doz</td>
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<td>Int'l Management</td>
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<td>Butler and Deardon</td>
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<td>Quinn</td>
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<td>Mauleon &amp; Willingson</td>
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Exhibit 8. EXECUTIVE MANAGEMENT CHARACTERISTICS IDENTIFIED BY AUTHOR
Ph.D Thesis

effective instrument to be discussed in the next chapter, Chapter IV. As Smith stated (in Dunnette 1983), "We cannot emphasize too strongly that observation of actual behavior on the job or, if necessary, off the job is the core of establishment of a successful criterion" (p. 753).

The intent of this research is not only to conduct an extensive search of the literature to discuss and identify what it is that effective managers do, but also to develop an assessment tool for measuring these behaviors in the real world. Grounding these behaviors in sound research will assure the establishment of a successful criterion with high predictive relevance.

Reviewing each of the 548 characteristics will show how intensive and involved the process is. Classifying and sorting the characteristics into meaningful categories is equally involved as the following section will reveal.
B. CLASSIFICATION OF EFFECTIVENESS-BASED PRACTICES AND CHARACTERISTICS: THE QUANTITATIVE PROCESS

The second stage of Phase 1 involves what we have labeled previously as the "Quantitative" stage or process. This process involves enumeration of the characteristics based on frequency of occurrence and sorting of the variables. This means (a) content analysis based on nominal classification (scaling) for dividing the characteristics into mutually exclusive categories or categorical variables, and (b) sorting or ordering of these subsequent characteristic groups or categories (scales) into the tri-divisional model (Stewart's) chosen as the framework for this research.

This process is steeped in the scientific method of studying human behavior more so than the "Qualitative" stage of the previous section. This implies, therefore, more rigorous procedures for gaining knowledge. The concept of measurement is critical to these rigorous procedures. "Measurement bridges the gap between what a researcher reports as an observation of a variable in the real world and what has been defined as a variable in a statistical model" (Williams 1979 p. 14). What a researcher observes is some kind of "phenomenon," "object," or "event" (p. 4). For purposes of this research, our phenomenon is practices and characteristics of effective management behavior. A varying characteristic of phenomenon is called a
"variable" defined by Williams as an "observable characteristic of an object or event that can be described according to some well-defined classification or measurement scheme" (p. 4). And measurement itself, according to Blalock (1979), "involves classification as a minimal requirement" (p. 12).

The follow-on procedure, then, to the identification of the effectiveness characteristics describing managers, is to classify them into mutually exclusive categories. Nominal scaling accomplishes this. Williams states:

"The prime characteristic of such categories is that all observations assigned to a given category are equivalent in terms of some characteristic and they differ from phenomena in other designated categories in terms of this characteristic. The foregoing phenomena, when measured in terms of a nominal scale, are often called 'categorical variables'" (p. 15).

Kerlinger's FOUNDATION OF BEHAVIORAL RESEARCH (1973) provides more detailed insight into the process of classification. He sees categorical variables and nominal measurement as "members of a subset (which) are considered the same and all assigned the same name (nominal) --" (p. 39). For example, "Whenever a population is sampled, the samples are subsets of the population" (p. 49). He further breaks down subsets into "partitioning" and "cross partitioning" which he calls "polytomies" as opposed to more simpler "dichotomies" (pp. 53-56).
Williams (1979) states "Whereas a phenomenon or variable is what is being observed, the researcher's reports of observations are considered data" (p. 5). It is "The research analyst," according to Kerlinger, "who breaks down data into constituent parts to obtain answers to research questions and to test hypotheses -- one must first analyze the data and then interpret the results of the analysis" (p. 134).

Kerlinger shows "partitioning" and "categorization" to be synonymous and it is these concepts that are the "foundation of analysis" (p. 137). "Analysis," he states, "means the categorizing, ordering, manipulating, and summarizing of data to obtain answers to research questions" (p. 134).

The analytical paradigm of this research moves from the nominal classification (that is, dividing or categorizing them into mutually exclusive categorical variables) to that of sorting or ordering the categories (or scales) into a tri-divisional model of management behavior. Our goals are similar to that of Gough's CPI -- California Personality Inventory -- which is a measure of the characteristics of personality. They are (Gough 1975 p. 5):

1. Theoretical in nature -- to develop descriptive concepts which possess broad personal and social relevance -- wide pervasive applicability to human behavior.
2. Practical goal of devising brief, accurate, and dependable sub-scales (subsets) for the identification and measurement of the variables chosen for inclusion in the inventory.

These are also the goals of the EMI -- Executive Management Inventory -- developed by the present researcher and designed through this research as a measure of the characteristics of executive management behavior.

In fulfilling these goals, the 548 management characteristics, previously identified, were through systematic analysis categorized by this researcher into 37 scales. These were subsequently grouped into our tri-divisional model derived from the literature. The procedures for this will be discussed further on.

Similar to the conceptual framework of Gough's CPI above which has 18 scales, the EMI developed through categorization and sorting, "is intended to furnish a comprehensive survey of an individual. -- The scales (of the CPI) are grouped for convenience into four broad categories bringing together those having related implications. The underlying logic here is interpretation, not factorial" (p. 5).

The 37 scales or categories derived through this "Quantitative" stage of Phase 1 and the number of characteristics comprising
each scale are shown in Exhibit 9. The categories range from "Visualizing" and "Scanning" to "Adapting/Changing," "Pluralism," and "Motivating," and to "Self-Maturity" and "Values." An entire range of behaviors evolved in attempting to define the "whole" manager -- a comprehensive picture of the effective executive. The range is extensive but consistent with the complexities of managerial work cited throughout this research -- particularly the work of executive managers in the changing and dynamic technology-based environment.

The "highest five" categories, by virtue of the number of characteristics derived from the literature, are:

- Motivating 35
- Diagnosing 31
- Flowing 26
- Sensitivity 25
- Information Gathering 25

These plus the five listed below comprise nearly 50% of the attributes of the effective executive and the work required to be effective:

- Strategizing 24
- Personal Drive 24
- Self-Awareness 23
- Adapting/Changing 20
- Varying Behavior 19
### Exhibit 9. EXECUTIVE MANAGEMENT CHARACTERISTICS IDENTIFIED BY CATEGORY

<table>
<thead>
<tr>
<th>Category</th>
<th>Characteristics</th>
<th>Category</th>
<th>Characteristics</th>
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<td>Visualizing</td>
<td>12</td>
<td>Motivating</td>
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</tr>
<tr>
<td>Scanning</td>
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<td>Communicating</td>
<td>16</td>
</tr>
<tr>
<td>Boundary Spanning</td>
<td>12</td>
<td>Resource Handling</td>
<td>8</td>
</tr>
<tr>
<td>Entrepreneuring</td>
<td>18</td>
<td>Reputation Building</td>
<td>7</td>
</tr>
<tr>
<td>Technological Imperative</td>
<td>6</td>
<td>Developing Relations</td>
<td>14</td>
</tr>
<tr>
<td>Analyzing</td>
<td>17</td>
<td>Developing Personnel</td>
<td>9</td>
</tr>
<tr>
<td>Focusing</td>
<td>12</td>
<td>Team Building</td>
<td>11</td>
</tr>
<tr>
<td>Strategyzing</td>
<td>24</td>
<td>Influencing</td>
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<td>Network Building</td>
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<td>Personal Drive</td>
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<tr>
<td>Information Gathering</td>
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<td>Varying Behavior</td>
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<td>Client Obligation</td>
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<td>Insightful</td>
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</tr>
<tr>
<td>Structuring</td>
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<td>Subtlety</td>
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<td>Diagnosing</td>
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<td>Flowing</td>
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<td>Intuition</td>
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<tr>
<td>Grasping</td>
<td>6</td>
<td>Sensitivity</td>
<td>25</td>
</tr>
<tr>
<td>Ambiguity/Clarity</td>
<td>18</td>
<td>Self-Awareness</td>
<td>23</td>
</tr>
<tr>
<td>Synergism</td>
<td>11</td>
<td>Self-Maturity</td>
<td>17</td>
</tr>
<tr>
<td>Adapting/Changing</td>
<td>20</td>
<td>Values</td>
<td>12</td>
</tr>
<tr>
<td>Pluralism</td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The individual characteristics comprising each category are listed in the "Appendix" as Attachment C. The characteristics are keyed by number to the author(s) from which they were derived (refer to Attachment B). As stated in the previous section on the qualitative process of identifying the characteristics in the first place, this quantitative process of classification is also intensive and involved. The procedures followed in obtaining these final categorical groupings — use of expert review, etc. — are discussed in the section following.
Ph.D Thesis

C. TRI-DIVISIONAL MODEL OF EXECUTIVE EFFECTIVENESS

Important to the categorization process of the EMI is the use of expert judgment by educators and practitioners (see Ohio State studies in Sutermeister 1969 pp. 380-383). Five such experts were used in this process. They were two hi-tech executive managers, one representing an American multinational company and a second representing a German company; two management educators, one British and one American; and one United Nations hi-tech executive. Each was provided a copy of the 37 categories with the detailed characteristics similar to that comprising Attachment C in the Appendix. The input and comments from the five were used to revise and improve the categories. Attachment C is, in fact, the result of this process.

The instructions provided each of the five experts are shown as Exhibit 10 on the following page.

From this first iteration in the use of management experts, definitions for each of the 37 categorical variables describing the work of effective executive managers were developed. These are shown as Exhibit 11.

These definitions were subsequently provided to the five experts in a second iteration process for use in sorting or
Exhibit 10. INSTRUCTIONS FOR MANAGEMENT RESEARCH

MANAGEMENT RESEARCH

Enclosed are 37 categories of work derived from research of management literature that attempt to cover the behavior of successful top managers in large corporations; i.e. what it is the managers do. Each category is made up of a number of characteristics, some as few as 6 others over 30.

To assure that the characteristics are grouped into meaningful categories you and other top managers and colleagues are asked to do the following:

1. Review each of the characteristics grouped within the same category to assure that each characteristic is the same or similar to one another; i.e. represents a homogeneous group.

2. If you feel a particular characteristic does not fit well in the group place a check mark by it and identify into which group or category shown you feel it best belongs.

3. If you feel a group or category would best be identified by a different name, cross through that category and write in the suggested name.

4. If you feel some of the characteristics should be re-grouped into a category not shown, identify that new category on a separate sheet and each of the characteristics (by number only) that you feel belong to it and attach it.

Do not spend too much time. Careful thought, though, and your best judgment are important and much appreciated.

Thank you.

J. Brianas
2 December, 1984

P. S. Since this is tentative research please do not reproduce or otherwise disseminate it. Your responses by 5 December are requested.
Exhibit 11. **CATEGORICAL DEFINITIONS**

**Visualizing** - a wholistic view of the organization including the environment external to it.

**Scanning** - looking out for ideas and situations impacting on one's organization.

**Boundary Spanning** - conscious of day-to-day as well as long-term matters and other requirements spanning broad horizons or approaches.

**Entrepreneuring** - taking action and risk and encouraging the organization to be independent and competitive.

**Technological Imperative** - competing through technologically superior products or providing superior services.

**Analyzing** - assessing the job, people and the environment and alternatives for sound problem-solving and decision-making.

**Focusing** - build on the organization's strengths and uniqueness and focus on contributions for achieving results.

**Strategizing** - plan or select and fine tune the organization's sense of direction, involve others and outthink and outmanage competitors.

**Network Building** - developing an informal and useful network of people in and out of the organization.

**Information Gathering** - seeking all kinds of information, asking questions, and encouraging feedback and differing views.

**Client Obligation** - staying close and providing quality to customers or clients.

**Structuring** - tailoring the organization to fit its tasks and people, promoting open and flexible organization systems.

**Diagnosing** - understanding and appraising of all human organizational forces and relevant situations, cues and sensed needs, and providing answers logic would not suggest.
Flowing - allowing strategies and decisions to evolve by resisting drive for closure through a continuous, incremental and political process.

Grasping - respond to the need of the moment by grasping at opportunities.

Ambiguity/Clarity - shifting between chaos and continuity, appearing imprecise yet resilient.

Synergism - harmonizing and maximizing human and technical resources to achieve maximum good for the total organization.

Adapting/Changing - knowing when and where to change from one stance to the next.

Pluralism - viewing work as a complex system of forces in and out of the organization with the manager playing many roles.

Motivating - treat people with respect and understanding as well as with high expectations while recognizing differences among them and strengths each possess.

Communicating - promote open communication throughout the organization, awareness of priorities and corporate goals and philosophy.

Resource Handling - hire and assign key personnel making appropriate changes.

Reputation Building - nurturing one's professional reputation.

Developing Relations - spend majority of one's time with others interacting with and cultivating those on whom dependent.

Developing Personnel - promoting, stretching, and monitoring the development of one's managers.

Team Building - develop consensus and workable coalitions, cooperative effort, and group loyalty.

Influencing - persuading others directly or indirectly and making them feel legitimately obliged.
**Personal Drive** - persistent, determined, and aggressive in getting things done, demanding excellence, and slicing through routine.

**Varying Behavior** - behave relative to the situation and use all sorts of interventions in moving processes forward.

**Insightful** - gaining insight into and awareness of others.

**Subtlety** - complex and subtle approach in dealing with the nuances of interpersonal processes.

**Reacting** - accept disorderly processes and react in an opportunistic way to the flow of events.

**Intuition** - trust in instinct and sense data.

**Sensitivity** - responsive and aware of the needs of people, the reality to know what is going on, and high awareness of the total system and its complex processes.

**Self-Awareness** - maintaining high accuracy and understanding of one's own nature and values, and how one affects others.

**Self-Maturity** - blends strength and humility in being oneself and changing as needed.

**Values** - maintaining a company's character through a sense of honesty and fairness based on significant meanings different from efficiency alone.
ordering the 37 categories into a literature-based management model. Analysis of the 13 models presented in Chapter II of this thesis yielded two models more pertinent to the categorization process of this research. They are:

1. Katz’s Conceptual Skills and Human Skills (Technical Skills relating to lower level managers are excluded).

2. Stewart’s Analytical Abilities, Social Skills, and Emotional Resilience.

Instructions were provided to the five experts to first sort the 37 categories into Katz’s model. The same procedure was subsequently followed for sorting into Stewart’s model. The instruction sheets used are shown as Exhibits 12 and 13.

Difficulties arose in attempting to sort the categories into Katz’s model. Two divisions were found inadequate for grouping all of an effective manager’s behavior. The three divisions of Stewart yielded better results. This model was the one ultimately used as the framework for describing the practices and characteristics of managers.

The final model developed by this author uses Stewart’s three divisions which have been labeled:

Analytical
Social
Emotional R

Katz’s definitions were also incorporated into this model.
Exhibit 12. INSTRUCTIONS
FOR IDENTIFYING EXECUTIVE MANAGEMENT CATEGORIES

Enclosed is a list of 37 categories of work of executive managers including a definition of each. Also enclosed is a conceptual framework or model for describing the work of managers. It is by Robert Katz.

You are asked to do the following:

1. Read Katz's descriptions of "Conceptual" and "Human" skills. (Exclude Technical).

2. Keeping these 2 descriptions in mind, identify each of the 37 categorical definitions as falling within either Conceptual or Human by placing a "C" or an "H" to the right of each definition.

3. If you have difficulty with any, label it as best you can but add a "?" after the "C" or "H".

4. Thank you for your assistance.
Exhibit 13. INSTRUCTIONS FOR IDENTIFYING EXECUTIVE MANAGEMENT CATEGORIES

Enclosed is a list of 37 categories of work of executive managers including a definition of each. Also enclosed is a conceptual framework or model for describing the work of managers. It is by Rosemary Stewart.

You are asked to do the following:


2. Keeping these 3 descriptions in mind, identify each of the 37 categorical definitions as falling within Analytical, Social, or Emotional by placing an "A", "S", or "E" to the right of each definition.

3. If you have difficulty with any, label it as best you can but add a "?" after the "A", "S", or "E".

4. Thank you for your assistance.
where appropriate, such as "Conceptual" which was included in "Analytical" and "Human" included in "Social." "Emotional R" is the new division to this model, a title used by Stewart and previously derived from Burgoyne and Stuart's (1976) "Emotional Resilience."

The final Tri-Divisional Model based on Katz (1955 and 1974), Stewart (1982), and Burgoyne and Stuart (1976) is shown as Exhibit 14 on the next page. The descriptive definitions are a combination of the above authors.

Following this is Exhibit 15 which identifies the categories comprising each division of the Tri-Divisional Model. Sorting into these 3 divisions was a derivation of the expert review.

With this as a framework for the research, we will now proceed to develop and test an instrument that captures the essence and predictive qualities of the management practices and characteristics identified in this chapter.
Exhibit 14. TRI-DIVISIONAL MODEL OF MANAGEMENT BEHAVIOR

Brianas (Per Stewar) 1985

ANALYTICAL

Seeing the enterprise as a whole, its complexity, and the total situation relevant to it; establishing its sense of direction; maintaining competitive awareness; making and carrying out policy and strategic decisions and choices, and integrating all activities and interests toward common objectives; assessing situations, people, and problems and all forces in or out of the organization; seeking information, feedback for sound problem-solving and decision-making; maintaining high perceptiveness and awareness of oneself, others, the organization and the environment.

SOCIAL

Working with and through people as part of one’s group and in intergroup relationships including peers, the boss, subordinates, external contacts, and as part of membership in various teams of people; communicating with and motivating others; building cooperative effort and team-work and a network of people in or out of the enterprise; influencing people directly or indirectly; developing and handling relationships, personnel and groups.

EMOTIONAL_R

Working in and tolerating stressful situations; having the stamina, perseverance, and tenacity to take actions and risks in response to changing needs, circumstances, and chaos and ambiguity including ambiguity in decision-taking and the need to select between uncertain alternatives; dealing with interpersonal constraints, threatening events, and the need to work with and consult many different people; maintaining integrity, character, and a sense of values in coping and flowing with organizational situations.
Exhibit 15.
TRI-DIVISIONAL CATEGORIZATION OF EFFECTIVE MANAGEMENT BEHAVIOR

<table>
<thead>
<tr>
<th>Category</th>
<th>Analytical</th>
<th>Social</th>
<th>Emotional R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visualizing</td>
<td></td>
<td></td>
<td>Entrepreneuring</td>
</tr>
<tr>
<td>Scanning</td>
<td></td>
<td></td>
<td>Flowing</td>
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<tr>
<td>Boundary Spanning</td>
<td></td>
<td></td>
<td>Grasping</td>
</tr>
<tr>
<td>Technological Imperative</td>
<td></td>
<td></td>
<td>Ambiguity/Clarity</td>
</tr>
<tr>
<td>Analyzing</td>
<td></td>
<td></td>
<td>Adapting/Changing</td>
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<tr>
<td>Focusing</td>
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<td></td>
<td>Personal Drive</td>
</tr>
<tr>
<td>Strategizing</td>
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<td>Varying Behavior</td>
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<td>Information Gathering</td>
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<td>Subtlety</td>
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<tr>
<td>Structuring</td>
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<td>Reacting</td>
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<td>Diagnosing</td>
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<td>Self-Maturity</td>
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<td>Values</td>
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<td>Pluralism</td>
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<tr>
<td>Insightful</td>
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<td>Intuition</td>
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<td>Sensitivity</td>
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<td>Self-Awareness</td>
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CHAPTER IV

DEVELOPMENT AND TESTING
OF RESEARCH INSTRUMENT
IV. DEVELOPMENT AND TESTING OF RESEARCH INSTRUMENT

A. INSTRUMENT DEVELOPMENT: A PERSPECTIVE

The previous chapter identified the management practices and characteristics of effective executives. Through a systematic process of categorisation and ordering of the 548 characteristics and subsequent 37 scales or categories a conceptual framework was developed as a model for describing, analyzing, and interpreting the results of this research. It is the Tri-Divisional Model of Management Behavior.

This chapter is designed principally as Phase 2, Instrument Development and Test. The goal is "To develop and test an instrument to measure what executives do using effectiveness-based criteria developed in Phase 1." The literature search has been incorporated into the previous chapter; specifically the "Qualitative" and "Quantitative" stages for identifying, categorizing, and sorting the characteristics from the literature. Twenty-five instruments related to managers were also previously reviewed in Chapter II. The important consideration at this point is the transition from the identification and coding of the various literature-based information to the actual measurement of the various aspects of human characteristics at work.
Dunnette (1983) provides excellent insight into the historical perspective and conceptual taxonomies in the measurement of human characteristics in the context of work performance in organizations. Human attributes and their measurement, he feels, "grows out of mankind's centuries old search for answers about the fundamental nature of man" (p. 475). Providing historical perspective on this, he states (pp. 475-477), "the early Greeks were strongly aware of human differences in the ability to learn." In 1816, Bessel an astronomer, was probably the first, according to Dunnette, to assign "quantitative values to observable differences in human behavior -- in relation to its effects on work performance." In 1869, Sir Francis Galton in his book HEREDITARY GENIUS "presented the elements of a system for classifying man according to their eminence (abilities). He stated that true eminence was extremely rare --." At the turn of the century (1895 to 1905) Alfred Binet, through his interest in complex mental processes, developed testing tools which by 1916 with the publication of the Stanford-Binet Test (by Terman) ushered in the coming of age of the measurement of individual differences.

With this perspective Dunnette explains, through the subsequent "broad and rocky terrain of aptitude and ability testing, that job and work performance have frequently been
ignored" (p. 477). But he says, "studies of aptitudes and skills on the one hand and work performance on the other have apparently yielded two quite distinct taxonomic worlds -- one based mostly on standardized test responses, the other mostly on the study and description of actual work performance" (p. 473). This basically differentiates between "personnel tests" and "observation research methods."

Dunnette, though, believes that a third taxonomy, one linking the other two, is needed. He states, "the linkage process is accomplished conceptually by turning to the third approach in behavior classification, the so-called 'ability requirements' approach. This orientation asks what human aptitudes, skills, or other attributes are required to carry out a job" (p. 495) -- more consistent with "instrumentation research methods" (pp. 497-500). This is basically the taxonomic or behavioral classification approach followed in the development of the instrument for this research.
Sirota (1973) believes that "The instrument that provides the most reliable diagnosis of the human side of organizations is the attitude questionnaire. -- Certainly, the questionnaire approach is far from perfect -- (but) the questionnaire has rarely been fully exploited --" (p. 124).

The rationale and methods used in developing an instrument are well described by Cammann et al (1983). They state:

"The need for collecting individual-level information stems from two parts of our view of an organizational assessment. The first involves evaluation. -- The second reason -- Organizations are very complex human systems, and no individual ever has complete information about all of the things that take place within them. -- Our decision to use a questionnaire to collect information about individual perceptions was based on the relative advantages and defects of this methodology. -- Given these advantages and defects, the relative ease of standardization, and the relative efficiency of questionnaires dictated that we use this method as our primary technique for collecting information .." (pp. 72-73).

But according to Maher and Kur (June 1983):

"Questionnaires are an indirect method of collecting data. Because they eliminate face-to-face interaction, questionnaires are only valuable if they ask appropriate questions which people can understand and ask them in a format people can answer. -- Original questionnaires will not have data on reliability and validity unless you develop such data yourself, but they can get at specific issues more clearly and directly than standardized questionnaires" (p. 100).
With all the pros and cons in the use of questionnaire instruments, the facts as Cammann et al (1983) state them are that "questionnaires provide data in a quantitative or codable form -- allows the institution of quality-control procedures -- assure anonymity -- (and) the data may be aggregated in multiple ways for a variety of modes of analysis, display, and interpretation" (p. 73) points to the value of this methodology. And according to Sirota (1973) the data provides "a sound probabilistic reading" of that which the researcher is trying to measure (p. 126).

"The formulation of questions," though, according to Bouchard (1983), "for an interview or questionnaire is still pretty much an art -- and researchers must depend on rules of thumb and past experience more than on empirical data" (p. 380). The procedure followed by this researcher in developing the EMI questionnaire is rooted in conceptually sound and rigorously systematic state-of-the-art procedures discussed in the previous chapter on the identification of management practices. These procedures are continued in this chapter on instrument development. They are consistent with Cammann's et al (1983) "measurement domains" for questionnaire design and development (pp. 73-77), an article published in Stanley Seashore's 1983 book. These guidelines, the authors state, can be followed in choosing what to include in the questionnaire content. They include:
1. Formulate a coherent theoretical framework and then concentrate the measurement effort on the essential conceptual components of that theory.

They feel this approach may be limited in scope and destined to be supplanted in time with a better theory. Alternatives are to:

2. Adopt the prevailing language, operative constructs, and implicit theories of organizational members and then aim to conform the questionnaire to this set of data.

3. Scan the existing literature in search of constructs and questionnaire measurement operations that have some established evidence of empirical reliability, validity, and utility.

Both 2 and 3 were used in this research. Scanning the literature involved the identification of research-based practices and characteristics derived from organization personnel. These work-related criteria are critical to the measurement methodology of this research and the categories developed for assessment.

In the last exhibit, Exhibit 15 shown in the previous chapter, the categories identifying each of the three divisions of the Tri-Divisional Model were shown. Each category was composed of from 6 to as many as 35 practices or characteristics. These characteristics formed the bases of the questions or items from which the EMI, the Executive Management Inventory, was developed. A weighting process was used (1) to transform these characteristics into specific questions, and (2) to assure that
the categories identified were fairly represented in the questionnaire developed.

Frequency criteria were used to meet this need. For every category with 10 or less characteristics, one item or question was developed. For every category with a frequency of 11 to 20 characteristics, two items were developed, and so on. The more homogeneous characteristics within each category were grouped to establish each item. The survey instrument derived through this process as well as through the systematic literature search and analysis identified in the previous chapters is shown as Exhibit 16 on the pages following.

As discussed in the "Research Design and Objectives" section of Chapter I, the instrument is divided into three parts.

PART I. Comprised of demographic and organizational variables.

PART II. Comprised of the practices and characteristics of effective managers as derived from the literature.

PART III. Comprised chiefly of open-ended questions/statements designed to supplement the statistical results.

Seventy-five items are shown in Part II. Items 1, 31, and 61 of that part are antonyms of other items in the inventory (28, 72, and 41 respectively). They are used as a check for
EXECUTIVE MANAGEMENT INVENTORY

THIS INVENTORY HAS BEEN PREPARED FOR RESEARCH PURPOSES ONLY. ITS INTENT IS TO OBTAIN INFORMATION ON EXECUTIVE MANAGEMENT PRACTICES. THE DATA FROM EACH INVENTORY WILL BE COMBINED TO PROVIDE A COMPOSITE PICTURE OF THE MANAGER GROUP UNDER STUDY. IN NO WAY CAN AN INDIVIDUAL BE IDENTIFIED NOR IS THERE ANY INTENT TO DO SO. YOUR RESPONSES, IN ASSOCIATION WITH THAT OF OTHER EXECUTIVES, WILL ADD TO THE BODY OF KNOWLEDGE IN THE FIELD OF MANAGEMENT AND HOPEFULLY ADVANCE THE STATE-OF-THE-ART AND PROMOTE BETTER UNDERSTANDING.

Prepared by
JAMES G. BRIANAS

Copyright © 1985, James G. Brianas and the University of Technology
Loughborough, England LE11 3TU
THIS "EXECUTIVE MANAGEMENT INVENTORY" IS DESIGNED TO ASSESS AN EXECUTIVE MANAGER'S CHARACTERISTIC BEHAVIOR PATTERN USED IN PERFORMING ONE'S JOB. SEVERAL STATEMENTS ARE PROVIDED WHICH DESCRIBE VARIOUS CHARACTERISTICS OF POSSIBLE MANAGEMENT PRACTICES. YOU WILL BE ASKED TO ASSESS HOW CLOSELY EACH STATEMENT COMES TO DESCRIBING HOW YOU PERFORM YOUR JOB. THERE ARE NO "WRONG" RESPONSES. THE RESPONSE THAT BEST FITS ANY ONE ITEM IS THE ONE THAT BEST REFLECTS YOUR PERCEPTION AND OVERALL BEHAVIOR RELATIVE TO HOW YOU HONESTLY FEEL YOU PERFORM YOUR WORK. YOU WILL ALSO BE ASKED TO PROVIDE YOUR PERCEPTION ON HOW YOUR COLLEAGUES PERFORM.

THE INVENTORY IS DIVIDED INTO THREE PARTS. PART I ASKS YOU TO PROVIDE SOME BASIC DEMOGRAPHIC INFORMATION TO BE USED IN TABULATING THE RESULTS. IN PART II YOU ARE TO DESCRIBE, USING A 10-POINT SCALE, FIRST HOW CHARACTERISTIC EACH STATEMENT IS OF YOU AS A MANAGER, AND SECOND HOW CHARACTERISTIC YOU FEEL IT IS OF THE TYPICAL EXECUTIVE IN YOUR ORGANIZATION. PART III IS OPEN-ENDED AND PROVIDES YOU THE OPPORTUNITY TO DISCUSS OR COMMENT ON ANY MATTER YOU FEEL APPROPRIATE TO THIS INVENTORY OR THE JOB OF MANAGING.

THE DATA PROVIDED BY YOU WILL BE COMPLETELY CONFIDENTIAL. PLEASE DO NOT PROVIDE YOUR NAME. ONLY YOUR HONEST AND OBJECTIVE RESPONSES ARE REQUESTED. TIME TO COMPLETE THE INVENTORY IS ABOUT 40 MINUTES.

NOTE: In this inventory, the words organization, company, or enterprise are synonymous and refer to the institution which employs you. In large organizations this ordinarily means the corporate office, department, division, subsidiary, or program or project office where you work. Executive Management refers to positions above the mid-manager level.
PART I. TO PROVIDE FOR MEANINGFUL TABULATION OF THE RESULTS PLEASE PROVIDE THE BASIC INFORMATION REQUESTED BELOW.

1. What is the country of origin of your company? ________________________.

2. How many years have you served as an executive manager (___ yrs); how many at other management levels (___ yrs)? Total years (___).

3. How many years of company-sponsored management training have you had (___ yrs); how many years of formal management education in a university (___ yrs)? Total years (___).

4. How much authority or freedom to act do you have in your position? (Circle the appropriate number.)

   Very Little 2 3 4 5 6 7 8 9 10 Very Large Amount

5. How many career moves (out-of-organization transfers) have you made in your company (___ moves), and how many in or out of former companies during your adult life (___ moves)? Total moves (___).

PART II. THIS IS THE MAIN PART OF THE INVENTORY. WHAT FOLLOWS ARE SEVERAL STATEMENTS REPRESENTING PRACTICES OF EXECUTIVE MANAGERS. THIS IS WHAT YOU ARE ASKED TO DO:

1. Read each statement carefully.

2. On a scale of 1 to 10 decide how characteristic the statement is of yourself.

3. Place one of the following ten numbers in the box under the column labeled "YOU".

4. Place the number "1" in the box located under the "YOU" column if it is Completely Uncharacteristic. Place the number "10" if it is Completely Characteristic, or use the appropriate values in-between.

5. Under the column labeled "OTHERS", identify, using the same 10-point scale, how characteristic the statement is of the "typical" executive in your organization.

EXAMPLE:

I represent my company to the local community, present several speeches annually, and serve on the intercity community action committee.

The number "8" under the "YOU" column shows that this statement is Very Characteristic of you. The "4" under "OTHERS" shows that it is Somewhat Uncharacteristic of your colleagues.

6. Be sure to respond to each statement. If for any reason you find it difficult, your best guess would be the most appropriate response.

7. Do not provide a response which indicates how you would like to behave, nor a response you feel may be more acceptable. Simply indicate by a number how characteristic the statement actually is.
1. I employ a rational decision-making process, one that is efficient and decisive, with no vacillation or procrastination, and with strategies decisively made and implemented within short time-frames.

2. I take a systems approach in conceptualizing the enterprise as a whole, turn my attention to overall performance, the integrated complexity of interrelated parts, and how our business relates to the industry, community, and the nation.

3. I am contemplative and a conceptualizer in understanding my company and the broader social environment in which we operate, our own internal strategic management forces and pressures, as well as forces and pressures external to the company.

4. I look out for new ideas and opportunities, am curious and keep alert to changing conditions, events and trends which may require my organization to adapt to its environment.

5. I scan the environment both in and outside my organization -- internal roles and relationships as well as external product/market trends, government regulations, sanctions, etc. -- and their impact on our products or services.

6. I am conscious of the long-term implications of day to day decisions, concerned for both economic success as well as political adjustments required, and if involved take a global, world-wide view in promoting our share of the market.

7. I define boundary conditions, the broad objectives of decisions, promote wide participation and decision-making at the lowest level possible, and am not adverse to using collective management as opposed to one-man rule.
8. I am action-oriented and competitive, promote innovation and a willingness to make risky, long-term competitive investments.

9. I encourage my organization to be autonomous and small business-like, to think independently and competitively, and I assume the role of sponsor in promoting change and an entrepreneurial culture.

10. I place central emphasis on producing technologically superior products or providing superior services, keeping abreast of developments in my industry, embracing and harnessing new technology, and an overall commitment to compete in the marketplace on technological grounds.

11. I approach my job analytically and imaginatively, analyze its nature, the demands, constraints, and choices for opportunity it offers and discover and deal with potentially serious problems before they become critical.

12. I approach human problems with the same analytical tools as marketing and finance, analyze how best to attract skilled people and personal commitments, see alternatives available in making sound decisions, and take a broad, integrated approach in analyzing risk as well as in promoting productivity.

13. I focus on the contribution I can make to the organization, on results and outward toward goals and specific objectives, and contributions which I must make for productivity.

14. I focus on the organization's uniqueness, its area of strength and success, and hammer out and build consensus around a few important new goals having the greatest long-term impact on the organization.
15. I select basic directions and broad conceptual goals rather than precise mathematical targets, shape and guide the organization and piece together disorderly bits of information to fine tune the organization’s general strategic direction.

16. I promote creative, flexible planning processes, orchestration of all resources linking formal planning to vigorous operational execution for plans including the next 30 days or 5 to 20 years, and let others suggest new thrusts as input into loosely connected goals and plans.

17. I focus on our competitors’ strategy for our annual plans, outthink and outmanage competitors, find strategic openings not within the framework of conventional thinking, and make arrangements and investments today for long-term survival.

18. I develop an informal and personal information network of people both in and out of the organization to trade information with and build cooperative relationships to satisfy emerging needs.

19. I aggressively seek information from others including bad news, cherish soft information -- gossip, hearsay, speculation -- collecting tidbits of data, details, and differing views to grasp reality firsthand.

20. I value the spirit of inquiry, ask lots of questions, and constantly move around, probe, listen, and show up unexpectedly.

21. I favor verbal media -- meetings and telephone calls --, gather and process vast amounts of information, encourage feedback and tolerate interruptions so as not to discourage the flow of current information.
22. I stay close to our clients and customers providing them high quality service and product reliability, and where possible pass on savings to consumers and society in general to reward them for their vote of confidence in us.

23. I tailor the organization to fit tasks and people, promote open communication systems, organic and flexible organization structuring, and multi-disciplinary project teams.

24. I consider and take steps to understand the forces at work within people, maintain an accurate awareness and assessment of key individuals and groups, their style, as well as any hidden agendas or expectations.

25. I read situations as accurately as possible for what they contain, appraise elements of a situation and the overall environment to include that of superiors, associates, followers, the organization, and job demands, and decide on the appropriate style of leadership to use.

26. I maintain a keen understanding of organizational forces in trying to respond to the pressures and dilemmas of the job, the accurate relationship between cues and actual behavior while trying to combine insight and wisdom with the science of management.

27. I illuminate problems, options, and contingencies posed by a sensed need, the depth and nature of blocks in the organization, and am creative in reshuffling facts and reformulating questions to come up with answers logic would not suggest.

28. I employ a decision-making apparatus that grinds very fine and deliberate; is more an opportunistic process than a rational one, and includes vacillating for months or even years for important decisions to emerge, with new management strategies implemented slowly over the years.
29. I create new consensus through a continuous, evolving, incremental, and often highly political process that has no precise beginning or end; I issue no orders but press and let people come around to my point of view.

30. I control premature momentum and resist drive for closure by flowing with a situation and gradually shift boundaries while employing trial balloons and cautious pressure.

31. I manage from strength and determination, not empathy and humility; I assert and maintain control and do not find it essential to change in response to different insights or self-realizations.

32. I respond to the need of the moment, jump from issue to issue in looking for, maximizing, and grasping at opportunities in the random succession of time and issue fragments that crowd my day.

33. I periodically shift between chaos and continuity, recognize the value of both the clear and the ambiguous through managing ambivalently, and provide explicit place to the unknown value of things.

34. I appear imprecise yet resilient, versatile and inconsistent in balancing various matters and making decisions and figuring out what to do despite uncertainty, great diversity and an enormous amount of potentially relevant information.

35. I team numerical goals with goals that satisfy people’s most basic psychological needs in serving the best interests of employees as well as the company, and harmonizing and maximizing (a knitting together of) human and technical resources.
5. I harness all the major motivational forces including those to optimize my potential, tap the energy and creativity of the organization as a whole and achieve maximum good for the total organization.

6. I adapt to shifting circumstances, make adjustments, know when and where to change from one stance to the next, and blend thrusts together as opportunities permit to slowly create new logical cohesion in responding to the law of the situation.

7. I take a total systems focus for change including the educational, technological, economic, and other cultural elements which are pre-requisite to organizational behavior changes, the importance of the family as a powerful environmental force for change and the complete interconnection between organizational and cultural values.

8. I view work behavior as being the result of a complex system of forces based on the variability of tasks, people, and the system of managing, the organization more like a dynamic modern weapons system rather than fixed fortifications, and whose effectiveness is dependent on complex forces in and out of the organization.

9. I view the manager as playing many roles -- leader, team member, politician, representative, specialist, head of family, etc. -- very complex, with many facets like a diamond whose leadership style can be understood in relation to the personality of the followers and characteristics of the situation.

10. I look for strengths in others and put up with weaknesses; I tolerate failure, encourage dissent and make allowance for the uniqueness of people including desires to pursue outside projects.

11. I maintain a positive and sympathetic attitude towards feelings and opinions of personnel, show confidence in them and treat them as adults in friendly and considerate ways.
43. I have high expectations of employees, expect them and create the environment for them to perform their best while recognizing their needs for autonomy, participation in decisions, and a share in the rewards of the company's success.

44. Recognizing that different people have different needs, I provide employees with the right tools to do the jobs expected, visit and coach them, and show recognition both for their performance and the power they do possess for goal achievement.

45. I initiate communication at the lowest levels of management, provide for joint consultation and collaboration, promote awareness of my priorities, and intense free exchange of opinions in vigorous, open debate.

46. I maintain a highly visible and accessible presence and meet the need for good communication by promoting verbal plus other communication channels and openly discussing the philosophy and goals of the company.

47. I hire and make assignments of key personnel myself and reinforce my efforts through changes and personnel movements in the organization.

48. I nurture my professional reputation and try to look and behave in ways others respect.

49. No matter how high I climb in the organization I maintain true friendships with those on whom I depend, and manage, cultivate, and interact with them and others and develop greater attachment of everybody to the bottom line.

50. I spend the vast majority of my work time with organization personnel and others and try to take charge of my relationships and develop a social system for interaction and mutual trust and confidence.
1. I am personally involved in promoting and monitoring the development of my managers through job rotations, internal promoting, training, stretching them, and educating by my example.

2. I build strong consensus and stable, workable coalitions and foster support and cooperative effort toward the organization and its objectives.

3. I develop high group loyalty, harmony, and cooperative attitudes in promoting teamwork and a pulling together within the team I lead.

4. I try to make others feel legitimately obliged to me and I am comfortable in investing and using my power and influence to secure a high rate of return.

5. I use various behavior in influencing and persuading others directly or indirectly and willingly manage and influence the performance of others to solidify my position.

6. I slice through the routine and ritual, compete for "air time" and am persistent and determined in getting things done whether in analyzing problems or in self-discipline.

7. I believe in strong leadership and giving myself to the organization and behaving persistently in articulating and implementing visions in compelling ways.

8. I set and demand standards of excellence, am competent, aggressive, hardworking, and have a tough-minded respect for the individual.

9. I use all sorts of interventions and action devices in nudging disorderly processes in desired directions from human relationships to secular efficiencies, and do not attempt to impose abstract order over them.
60. My management behavior and action depends on the specifics of the situation -- no best way to manage all situations; I keep my style consistent with my personality but vary my behavior and adapt it to the situation.

61. I do not put up with weaknesses nor tolerate failure; I believe people should be supportive not dissenting nor should personal uniquenesses or outside projects affect the company.

62. I use and weight cues for insight into others and form a lens from this for viewing, seeing relationships, and developing probability models and awareness about people.

63. I take a complex and subtle approach to the functions of managing, ways of dealing with others including widening and narrowing of dialogues to correspond to subordinate sensitivity and the nuances of interpersonal processes.

64. I emphasize novelty and accept disorderly, non-rational reactive processes, informal and frivolous, with few predetermined rules, and react in an opportunistic way to the flow of events.

65. I trust in intuition, instinct, and sense data and other information "locked inside the brain" and forming an internal strategic data bank.

66. I am sensitive to "face," to cues in everyday behavior, the needs of subordinates and all people, and try to maintain this high level of sensitivity no matter how high I climb in the organization.

67. I maintain high sensitivity to the total system and complex processes in a fast-changing environment, to market needs, and sensitivity to national customs or nuances of the area and other external demands.
<table>
<thead>
<tr>
<th>Response</th>
<th>YOU</th>
<th>OTHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat</td>
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<td></td>
<td></td>
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<tr>
<td>Very</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completely</td>
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</tr>
<tr>
<td>Uncharacteristic</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I am sensitive to the power centers in the organization and the reality to know what is happening in and outside of the company while not undermining the authority of my own managers or other organization personnel.

I know how I come across to others, how my leadership style affects my organization, and am sensitive to the impressions my actions have on others.

I test my perceptions against reality, maintain high accuracy and understanding of my own nature and my values (am tuned into myself), and am alert to my own shortcomings.

I examine myself to find out when and how I work best, when not to make decisions, what people and situations are upsetting, and what I need to learn and relearn.

Rather than assert and maintain control I try to be empathetic, to blend strength with humility, and change in response to new insights and self-realizations.

I have clear answers as to how much I value my life, what I want to do with it, and what I must do to be myself, and promote coincidence among personal, company, and job goals.

I feel a company's character is developed through a shared sense of values different from efficiency alone, shaped and managed by top management, and reinforced through coaching and evangelism.

I believe in creating our company's own future and shaping business values through adhoc opportunities while maintaining a sense of honesty, openness and fairness based on significant meanings and interweaving human values.
PART III. IN THE SPACE BELOW PROVIDE ANY COMMENTS YOU WISH TO MAKE ON THIS INVENTORY, YOURSELF AS AN EXECUTIVE MANAGER, OTHER MANAGERS OR COLLEAGUES, YOUR ORGANIZATION, OR THE JOB OF MANAGING IN GENERAL.
THANK YOU VERY MUCH FOR YOUR RESPONSES
This instrument is designed to be computer processed.
assuring that a manager is responding meaningfully to the inventory. The balance of the items, 72 of them, are the effectiveness-based items derived from the literature.

Exhibit 17 provides the key to understanding which items of the EMI are intended to measure which category or variable of behavior. The number of characteristics originally comprising each category is also shown.

Of interest in this process is the methodology used in developing an item or question in Part II, the principal part of the Inventory. As closely as possible, each item was developed so as to maximize use of each author's original meaning and terminology. An example of this is shown in Exhibit 18. This exhibit explains the derivation of item 2, Part II of the EMI.

As shown in the exhibit, the item was derived from 3 authors: Mantell, Katz, and Drucker. The attempt, as with all the items, was to bring together homogeneous groups of specific characteristics that describe a manager in a particular way.

With respect to Part I of the EMI, the demographic and organizational variables were not identified a priori as nice information to have. As with Part II, they were
## TRI-DIVISIONAL CATEGORIZATION OF EFFECTIVE MANAGEMENT BEHAVIOR

**BY DETAILED SUB-DIVISIONS**

<table>
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<th>Category</th>
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<th>#Char.</th>
<th>Category</th>
<th>Item(s)</th>
<th>#Char.</th>
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<td>Network Building</td>
<td>18</td>
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<td>Entrepreneurining</td>
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<td>18</td>
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<td>Scanning</td>
<td>4,5</td>
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<td>Client Obligation</td>
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<td>Flowing</td>
<td>28,29,30</td>
<td>26</td>
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<td>Boundary Spanning</td>
<td>6,7</td>
<td>12</td>
<td>Motivating</td>
<td>41,42,35</td>
<td>35</td>
<td>Grasping</td>
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<td>6</td>
<td>Communicating</td>
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<td>Ambiguity/Clarity</td>
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<td>Imperative</td>
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<td>17</td>
<td>Resource Building</td>
<td>47</td>
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<td>Adapting/Changing</td>
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<td>Reputation Building</td>
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<td>Personal</td>
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<td>Developing Relations</td>
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<td>Developing Personnel</td>
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<td>Subtlety</td>
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<td>Values</td>
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<tr>
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<td>Sensitivity</td>
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<tr>
<td>Self-Awareness</td>
<td>69,70,71</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**TOTALS:** 16 34 250 10 17 126 11 21 172
Exhibit 18.
DERIVATION OF INVENTORY ITEMS:
EXAMPLE FROM THE CATEGORY `VISUALIZING', ITEM 2

**Item 2:** I take a systems approach in conceptualizing the enterprise as a whole, turn my attention to overall performance, the integrated complexity of interrelated parts, and how our business relates to the industry, community, and the nation.

<table>
<thead>
<tr>
<th>Item Terminology</th>
<th>Author/ Source</th>
<th>Characteristic Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>I take a systems approach</td>
<td>Mantell 1972</td>
<td>421. &quot;Systems approach needed.&quot;</td>
</tr>
<tr>
<td>In conceptualizing the enterprise as a whole</td>
<td>Katz 1955 and 1974</td>
<td>155. &quot;Sees the enterprise as a whole.&quot;</td>
</tr>
<tr>
<td>Turn my attention to overall performance</td>
<td>Drucker 1967</td>
<td>188. &quot;Turn attention from own narrow specially to performance of the whole.&quot;</td>
</tr>
<tr>
<td>The integrated complexity of interrelated parts</td>
<td>Mantell 1972</td>
<td>422. &quot;Integrated complexity of interdependent parts.&quot;</td>
</tr>
<tr>
<td>How our business relates to the industry, community, and the nation</td>
<td>Katz 1955 and 1974</td>
<td>157. &quot;Visualizing relationships of one's business to the industry, community, and social and economic forces in the nation.&quot;</td>
</tr>
</tbody>
</table>
literature-based. Country of origin, number 1, is designed to identify the home country of the manager’s multinational corporation, required for subsequent comparative analyses. Number 2, years of executive and management experience, is designed to assess the relationship between experience and measured effectiveness in Part II. This, in part, tests Condon’s (March 1985) statement that "The best way to learn to manage is from experience" (p. 18), plus Tannenbaum and Massarick’s (1968) perception that "lack of experience and training -- may restrict a leader’s capacities for behavior and his flexibility" (p. 468). Number 3 on training and education relates to the importance Hayes et al (1984) give to training for such countries as the United States, Germany, and Japan; training which creates openness to new ideas and opportunities and taking of initiative (p. 37), and training cited by Tannenbaum and Massarick above and others including Scheer (1982 p. 171).

Number 4 covers authority or freedom to act which in part tests the concept of "choices" (Stewart 1982, Marshall and Stewart July 1981, and others by Stewart) that are open to managers. And number 5, identifying career moves, relates to Marshall and Stewart’s (July 1981) interest in the job moves a manager has made.
The variables such as in Part I of the EMI are called by Likert (in Hersey and Blanchard 1972) "intervening variables" and are important determinants of organizational effectiveness (pp. 96-97). Through correlation analysis their relationship to management behavior will be assessed.

Koopman (1983) labels them as "contingency variables" (p. 5) and Moorhead (1981) as "job and role variables" (p. 197). Irrespective of the labels "Data on the demographic characteristics of respondents," according to Cammann et al (1983), "are needed to allow analysis relating to differential work experiences among members and differential responses to them" (p. 79).
C. RESULTS FROM SEVEN EXECUTIVE MANAGERS

We have previously stated that the focus of this research is on executive managers, in multinational corporations, working in technology-based industries. The Executive Management Inventory was developed for this group. Assessment of no other level or kind of managerial work is intended.

In testing the EMI seven hi-tech executive managers working in six different multinational corporations were identified. The sample was stratified to assure that a reasonable cross-section of industries -- aerospace, electronics, computer services -- and executive levels -- President, Vice-president, Director -- are included. The STANDARD INDUSTRIAL CLASSIFICATION MANUAL (1972) was used in identifying, by code, the hi-tech industries. The listing of each of the seven executives by their SIC code is shown in Exhibit 19 on the following page. The job titles of the executives are as follows:

1 President Electronics
3 Vice Presidents Petroleum

Computer Services
Aerospace
1 Managing Director Electronics
1 Program Director Aerospace
1 Director Aerospace

183
### Exhibit 19.

**EXECUTIVE IDENTIFICATION**

**BY STANDARD INDUSTRIAL CLASSIFICATION CODES**

**OF INDUSTRIES**

<table>
<thead>
<tr>
<th>Executive Group</th>
<th>SIC Div.</th>
<th>SIC Code</th>
<th>Classification Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exec. #1</td>
<td>D</td>
<td>36</td>
<td>Electric and Electronic Equipment/Communication, Components</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>48</td>
<td>Communication/Services</td>
</tr>
<tr>
<td>Exec. #2</td>
<td>B</td>
<td>13</td>
<td>Oil and Gas Extraction</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>29</td>
<td>Petroleum Refining/Products</td>
</tr>
<tr>
<td>Exec. #3</td>
<td>I</td>
<td>73</td>
<td>Business Services/Personnel, Computer, Management</td>
</tr>
<tr>
<td>Exec. #4</td>
<td>D</td>
<td>36</td>
<td>Electric and Electronic Equipment/Communication, Engine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37</td>
<td>Transportation Equipment/ Aircraft</td>
</tr>
<tr>
<td>Exec. #5</td>
<td>D</td>
<td>36</td>
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<td></td>
<td></td>
<td>48</td>
<td>Communication/Services</td>
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<td>Exec. #6</td>
<td>D</td>
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<td>Exec. #7</td>
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<td>36</td>
<td>Electrical Electronic Equipment/Communication, Engine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37</td>
<td>Transportation Equipment/ Aircraft</td>
</tr>
</tbody>
</table>
Each executive was personally contacted and requested to objectively complete the questionnaire and return it through the post anonymously to this researcher. The results from their input are presented in this chapter. The intent here in testing the EMI is to present a range of results that (1) are possible to obtain from the EMI for the purposes of measuring and assessing management behavior, and (2) can be used in assessing the psychometric integrity of the instrument. In achieving this both questionnaire and interview approaches were used. These two field research methods are widely used for "systematic data collection" and provide an "inside view" of an organization and its people (Bouchard 1983 pp. 368-385). But the researcher must, according to Bouchard,

"...cast himself in the role of an 'honest inquirer'. An inquiring stance is important at all levels in the status hierarchy, but probably increases in importance with the expertise and status of the respondent. The higher his status, the more valuable his time and, therefore, the more critical it is that he perceive the inquiry as a valid one, rather than perfunctory. -- under conditions of 'trust' people find it rewarding to discuss what they know well" (p. 369).

The statistical results will principally be presented in this section; that is, input of the seven executives to Parts I and II of the EMI.

Part I. Demographic/Organizational Variables

All executives in the sample of seven worked for American
multinational corporations in an overseas setting of a host country. Excluding the country of origin (question 1), the balance of the intervening variables of Part I yielded 10 pieces of background information on each executive. This provided 70 individual response items on the executive group. These are shown in Exhibit 20. (Part II results are also shown in the exhibit. They will be discussed subsequent to Part I.) The exhibit is a computerized printout of the overall results. Means, standard deviations, standard errors of the mean, etc. are included.

Question 2c of Part I on the total number of years as a manager (TOTL-MGT) shows that the executives have served a total of 153 years in management positions. Of this total, 89 years were at the executive level and 64 years as a mid-level manager and below. This ranged from a low of 10 years of experience (Minimum Value) for one executive (which in fact was executive #6) to 34 years experience (Maximum Value) for another executive (which was executive #3). The mean or average was 21.9 years per executive.

Question 3 (TOT-TNED) covered years of management training and education. This showed a total of 36 years for all executives, the average being 5.1. Of the 5.1, 1.4 years was for company-sponsored management training (MGT-TRN) and 3.7 for management education in a university (MGT-ED). This is
<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>N</th>
<th>SUM</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
<th>STD. ERROR OF MEAN</th>
<th>MINIMUM VALUE</th>
<th>MAXIMUM VALUE</th>
<th>RANGE</th>
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MAY 20, 1985
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Ph.D Thesis

followed by question 4 (AUTH-ACT) the amount of authority or freedom to act. The average for this was 8.1 showing a large amount of authority.

The last question, question 5 (TOTL-MVS), concerned career moves. This showed an average of 9.3 per executive -- 4.0 moves within their present company (MVS-PRES) and 5.3 in other companies (MVS-FRMR). Correlation analysis between these questions in Part I and the results from Part II will be discussed in the "Validity and Reliability" section of this chapter.

Part II. Management Practices and Characteristics

This part of the EMI provides for the measurement of specific management behavior. The intent is to assess the whole manager, to make a comprehensive assessment of each manager and groups of managers along 72 dimensions or characteristic groups of behavior. These 72 dimensions are categorized into 37 scales identifying patterns of executive behavior. As derived from the literature, effective executives working in technology-based industries; i.e. those characterized by a high rate of change and keen competition such as in a multinational environment, are expected to behave in a manner similar to that described by the 72 variables. These are NOT intended as (1) categories descriptive of all managers, nor are they intended
Ph.D Thesis

as (2) the one best way to manage; i.e. a universal theory of management. Neither are they intended as (3) a static representation of management behavior. They ARE intended for:

Executive level managers, in Technology-based industries, working in Multinational corporations

This is a relatively homogeneous environment with a high degree of congruence among situational forces impacting on the various organizations and their people. It reflects as Burns and Stalker had originally identified, the "organic system" of management -- which is "best adapted to conditions of change," and whose "limits of feasible action are set more widely" (pp. vii-viii).

The results from Part II of the EMI identifying the practices and characteristics of the seven executives are shown in Part II of the previous exhibit, Exhibit 20. The exhibit is keyed sequentially to each item of the EMI. For example, the number 02 on the upper left of the exhibit represents item #2, one of two questions covering the category "Visualizing" (VISUL). (Item #1, if you recall, is an antonym of #28 and along with items 31 and 61 is not included in the results.) The average value for item #2, based on a scale of 10, is shown as 5.9 under the "Mean" column. The standard deviation (variation around the mean) is 2.3, the standard error of the mean (standard deviation of the sampling distribution) 0.9, and the
variance (mean of the sum of the squared deviations from the mean), on the far right of the exhibit, is 5.5 (Glossary in Roberts 1979 pp. 359-362). The range of 7.0 for item #2 is mirrored in the minimum value of 1.0 and maximum value of 8.0. The mean values and other statistical data can systematically be derived from the exhibit for each of the 72 items. The overall mean for Part II (not identified in the exhibit) is 6.3.

The highest value achieved for any item is 8.1. This was for item #15 one of the two items on "Strategyzing." The lowest was 2.1. This occurred for item #34 one of the two items on "Ambiguity/Clarity." Such a rank order designation of the results is shown in Exhibit 21.

The scale of 1 to 10 at the top of the exhibit is a duplicate of that found in the questionnaire. The intent is to show properties of an "interval scale." That is, the numbers have equal intervals -- the distance between each number is equal -- "and that such equality is psychologically meaningful to the user. If this assumption can be made, then a far greater variety of statistical models are available for data analysis and interpretation" as opposed to a more restricted "ordinal scale" with unspecified intervals or a "ratio scale" which assumes an absolute zero point (Williams 1979 pp. 15-20).
## Exhibit 21. PROFILE OF MOST TO LEAST CHARACTERISTIC BEHAVIOR OF SEVEN EXECUTIVES

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It is interesting to note that when we relate the statistical results, using the 10-point scale, to the Tri-Divisional Model of Management used as the framework in this research -- Analytical, Social, and Emotional R -- 4 of the 5 highest values fall into the Analytical division or category. They are item 15 (Strategyzing) with 8.1; item 10 (Technological Imperative) with 8.0; item 14 (Focusing) with 7.9; and item 24 (Diagnosing) also with 7.9. The other top 5 item was 48 (Reputation Building) which falls into the Social division.

On the other hand, of the 5 items with the lowest values, 4 fall into the Emotional R division. They include item 34 (Ambiguity/Clarity) with 2.1; item 32 (Grasping) also with 2.1; item 33 (the second Ambiguity/Clarity) with 2.7; and item 64 (Reacting) with 3.3. Item 55 (Influencing), the 5th item with 3.9, falls into the Social division.

What we are beginning to see here are the relative strengths and weaknesses of the executives with respect to the 72 variables of the EMI. The executives appear to be strong in the Analytical factors of the manager's job and weak in the Emotional R factors.

Using the same rank order designation as Exhibit 21, these results as grouped into the Tri-Divisional Model are shown in
Ph.D Thesis

Exhibit 22. At the bottom of this exhibit are the means for each of the three divisions. They are:

- Analytical 6.8
- Social 6.4
- Emotional 5.4

As previously mentioned, Emotional R is again lowest. This division is the least characteristic of their behavior and management practices. They were, in other words, weak in the ebbs and flows, the contrasts between the clear and the ambiguous, the subtle, reacting to opportunities, and organizational values of essence.

To elaborate further on the strengths and weaknesses of the executives, 6.3 (the mean value of all the executives) will be used as a cutoff point. Values 6.3 and above will identify strengths; values below 6.3, weaknesses. Relating this to the previous exhibit, Exhibit 22, we find under "Analytical" that 23 of the 34 items (67.6%) have values 6.3 or above. Over two-thirds of these items, then, reflect strong characteristics of the executives. The "Social" division shows a similar response with 11 out of 17 items (64.7%) having values 6.3 and above. The "Emotional R" division, on the other hand, has only 8 out of 21 items (38.1%) with values 6.3 or above. The executives are weak, then, in over 60% (61.9%) of these characteristics.
Exhibit 22.
EXECUTIVE RESPONSES BY TRI-DIVISIONAL CATEGORIZATION OF EFFECTIVE MANAGEMENT BEHAVIOR

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Total Categories: 16 10 11
Total Items: 34 17 21
Mean: 6.8 6.4 5.4
Ph.D Thesis

(For a further discussion of this see the viewpoint article shown as Attachment D in the "Appendix" of this thesis: "Mastering 'Dynamic Complexity' the Key to Managing Change" by Brianas. This writing appeared October 1986 in INTERNATIONAL MANAGEMENT, published by McGraw-Hill.)
D. EXECUTIVE MANAGEMENT PROFILES

In exploring possible analytical advantages of the Executive Management Inventory, patterns of responses will be examined for each of our sample of seven executives. This may be considered "grist for the mill" yet in evaluating the efficacy of a new research instrument comprehensive analyses may be important to assure that the issues it is intended to examine are adequately covered. Maher and Kur (June 1983) have stated, "Standardized questionnaires tend to be general. If you have specific issues you want to explore, it may be to your advantage to construct an original questionnaire" (p. 100).

The original questionnaire developed for this research lends itself to the analysis of managers in aggregate, as was presented in the previous section, as well as managers individually. This section will analyze each manager by providing an individual response pattern for each and exploring the implications of this.

Exhibit 23, on 7 pages, identifies the "Response Profile" of each of the seven executives. From this several analyses are possible. For example, the peaks (on the right side of each exhibit) and valleys (on the left) immediately identify the strengths and weaknesses of each executive as well as the more moderate (average) responses. This is clearly shown on the
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**Executive #7**

**RESPONSE PROFILE EXECUTIVE MANAGEMENT INVENTORY**

1. Completely Uncharacteristic
2. Completely Characteristic

**ITEM/CATEGORY**

- 01 VISUL
- 02 VISPAN
- 03 SCAN
- 04 TMBLG
- 05 PERSD
- 06 REPBL
- 07 DIAGN
- 08 ADPCH
- 09 ADPCH
- 10 PLURA
- 11 MOTIV
- 12 COMH
- 13 RESHL
- 14 DEVRE
- 15 VARBE
- 16 INSGH
- 17 SUBTL
- 18 REACT
- 19 INTUI
- 20 SENSI
- 21 SELFA
- 22 VALUE
first page of the exhibit which identifies the responses of Executive #1.

The "Visualizing" category, comprised of items of 2 and 3, are identified as "Completely Uncharacteristic" of this manager. Both have a value of "1" as do 8 other items shown on the left of the chart. On the other hand, starting with the category "Scanning" on the upper right, comprised of items 3 and 4, 19 items show a value of "10". These depict practices "Completely Characteristic" of the manager.

It is obvious that there are many extreme behaviors peculiar to this manager not readily observable through statistical averages. Of the 72 items in this EMI, 40.3% depict very extreme behavior -- 13.9% with values of "1" and 26.4% with values of "10". His remaining behaviors -- 43 items of 59.7% -- are distributed between these extremes.

Executive #2, on the other hand, displays a more moderate response profile. Only one item (#58) has a value of "10" covering the category "Personal Drive" which this manager shows a high degree of. And on the left of the exhibit one item (#32) with a value of "1" shows this manager clearly lacking skills in "Grasping" at opportunities.
The results from these 7 response profiles are summarized in Exhibit 24. As can be seen, the executive behaviors are distributed throughout the 10-point continuum. Executive #1 displays the most extreme behavior pattern followed by Executive #3. Conversely, Executive #6 reflects a more compressed range of behavior with a more definitive cluster around the center.

The responses shown in this exhibit are graphically depicted in the following exhibit, Exhibit 25. Looking at these graphs we are able to distinguish several rather distinct styles of managing. The labels depicting these styles are shown here only as possible results identifiable from research using the EMI. For example, Executive #1 can be considered a "Manic" manager capable of swinging from one extreme to the next. Executive #2 can be depicted as having a "Tri-Modal" style of managing with 3 rather distinct modes visible if lines were drawn connecting the top of each bar on the graph. Executive #3 is "Bi-Modal" with frequencies bunching to the right (and the distribution trailing to the left; a negative skew). Executive #4 has a "Normal" style or one of "Central Tendency" as does Executive #6 -- both reflecting behavior patterns typical of the normal curve. Executives #5 and #7 are Bi-Modal, as was Executive #3, again with negative skews.
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<th>Completely Uncharacteristic</th>
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<td>10 - 4 1 2 7 8 8 13 19</td>
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Exhibit 24. Matrix of Individual Response Levels of 7 Executives To 72 Management Practices/Behavior On a 10-Point Scale
Exhibit 25.
INDIVIDUAL RESPONSE PATTERN OF 7 EXECUTIVES TO 72 MANAGEMENT PRACTICES/BEHAVIOR ON A 10-POINT SCALE

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<td>RESPONSES</td>
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To summarize, analyses of these response profiles reveal four rather distinct general styles of managing:

- Manic
- Tri-Modal
- Bi-Modal
- Central Tendency

From the details possible on each of the managers, such as by examining their responses to each of the 72 variables, through to the more general analysis of overall style, application of the EMI for analysis of individual managers has its potential.

To consider here is the implication of the EMI for use in:

- Personnel Research
- Performance Appraisal
- Personnel Hiring
- Training & Development
- Organization & Management Assessment

These will be referred to further on in this thesis.
E. EXECUTIVE INTERVIEWS

As mentioned earlier in this chapter, the executives used in testing the EMI were each personally contacted by this researcher. (Bouchard 1983, "We recommend transmitting questionnaires in person, if at all possible" p. 383.) Five of the executives were contacted face-to-face and two by virtue of being located at a distant city were contacted by phone. Though their time was limited, due to their position, each forwarded the completed questionnaire to this researcher. Respondent anonymity was assured. (Cammann et al 1983, "The field practices -- must provide -- assurances of anonymity and confidentiality" p. 77.)

Following the collection and review of the 7 questionnaires, each of the executives was contacted for brief interviews concerning their impressions of the EMI and the research in general. The focused interview approach was followed. (Bouchard 1983, "The focused interview is a specialized procedure developed for use on persons who are known to have been involved in a particular situation -- one which the investigator has controlled and analyzed provisionally prior to the interview" p. 374.)
Five specific questions comprised the structured content of the interview. Interviews were ultimately held with 6 of the 7 executives (the work of the 7th -- Exec #1 -- took him out of the country for several months). The five questions basically covered:

1. Problems in completing the inventory
2. What would you change
3. Overall impression of the inventory
4. Viewing your company vis-a-vis competitors
5. Feelings on the tri-regional analysis proposed in this research

The results from each interview follow in Exhibit 26. These results are briefly summarized below.

Question #1. The instrument was a little long. Rating "others" was a problem.

Question #2. Information on "others" is subjective. I would eliminate it.

Question #3. It is a good instrument; well presented.

Question #4. We are in a very competitive business. We have to know what's going on.

Question #5. Americans are competitive but pretty structured; the British not so hard working; Europeans conservative; and Japanese good but can't deal well with others outside their company.

A seventh interview was held with an educator schooled in survey research methods and a graduate of the University of Michigan. His comments are shown in Exhibit 26-7.
Exhibit 26-1

Interviewee: Exec. #2
Job Title: Vice-President
Field: Petroleum
SIC Code: #13 and #29

INTERVIEW QUESTIONS

1. What problems if any, did you have in completing the Executive Management Inventory?

No problem with the instrument itself. The questions asked were ambiguous, though, with respect to the "Others" category.

2. What, if anything, would you change?

I would question the need for information on "Others". I would probably eliminate it.

3. What is your overall impression of the instrument?

It is okay. I have used the Hersey and Blanchard situational instrument in the past.
4. How do you view your own company with respect to that of your competitors?

We are in a very competitive business — the petroleum industry. We are subject to the OPEC price of crude oil and the Rotterdam spot market price. We have to know what is going but we have no control over it. Anti-trust legislation also impacts on us.

5. The intent of this research is ultimately to analyze the differences among three groups of executives in high-technology companies: English-Speaking (U.S. & U.K.), Continental European (Dutch, French, or German), and Far East (Japan and Korea). What are your feelings on this and the possible results from it?

My guess is that the results will be interesting. We deal with all nationalities. The Japanese do not consider these instrument items. The United Kingdom is also different from the United States. I have spent some years in the U.K. Basically they are not as hard working as Americans.

I feel we need to use information on the styles and practices from these various areas — a different instrument for each. But maybe much of this has been incorporated into your inventory.
**INTERVIEW QUESTIONS**

1. What problems if any, did you have in completing the Executive Management Inventory?

There was no specific problem. It was a little long but I believe it covered the spectrum of management skills.

One factor that should be identified in such a survey is the age of the executive. If one is close to retirement he is not interested in learning. He will not change. Other factors important may be the level of the executive, the size of his organization, and how many managers he is responsible for.

2. What, if anything, would you change?

The "Others" column was difficult. Everyone thinks he is better than the other guy. This is subjective, so it is difficult. The results, though, are probably good. It is an interesting part of the survey.

3. What is your overall impression of the instrument?

It is an excellent survey. As in all such attempts it could be improved over time, but it is pretty close to picking out management actions and thought processes. The length of the statements are also okay. I will be interested in the overall final results.
4. How do you view your own company with respect to that of your competitors?

My company is more stable, more reliable, more conservative, more strategic-oriented -- concerned for the long haul. We have a 20-year plan. We are interested in establishing a base and being reliability-oriented. We are moving more into high-technology through joint ventures and use of computer technology.

5. The intent of this research is ultimately to analyze the differences among three groups of executives in high-technology companies: English-Speaking (U.S. & U.K.), Continental European (Dutch, French, or German), and Far East (Japan and Korea). What are your feelings on this and the possible results from it?

This is difficult to compare. There is a trend towards internationalism. We have 27 nationalities in our company -- many westerners and others. Everyone is respected for his contribution. Europeans, I believe, are more conservative. The Japanese can not deal well with others outside their company. They can build but not maintain.
Interviewee: Exec, #4
Job Title: Director
Field: Aerospace
SIC Code: 36 and 37

INTERVIEW QUESTIONS

1. What problems if any, did you have in completing the Executive Management Inventory?

I have completed similar batteries in the past. This one was long and the questions were asked differently but I had no problems with it. It was fine. The questions convoluted. I would have preferred shorter ones but it was okay.

2. What, if anything, would you change?

I had to put myself in someone else's shoes for the "Others" category. It wasn't easy.

3. What is your overall impression of the instrument?

Fine. It is a good instrument. There are certain behaviors that make for successful managers. Much depends on the company personality. But there are certain trends.

You may want to segment the different types -- the variety of management types. Types depend on the situation, the people. A manager has to be able to make correct decisions 60% of the time.
4. How do you view your own company with respect to that of your competitors?

This is an extremely competitive world. We are one of the leaders. We have to know what is going on. And we have to function differently for different areas.

5. The intent of this research is ultimately to analyze the differences among three groups of executives in high-technology companies: English-Speaking (U.S. & U.K.), Continental European (Dutch, French, or German), and Far East (Japan and Korea). What are your feelings on this and the possible results from it?

In Japan there is much greater awareness of what it takes to manage effectively. We (the Americans) wrote the theory on management. The Japanese practice it. We are pretty dogmatic.

The last recession in the United States brought changes. Companies are more cost conscious now than before 1980. But the Japanese system can't be adapted by us. Our society is different.

With respect to the Europeans, we are more structured than they are. But we are further ahead in quality control.
1. What problems if any, did you have in completing the Executive Management Inventory?

It is very difficult to disassociate oneself from personal feelings in how to manage others. It is difficult to assess managers from what I expect of them. The kind of business you are in has importance relevant to this. Awareness to the instrument should be related, therefore, to the specific type of business you are in.

2. What, if anything, would you change?

My perspective is a little broader. An explanation in the questionnaire may be needed to clarify the difference between development activities which occur in the States (for an American company) and application activities which occur elsewhere in the world.

3. What is your overall impression of the instrument?

It is extremely well done.
4. How do you view your own company with respect to that of your competitors?

Ours is proprietary. There are not many other companies involved in our business. We are really not in a highly competitive business since we are the competition. No one has the system that we have. Of those that are close ours is better.

Of course, we must stay on top. But we ask, what are my strategies to sell to my customer?

5. The intent of this research is ultimately to analyze the differences among three groups of executives in high technology companies: English-Speaking (U.S. & U.K.), Continental European (Dutch, French, or German), and Far East (Japan and Korea). What are your feelings on this and the possible results from it?

We (my company) would show very favorably. We do not compete against French or other European firms. Ours is a very high technology business. The Japanese are 30 to 40 years behind us in technology. They, as a matter of fact, are the 3rd or 4th biggest customer we have.
1. What problems if any, did you have in completing the Executive Management Inventory?

It was a little too long. The problem I had was with "Others". That is, comparing my role and trying to determine that of others. In doing so I may think of superiors or subordinates. I felt I would rate myself higher in comparison to others, including superiors.

2. What, if anything, would you change?

The section on "Others" may best be divided into type of others.

3. What is your overall impression of the instrument?

Very Good.
4. How do you view your own company with respect to that of your competitors?

My company is leading the industry in aerospace and defense. We are one of the most profitable with return on equity in the upper 20% area.

We believe in innovation. In 1983 our President won many awards for his corporate management results.

5. The intent of this research is ultimately to analyze the differences among three groups of executives in high-technology companies: English-Speaking (U.S. & U.K.), Continental European (Dutch, French, or German), and Far East (Japan and Korea). What are your feelings on this and the possible results from it?

I don’t think we have lost our competitive edge. We have forged ahead in high technology. But like the smoke-stack industry, we had to get back to basics -- to modernize our plants and equipment.

The dollar is strong. That is why we are losing out. But who is leading in space?
1. What problems if any, did you have in completing the Executive Management Inventory?

It was a little long. I had to catch myself from rushing through it. Some questions as phrased seemed to make the assumption that someone pays attention to people more than they should.

2. What, if anything, would you change?

When I finished the inventory there was a place for comments. I did not write anything because I felt it was great.

3. What is your overall impression of the instrument?

It was great. I did not have to re-read the statements. It was well presented.
4. How do you view your own company with respect to that of your competitors?

It is damn competitive on a daily basis -- cost competition and technical competition. It gets people excited a bit. Have to be innovative, and have to work twice as hard.

There has been criticism of GM's not paying attention to the front end of the business -- the marketing side -- as opposed to the production and delivery end. The ratio should be 80/20 in favor of marketing. This is where the competition really is. Our company has been doing just that and it has paid off in new business. Our company President had to spend several months in Washington, D.C. to help do it.

5. The intent of this research is ultimately to analyze the differences among three groups of executives in high-technology companies: English-Speaking (U.S. & U.K.), Continental European (Dutch, French, or German), and Far East (Japan and Korea). What are your feelings on this and the possible results from it?

A Japanese firm is under contract to us on aerospace matters. We are not very pleased with them.

I have worked with European executives on the continent and enjoyed the relationships irrespective of the language barriers.

Executives from the United Kingdom are not the same as the U.S. or European. They do not work as hard.
1. What problems if any, did you have in completing the Executive Management Inventory?

As requested, I reviewed it from an Educator's point of view and my own experience in survey research as a student of the Survey Research Center, University of Michigan.

2. What, if anything, would you change?

The questions definitely address your objective. I would rephrase them, though, more succinctly. The simpler the sentence structure the more comprehensible it is. #48, for example, is very clear and easy to follow compared to 43 which is involved.

I would change the 10-point scale to 5-point. I would keep the "Others" category but I would maybe identify them as subordinates, peers, or superiors.

3. What is your overall impression of the instrument?

It is an excellent instrument and has so high quality of appearance.

Does it measure effectiveness? Definitely.
4. How do you view your own company with respect to that of your competitors?

Not applicable.

5. The intent of this research is ultimately to analyze the differences among three groups of executives in high-technology companies: English-Speaking (U.S. & U.K.), Continental European (Dutch, French, or German), and Far East (Japan and Korea). What are your feelings on this and the possible results from it?

This research is fascinating. I had a sample of 140 in a research study and only threw out two. So people will be honest in responding. Your three built-in "dummy" questions also serve as a check.

The three groups will provide a good measure of management effectiveness.
Based on the interviews and detailed analysis of the test results, the EMI was subsequently revised. The questions were shortened with the ultimate meaning of each kept in tact. The "others" category was eliminated (as was also recommended by the executives in the comments section, Part III of the inventory). These and other revisions will be covered later in the follow-on chapter, Chapter V.
Ph.D Thesis

F. PSYCHOMETRIC DATA

Campbell (1963) states that "The reason for psychometric theory's existence is the obvious fact that measurement of many important human characteristics are not error free and relationships between these characteristics and other variables -- are not perfect" (pp. 185-186). What follows in this section is discussion and analysis of some of what Campbell above calls "core" topics of psychometric theory (p. 185) as they relate to the Executive Management Inventory.

1. Factor Analysis

Factor analysis is a statistical method which falls into the category of multivariate analysis; that is, it refers to analysis of several variables. Williams (1979) defines it as:

"...the degree to which clusters of intercorrelated variables may represent fewer underlying, more basic, hypothetical variables. -- Factor-analytic procedure takes the variance defined by the intercorrelations among a set of measures and attempts to allocate it in terms of fewer underlying hypothetical variables. These hypothetical variables are called factors" (pp. 161-162).

According to Kerlinger (1973):

"Factor analysis serves the cause of scientific parsimony. It reduces the multiplicity of tests and measures to greater simplicity. -- Because of its power and elegance, factor analysis can be called the queen of the analytical methods" (p. 659).
We will recall that the original Ohio State Studies used the factor analytic method in developing underlying factors representative of leadership. Much of this original work was based on the study of foremen. Follow-on work included "A group of three hundred Air Force crew members (who) had answered the 150 items with respect to their commanders. These data then were analyzed to determine the underlying factors which were characteristic of leadership .." (Sutermeister 1969 p. 381). This led, as previously mentioned, to the two-factor theory of leadership based on "Consideration" and "Initiating Structure" (p. 382).

Although it is "powerful" and "elegant" there are also "serious criticisms of factor analysis" (Kerlinger p. 688). "The factors," it is said, "are simply artifacts of the method. They are averages that correspond to no psychological reality -- other than in the mind do the factor analyst" (p. 688). But Kerlinger dismisses this and other arguments by quoting Thurstone. He states:

"As scientists we have faith that the abilities and personalities of people are not so complex as the total enumeration of attributes that can be listed. We believe that these traits are made up of a smaller number of primary factors --. It is our ambition to find some of these abilities and traits" (p. 689).

While important, as previously stated, such that it "takes the variance defined by the intercorrelations among a set of measures and attempts to allocate it in terms of fewer
underlying hypothetical variables" (Williams 1979 p. 162), questions of its oversimplicity of the complex nature of man has raised some concern.

In an entire chapter devoted to "Consideration" and "Initiating Structure," Bass (1981) concluded:

"...in the interest of uncovering some heretofore hidden complexities of leader behavior and leader influence, it would seem desirable to explore the possibilities of a multifactor approach rather than rest content with a two-factor solution" (p. 392).

Original documents of Ralph Stogdill (1963 and 1970) obtained by this researcher from The Ohio State University clearly shows this reconsideration of a two-factor theory as hypothesized through the factor analytic method. Stogdill (1963) stated, "It has not seemed reasonable to believe that two factors are sufficient to account for all the observable variance in leader behavior" (p. 2). He then went on to develop, through empirical research, a 12-variable description of leader behavior.

Stogdill also supports Halpin in "that two factors are not sufficient to describe all the complexities of leader behavior (from Stogdill 1970 p. 2). Such complexities of behavior are supported by Morse and Lorsch (1970). The best way to deal with these complexities, they state, is not "Theory X or Theory Y" or a "Universal Theory" but through a "Contingency Theory."
Ph.D Thesis

The basic deficiency with earlier approaches is that they did not recognize the variability in tasks and people which produces this complexity" (p. 68).

The importance of factor analysis yet concerns over it are identified here due to its critical position in the psychometric field and hence its relevance to the EMI. Measurement instruments are not error free and yet, with the complexity of organizational and leader behavior, the relationship between this instrument, the EMI, and the variables of effective management behavior it is attempting to measure should be sound and of good predictive relevance.

The approach taken by this researcher with respect to underlying factors is similar to that of the CPI -- California Personality Inventory (Gough 1975). Each of the 37 scales of the EMI is intended to measure an important facet of management behavior in organizational environments characterized by a high degree of change. The total of the scales is intended to provide a comprehensive survey of an executive manager's practices and characteristics. Factor analysis, if used, would by nature of the method eliminate some of the underlying factors and otherwise attempt to further simplify the structure of the instrument. This would not preclude future use of this method for the EMI but the intent of this research is to measure the whole manager whose practices and characteristics
of effectiveness are derived from literature-based empirical research.

The subsequent method of scale construction used for our instrument is comparable to the "empirical technique," that of developing inventory statements around a "criterion dimension which one seeks to measure" (Gough 1975 p. 18). The scales are grouped for convenience into three broad divisions derived from research-based management models (Katz, Burgoyne and Stuart, and Stewart). The underlying logic here is analysis and interpretation of the results (which through computer technology is greatly simplified), not factorial analysis (Gough p. 5).

2. Validity and Reliability

In Morrison's et al (March 1978) comprehensive review of 24 management instruments, evaluation of the psychometric properties of the instruments was based on their "validity" and "reliability" (pp. 14-16). Validity is "the degree to which researchers measure what they claim to measure -- (and) Reliability (is) the external and internal consistency of measurement" (Williams 1979 pp. 20-21). In other words, the EMI would be valid if it measures what it is supposed to measure (it is truthful) or what Williams also calls its "goodness of fit" (p. 21), and reliable if the same or similar results occur over time (it is consistent). "The reliability
Ph.D Thesis

and validity of a feedback instrument are critical to the value
and meaning of the information generated in the survey process"  

Validity

Kerlinger (1973) points to the importance of validity. He
states:

"The subject of validity is complex,  
controversial, and peculiarly important in
behavioral research. Here perhaps more than
anywhere else, the nature of reality is
questioned" (p. 456).

In 1966 a joint committee composed of the American
Psychological Association and the National Council on
Measurements Used in Education agreed on three classifications
of validity. Kerlinger identified them ( p. 457) as:

Content Validity

Criterion-related Validity

Construct Validity

Content Validity:

This classification points to the concept of
representativeness.

"Content validation is guided by the question:
Is the substance or content of this measure
representative of the content or the universe
of the content of the property being measured?
-- Content validation consists essentially of
judgment. Alone or with others, one judges the
representativeness of the items" (Kerlinger p.
458).
Ph.D Thesis

In assessing the content validity of the EMI we refer to the interview responses in the previous section. Executive managers were asked: "What is your overall impression of the instrument?" The responses included:

"It is an excellent survey. -- it is pretty close to picking out management actions and thought processes."

"It is extremely well done."

"It was great."

"It is an excellent instrument and has so high quality of appearance. Does it measure effectiveness? Definitely."

The judgment of these executives is also consistent with the sources from which the items in the instrument were derived: Empirically-based research on management effectiveness derived from the literature. These point to rather high content validity for the EMI.

The EMI can also be said to have high "face validity" relating to expected reactions of the respondents to the instrument; the clarity of its format, its understandability, and overall appearance (Morrison et al March 1978 pp. 20-21). Note: The revised edition of the EMI added to its content and face validity.

Criterion-related Validity:

Schneider (1976) cites two kinds of this validity: (1) Concurrent, and (2) Predictive. Of these "Predictive
Validity," comparing an assessment procedure to some external criterion, is the most critical, and "is always the preferred method for establishing validity" (pp. 127-128).

As with the criterion problem previously discussed,

"The single greatest difficulty of criterion-related validation is the criterion. Obtaining criteria may even be difficult. What criteria can be used to validate a measure of -- effectiveness? Who is to judge -- effectiveness?" (Kerlinger 1973 pp. 459-460).

Though difficult, identifying and predicting future occurrences is not impossible. To assess the EMI on this psychometric property, we will briefly jump to the EMI results of the revised edition to be discussed in the chapter following. In those results, the overall average derived for the executives studied (American, British, Swedish, German, Japanese, and Korean) was 6.50, based on a 10-point scale. This is comparable to the 6.31 obtained through the average of the previous seven executives used in testing the EMI.

As part of the follow-on research of the revised EMI, six General Managers, identified to this researcher as successful, were interviewed. Three of these managers also completed a revised EMI. In each case their EMI results were higher than the average for all other executives. As intended by the instrument, this represents more effective corporate managers.
The instrument was in this case predicting the criterion of effectiveness as judged of the General Managers. The interviews themselves showed these executives to be high caliber managers.

Construct Validity:

"Construct validity is one of the most significant advances of modern management theory and practice -- because it unites psychometric notions with theoretical notions. -- (and is preoccupied with) scientific empirical inquiry involving the testing of hypothesized relations" (Kerlinger 1973 pp. 461-462). "Constructs have been called intervening variables -- processes that in turn account for behavior" (p. 40).

From the demographic or intervening variables in Part I of the EMI, three constructs and their hypothesized relationship to effectiveness (values as measured through the EMI) will be be tested. The three are:

Management Experience
Management Training
Career Moves

The assumption is that these variables (constructs, due to their hypothesized relations) impact on and therefore are associated with executive effectiveness. The intent is to measure this association through correlation analysis.

1. It is hypothesized that on-the-job experience as managers is positively correlated with a manager's effectiveness. The greater the experience the more effective the manager.
2. Secondly, training for managers sponsored by their corporations, is also positively correlated with a manager's effectiveness. The more the training the more the effectiveness. (Management education through a university, as opposed to corporate training, is questionable and therefore excluded.)

3. And third, career moves made by a manager is hypothesized to be negatively correlated to effectiveness. As career moves increase a manager's effectiveness decreases.

Pearson's product-moment correlation (r) is used to derive the strength of the relationships assumed above (Blalock 1979 pp. 381-412). The formula is:

\[
\frac{NSXY - (SX)(SY)}{\sqrt{[NSX^2 - (SX)^2][NSY^2 - (SY)^2]}}
\]

Note: S = Sigma (Sum of)

Using the formula above, the derived correlations of the three constructs in association with effectiveness are as follows:

- Management Experience .78
- Management Training .68
- Career Moves -.64

The first correlation of .78 is significant at the 5% (.05) level of confidence and the second and third (.68 and -.64) at the 10% (.10) level (Roberts 1979 p. 354). NOTE: Scatter diagrams derived from results of the 55 executives to be covered in the next chapter provided correlation estimates of .30, .45, and -.65 respectively for the three constructs above.
Ph.D Thesis

All are significant at the .05 level of significance.

These correlations support the hypothesized relationships. Construct validity of the EMI is therefore assumed and consistent with the results achieved for Content and Criteria-related validity.

Reliability

Now we are interested in testing how consistent or stable the EMI is shown to be over time. Schneider (1979) uses these two terms in identifying two major kinds of reliability: Consistency and Stability (p. 124).

"Consistency," according to Schneider, refers to the extent which two or more approaches (judges, test items, interview questions, attitude items, etc.) yield similar results" and are obtained during the same time frame (p. 126). While some of these approaches were used in this research, this method for obtaining reliability was not pursued.

Stability:

This method of assessing reliability was, on the other hand, clearly pursued. Stability refers to applying the same method at different points in time to see if comparable data are achieved (Schneider pp. 124-125). Kerlinger (1973 p. 451)
Ph.D Thesis

refers to this as the "test-retest interpretation of reliability." It is his "analysis of variance" method (pp.71-91 and 452-454) that will be used in testing the EMI's stability through time.

"A rather direct measure," he states, "of the reliability of the instrument can be obtained by calculating the variance or standard deviation of the error scores (Xe) -- (or) the variances of the X1 and X2 scores --." The calculation method yields a "reliability coefficient." This is based on the relationship between the variances of (1) the individual scores of the instrument presented at one point in time (actual scores, X1) to that of (2) the individual scores of the instrument presented at a later time (true scores, X2).

The formulae for measuring the variance (V) is (p. 72):

\[
\frac{Sx^2}{n}
\]

In this calculation x is a deviation from the mean and Sx' is the sum of the squares of the deviation (of each individual score -- 72 in the case of the EMI).

The follow-on step to obtaining the variances of both the
actual and true scores, which we will label $V_1$ and $V_2$ respectively, is to obtain their ratio. The formulae for the ratio of the between group variances which yields the "reliability coefficient" ($r$), we seek to derive, is (p. 453):

$$\frac{V_2}{V_1}$$

**NOTE:** This is not to be confused with the coefficient of correlation which is the square root of "$r$" above.

Three from our group of seven executives participating in the test of the Executive Management Inventory provided follow-on retest data. The test-retest time span ranged 5 to 10 weeks.

Reliability calculations were made for each of the 3 divisions of the EMI -- Analytical, Social, and Emotional R. Average reliabilities for each of these divisions were respectively $r = .69$, $r = .51$, and $r = .83$. More specifically, the reliability coefficients obtained for each division ranged as follows:

- **Analytical:** Low of .51 to High of .90
- **Social:** Low of .22 to High of .85
- **Emotional R:** Low of .73 to High of .92
A sample calculation using scores on the Analytical division from one executive is shown in Exhibit 27.

As Kerlinger states, from the "differences -- shown under the column labeled 'Xe'; they are 'error scores' -- the instrument is evidently fairly accurate. The calculation of r confirms this impression" (p. 452). In our case $r = .90$.

While some of the reliability coefficients are low, such as .22 under Social, the majority are above .50 including .90 and .92. The importance of these reliability results is in providing a sound probabilistic reading for the stability, through time, of the Executive Management Inventory. The overall findings from the calculations show that this is the case.

Based on this and the previous validity results, there is every confidence that the EMI, while not error free, possesses reasonably sound psychometric properties. Through the testing procedures and results, as discussed in this chapter, the inventory was further improved. The chapter which follows covers these improvements and more specifically the research findings based on results from three worldwide, regional groups of executive managers.
Exhibit 27.
CALCULATION OF THE RELIABILITY COEFFICIENT
OF THE ANALYTICAL DIVISION OF THE EMI: AN EXAMPLE

<table>
<thead>
<tr>
<th>NUMBER OF ITEMS</th>
<th>1st Test</th>
<th>2nd Test</th>
<th>ERRORS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$X_1$</td>
<td>$X$</td>
<td>$X^2$</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>.5</td>
<td>.25</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>.5</td>
<td>.25</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>1.5</td>
<td>2.25</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>1.5</td>
<td>2.25</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>.5</td>
<td>.25</td>
</tr>
<tr>
<td>30</td>
<td>8</td>
<td>.5</td>
<td>.25</td>
</tr>
<tr>
<td>31</td>
<td>7</td>
<td>-.5</td>
<td>.25</td>
</tr>
<tr>
<td>32</td>
<td>9</td>
<td>1.5</td>
<td>2.25</td>
</tr>
<tr>
<td>33</td>
<td>6</td>
<td>-1.5</td>
<td>2.25</td>
</tr>
<tr>
<td>34</td>
<td>5</td>
<td>-2.5</td>
<td>6.25</td>
</tr>
<tr>
<td>$\Sigma$</td>
<td>255</td>
<td>88.50</td>
<td>228</td>
</tr>
<tr>
<td>$\bar{X}$</td>
<td>7.5</td>
<td>6.7</td>
<td>.8</td>
</tr>
</tbody>
</table>

$$V_1 = \frac{\Sigma X^2}{n} \quad V_2 = \frac{\Sigma X_e^2}{n}$$

$$= \frac{88.50}{34} \quad = \frac{79.06}{34}$$

$$= 2.60 \quad = 2.33$$

$$r_{1,2} = \frac{V_2}{V_1}$$

$$= \frac{2.33}{2.60}$$

$$= .90$$
CHAPTER V

RESEARCH AND ANALYSIS

OF ANGLO-AMERICAN,

NORDIC-EUROPEAN,

AND FAR-EASTERN MANAGERS
V. RESEARCH AND ANALYSIS OF ANGLO-AMERICAN, NORDIC-EUROPEAN, AND FAR-EASTERN MANAGERS

A. THE REVISED RESEARCH INSTRUMENT

This chapter covers the 3rd and final phase of the 3-phased systematic process for presenting the field research findings. As identified in the introductory chapter, Chapter I, the objective of Phase 3 is "To apply the final instrument to groups of executives worldwide in technology-based multinational corporations." The focus of this phase is on "assessing the practices and characteristics of the Chief Executive Officer (President, General Manager, Managing Director, Project Manager, etc.) in an international environment."

The beginning of this phase is, in essence, the ending of the last phase, Phase 2, covering the development and testing of the research instrument. Testing of the instrument, the Executive Management Inventory (EMI), resulted in the development of an improved research tool. That instrument, the "Revised Edition" of the EMI, is shown as Exhibit 28.

Overall, the items on the revised EMI are more succinct with the "Others" response column completely eliminated as recommended by the test group. The number of pages also is
EXECUTIVE

MANAGEMENT

INVENTORY

THIS INVENTORY HAS BEEN PREPARED FOR RESEARCH PURPOSES ONLY. ITS INTENT IS TO OBTAIN INFORMATION ON EXECUTIVE MANAGEMENT PRACTICES. THE DATA FROM EACH INVENTORY WILL BE COMBINED TO PROVIDE A COMPOSITE PICTURE OF THE MANAGER GROUP UNDER STUDY, IN NO WAY CAN AN INDIVIDUAL BE IDENTIFIED NOR IS THERE ANY INTENT TO DO SO. YOUR RESPONSES, IN ASSOCIATION WITH THAT OF OTHER EXECUTIVES, WILL ADD TO THE BODY OF KNOWLEDGE IN THE FIELD OF MANAGEMENT AND HOPEFULLY ADVANCE THE STATE-OF-THE-ART AND PROMOTE BETTER UNDERSTANDING.

Prepared by
JAMES G. BRIANAS

Revised Edition

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THIS "EXECUTIVE MANAGEMENT INVENTORY" IS DESIGNED TO ASSESS HOW YOU THE EXECUTIVE MANAGER TYPICALLY PERFORM YOUR JOB. SEVERAL STATEMENTS ARE PROVIDED WHICH DESCRIBE VARIOUS CHARACTERISTICS OF MANAGERS. YOU WILL BE ASKED TO ASSESS HOW CLOSELY EACH STATEMENT COMES TO DESCRIBING YOU. THERE ARE NO "WRONG" RESPONSES. THE RESPONSE THAT IS BEST IS THE ONE THAT REFLECTS HOW YOU HONESTLY FEEL YOU PERFORM YOUR WORK.

THE INVENTORY IS DIVIDED INTO THREE PARTS. PARI_I ASKS YOU TO PROVIDE SOME BASIC DEMOGRAPHIC INFORMATION TO BE USED IN TABULATING THE RESULTS. IN PARI.II YOU ARE TO DESCRIBE, USING A 10-POINT SCALE, HOW CHARACTERISTIC EACH STATEMENT IS OF YOU AS A MANAGER. PARI.III IS BRIEF AND PROVIDES YOU THE OPPORTUNITY TO FREELY COMMENT ON YOUR JOB OF MANAGING.

THE DATA PROVIDED BY YOU WILL BE COMPLETELY CONFIDENTIAL. PLEASE DO NOT PROVIDE YOUR NAME. ONLY YOUR HONEST AND OBJECTIVE RESPONSES ARE REQUESTED. TIME TO COMPLETE THE INVENTORY IS ABOUT 25 MINUTES.

NOTE: Executive Management refers to positions above the mid-manager level.

PART I. TO PROVIDE FOR MEANINGFUL TABULATION OF THE RESULTS PLEASE PROVIDE THE BASIC INFORMATION REQUESTED BELOW.

1. a. Country of origin of your company ________________________
   b. Kind of business it is in _________________________________
   c. Country of your childhood ________________________________

2. a. Your highest education level or degree ____________________
   b. Field of study trained/educated in ________________________
PART I  Continued

3. Years of company-sponsored management training you had (___). Years of formal management education in a university (___ yrs). Total years (___).

4. Years during your career you served as an executive manager (___ yrs). Years spent at other management levels (___ yrs). Total years (___).

5. Years you served as an "apprentice" manager before first becoming a supervisor or manager (___ yrs).

6. Number of years in this country (___ yrs). Years in other foreign countries (___ yrs). Total years overseas (___).

7. Total number of different companies you worked for altogether including the present one (___ companies).

8. Title of your current position. ___________________

PART II. THIS IS THE MAIN PART OF THE INVENTORY. WHAT FOLLOWS ARE SEVERAL STATEMENTS REPRESENTING PRACTICES OF EXECUTIVE MANAGERS. THIS IS WHAT YOU ARE ASKED TO DO:

1. Read each statement carefully.
2. On a scale of 1 to 10 decide how characteristic the statement is of yourself.
3. Place one of the following ten numbers in the box following the statement.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Uncharacteristic</td>
<td>Very Uncharacteristic</td>
<td>Somewhat Uncharacteristic</td>
<td>Somewhat Characteristic</td>
<td>Very Characteristic</td>
<td>Completely Characteristic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Place the number "1" in the box if it is Completely Uncharacteristic. Place the number "10" if it is Completely Characteristic, or use the appropriate values in between.

EXAMPLE:

I represent my company to the local community, present several speeches annually, and serve on the intercity community action committee.

The number "8" shows that this statement is Very Characteristic of you.

5. Be sure to respond to each statement. If for any reason you find it difficult, your best guess would be the most appropriate response.

6. Do not provide a response which indicates how you would like to behave, nor a response you feel may be more acceptable. Simply indicate by a number how characteristic the statement actually is.
1. I employ a rational decision-making process, one in which important decisions are efficiently and decisively made, with no procrastination or vacillation.

2. I look at my company as a whole, its overall performance, and the complexity of its interrelated parts.

3. I pay continuous attention to understanding my company, its forces and pressures, and the forces and pressures in the broader environment in which we operate.

4. I am curious and alert in looking out for new ideas and opportunities for my company.

5. I scan product/market trends in our industry, government regulations and controls, and their impact on our products or services.

6. I am conscious of the long-term implications of day to day decisions for both economic success as well as political adjustments required.

7. I am not adverse to using collective management as opposed to one-man rule or in promoting wide participation and decision-making at the lowest levels.

8. I am competitive and action-oriented, promote innovation and a willingness to make risky, long-term competitive investments.

9. I encourage my organization to be autonomous and small business-like, to think independently and competitively and develop an entrepreneurial culture.

10. I place central emphasis on producing technologically superior products or providing superior services, embracing new technology, and competing in the marketplace on technological grounds.
11. I approach my job analytically, analyzing its nature and the demands, constraints, and choices for opportunity its offers.

12. I discover and deal with serious problems, see and develop alternatives, and assess the risk involved in making sound decisions.

13. I focus on the contribution I can make to the organization, on results and productivity, and outward toward goals and objectives.

14. I focus on my organization's uniqueness, its area of strength and success, and build consensus around a few important new goals having the greatest long-term impact on the organization.

15. I shape and guide the organization and piece together disorderly bits of information to fine tune its general strategic direction -- rather than impose precise targets.

16. I promote creative, flexible planning processes, and link formal planning to vigorous operational execution for short- or long-range plans.

17. I outthink and outmanage competitors and find strategic openings not within the framework of conventional thinking.

18. I develop an informal and personal information network of people both in and out of the organization to trade information with and build cooperative relationships.

19. I aggressively seek information from others including bad news, gossip, speculation, details, and differing views to grasp reality first hand.
20. I value the spirit of inquiry, ask lots of questions, and constantly move around, probe, listen, and show up unexpectedly.

21. I favor face-to-face meetings, telephone calls, and other information-gathering methods, encourage feedback and tolerate interruptions so as not to discourage the flow of current information.

22. I stay close to our clients and customers providing them high quality service and product reliability and where possible pass on savings to them.

23. I structure my organization to fit both tasks and people, promote open systems, and an organic and flexible organization.

24. I take steps to understand the forces at work within people, maintain an accurate awareness of key individuals and groups including any hidden agendas or expectations.

25. I appraise elements of a situation and the overall environment to include superiors, associates, followers, the organization, and job demands, and use the style of leadership appropriate.

26. I maintain a keen understanding of human organizational forces and the accurate relationship between cues people provide and their actual behavior.

27. I illuminate problems, options, and contingencies posed by a sensed need and am creative in reshuffling facts to come up with answers logic would not suggest.

28. I employ a decision-making apparatus in which important decisions are made slowly and deliberately; is more a developmental process rather than a rational and decisive one.
9. I create new consensus through a continuously evolving and often highly political process that has no precise beginning or end; I press but let people come around to my point of view.

10. I resist prematurely achieving a goal or an end result by flowing with a situation and gradually shifting boundaries while employing trial balloons and cautious pressure.

1. I manage from strength and determination, not empathy and humility; I assert and maintain control and do not find it absolutely essential to change in response to different insights or circumstances.

2. I respond to the need of the moment, jump from issue to issue in looking for, maximizing, and grasping at opportunities.

3. I periodically shift between chaos and continuity, recognize the value of both the clear and the ambiguous, and I reflect this in how I manage.

4. I appear imprecise yet resilient and versatile in figuring out what to do despite uncertainty, great diversity and an enormous amount of potentially relevant information.

5. I pull together quantitative goals with goals that satisfy people's most basic psychological needs in serving the best interests of employees as well as the company.

6. I tap and harness all the major motivational forces, the energy and creativity of the enterprise as a whole, and focus on achieving maximum good for the total organization.

7. I adapt to shifting circumstances, know when and where to change from one stance to the next and slowly create new, logical cohesion in responding to the law of the situation.
38. I take a total systems focus, organizational and cultural, in making changes to include the educational, technological, economic, and personal elements which are important to organization and management behavior changes.

39. I view behavior at work as being the result of a complex system of forces based on the variability of tasks, people, and the system of managing within the organization and forces impacting from the outside.

40. I view the manager as playing many roles -- leader, team member, politician, representative, etc. -- whose leadership style can be understood in relation to the personality of the followers and characteristics of the situation.

41. I look for strengths in others and put up with weaknesses; I tolerate failure, encourage dissent and make allowance for the uniqueness of people.

42. I maintain a positive and sympathetic attitude towards feelings and opinions of personnel, show confidence in them and treat them as adults.

43. I have high expectations of employees, expect them to perform their best, and I create the environment and motivation for them to do so.

44. I provide employees with the right tools to do the right jobs, coach them, and recognize their different needs and the abilities they do possess for achieving goals.

45. I initiate communication at the lowest levels of management, promote awareness of my priorities, and intense free exchange of opinions in vigorous, open debate.

46. I maintain a highly visible and assessible presence and meet the need for good communication by promoting verbal plus other communication channels and openly discussing the philosophy and goals of the company.
47. I hire and make assignments of key top personnel myself and reinforce my efforts by making changes and by moving personnel in the organization. 

48. I nurture my professional reputation, including trying to look and behave in ways others respect.

49. No matter how high I climb in the organization I maintain true friendships with those on whom I depend, and cultivate and interact with them and others.

50. I spend the vast majority of my work time with organization personnel and others, take charge of my relationships, and develop a social system for interaction and mutual trust.

51. I am personally involved in promoting and monitoring the development of my managers through job rotations, internal promoting, training, and educating by my example.

52. I build strong consensus and stable, workable coalitions and foster support and cooperative effort toward the organization and its objectives.

53. I develop high group loyalty, harmony, and cooperative attitudes in promoting teamwork and a pulling together within the team I lead.

54. I try to make others feel legitimately obliged to me and I am comfortable in using my power and influence to obtain this.

55. I use various behavior in influencing and persuading others directly or indirectly and willingly manage and influence the performance of others to solidify my position.

56. I slice through the routine and ritual, compete for "air time", and am persistent and determined in getting things done whether in analyzing problems or in self-discipline.
57. I believe in strong leadership, in giving myself to the organization, and behaving persistently in articulating and implementing strategic directions in compelling ways.

58. I set and demand standards of excellence, am competent, aggressive, hardworking, and have a tough-minded respect for the individual.

59. I use all sorts of devices in nudging disorderly processes in desired directions but do not attempt to impose abstract order over them.

60. My management behavior and action depend on the specifics of the situation; I keep my style consistent with my personality but vary my behavior and adapt it to the situation.

61. I do not put up with weaknesses nor tolerate failure; I believe people should be supportive not dissenting nor should personal uniquenesses affect the company.

62. I use cues to gain insight into others and form a lens from this for viewing relationships and developing probability models about people.

63. I take a subtle approach to the functions of managing and ways of dealing with others including widening and narrowing of dialogues to correspond to the distinctive qualities of interpersonal processes.

64. I emphasize novelty and accept disorderly, non-rational processes, informal and frivolous, and react in an opportunistic way to the flow of events.

65. I trust in intuition, instinct, and sense data and other information "locked inside the brain" and forming an internal data resource.

66. I am sensitive to "face," to cues in everyday behavior, the needs of subordinates and all people, and maintain this no matter how high I climb in the organization.
I maintain high sensitivity to the total system and complex processes in a fast-changing environment, including market needs, area or national customs and other external demands.

I am sensitive to the power centers in the organization, the reality to know what is happening in and outside of the company while not undermining the authority of my own managers.

I know how I come across to others, how my leadership style affects my organization, and am aware of the impressions my actions have on others.

I test my perceptions against reality, maintain high accuracy and understanding of my own nature and values, and am alert to my own shortcomings.

I examine myself to find out when and how I work best, when not to make decisions, what people and situations are upsetting, and what I need to learn and relearn.

Rather than assert and maintain control I try to be empathetic, to blend strength with humility, and change in response to new insights and self-realizations.

I have clear answers as to how much I value my life, what I want to do with it, and what I must do to be myself, and promote consistency among personal, company, and job goals.

I feel a company's character is developed through a shared sense of values, different from efficiency alone, and shaped, managed, and reinforced by top management.

I believe in creating our company's own future and shaping its business values while maintaining a sense of honesty, openness, and fairness based on significant meanings.
PART III. THREE BRIEF ADDITIONAL RESPONSES ARE REQUESTED BELOW.

1. Rank the following items in the order of importance to you. Place "1" next to the item most important down to "7" for the item least in importance. Rank them even though they all may be important to you.

   Productivity
   Honesty
   Company profits
   Quality results
   Human resources
   Innovation
   Client/customer service

2. Overall, on a scale of 1 to 10, how would you rate the effectiveness of your company in this country? Use 1 as Extremely Ineffective and 10 Extremely Effective (____). How would you rate your company world-wide? (____).

3. Please comment freely below on how you feel about your job as a manager -- the problems and constraints, your background and experience which helped make you the kind of manager you are, etc.

Thank you very much for your assistance.
Ph.D Thesis

reduced 25% from 16 to 12. Specifically, the revisions are as follows:

PART II. The demographic and organizational variables were increased from 5 to 8 questions. This was necessary for several reasons. First, although this research is directed to technology-based industries, particularly hi-tech, safeguards are necessary to assure that indeed they are the respondents. 1.b., Kind of business your company is in, was therefore added as a cross-check to the solicitation by post. 1.c., Country of the respondent's childhood, was added to assure that the company's country of origin and that of the respondent are identical.

Since level of formal education and field of study are tied to management training and education (question 3), these two questions (2.a. and b. on education level and field studied) were also added to assess differences among the national groups. These questions plus question 5 on apprenticeship were, in fact, a result of research by Peter Lawrence (1980) identified in his book, MANAGERS AND MANAGEMENT IN WEST GERMANY. Of interest to this research, for example, are comments such as, "Another distinctive feature of the German university scene is that there are no undergraduate courses in management or business studies" (p. 63); and "There are no master's degrees in West Germany, in the British and American sense. --" (p. 64). The impact that apprenticeships may have on
managers is pointed up by Lawrence’s comments on the German “emphasis on practical experience in connection with a successful career in management — (and) Another dimension of this cult of the practical is the apprenticeship system” (p. 115). Question 6 in the revised version also points to experience, this time in foreign countries.

To assure that only executive level managers are responding, question 8 requesting the person’s title was also added.

One question was eliminated from Part I. It referred to the manager’s degree of authority or freedom to act. The range of responses from the test group was very narrow for this question. Also, a zero correlation resulted when compared to Part II.

PART II. This part of the inventory is designed to capture both the spirit and intent of the work of 88 authors whose field research and experience comprised the input into the development of the EMI. As was seen in the developmental process of how each item of the instrument was developed (Exhibit 18), every attempt was made to use the language of each researcher in describing a successful characteristic or practice of top managers. Equally important was to effectively synthesize the same or similar characteristics into a cohesive and meaningful statement describing a characteristic feature of
Ph.D Thesis

the manager; i.e. the items of the EMI.

Since the focus of the research is on executive managers, simplicity of item structure, though important, did not supercede the intent of identifying these particular characteristic features. Hence, in 72 items, the Executive Management Inventory portrays the essence of a manager's broad scope of skills and abilities designed to achieve effective results. These skills and abilities can not be used at one time -- this is obvious. But as we have previously quoted R. Alex Mackenzie (1969) in Chapter II.C., "A manager's interest in any one of them depends on a variety of factors --. He must at all times sense the pulse of his organization -- as he concentrates, now on one function, then on another --" (p.86).

Experience with the first EMI, though, did point to the need to simplify Part II. The "Others" column was originally included to maximize the input data by providing information on other executives in the company as well as on oneself. This proved rather exasperating and time-consuming for busy executives. "Others" was therefore eliminated. Consistent with this improvement, the items themselves were simplified by eliminating possible redundancies in terminology while retaining the meaning and language of the original authors. As a result of this, two-thirds of the 72 items were revised. Overall, the number of words used for all items was reduced
PART III. Two questions were added to the last part of the inventory. One covered the importance to the executives of seven organizational factors related to effectiveness. This included "productivity" through "client/customer service." The second question asked the executives to rate the effectiveness of their company both in the current host country as well as worldwide. These were designed, along with the open-ended third question, to expand the information-base on the executives.

What is the overall impression of this revised edition of the EMI to that of the first? A letter to this researcher from an educator, Dr. Stephen Twining, and former graduate of the University of Michigan’s Survey Research Center, responds to this. This educator, also interviewed during the testing of the first instrument, states:

"This edition has exceeded the expectations I had of the first.--The instrument would be a valuable diagnostic tool not only for your research -- but also for organizations generally."

His letter is enclosed in full in the "Appendix" of this thesis as Attachment E.

Translation of the EMI
Since this research covers six national groups of executives,
assessments are needed as to the English language capabilities of the proposed respondent groups. With English the "lingua franca" of the business world, particularly for international executives, translations may not have been necessary. But, if required, they would be made to assure that the intended meanings of the inventory and its constituent parts would be the same for all executives -- irrespective of national background.

Commercial Attaches and other embassy and consulate personnel from the executives' home country were interviewed for this purpose as well as for identification of the companies to be sampled for the field research (discussed next). From these interviews, which included a review of the inventory itself, it was determined that a translation would be necessary for the Japanese executives. To accomplish this two experienced Japanese translators were recruited. Each worked independently.

The translation process was extensive and included reviews by Japanese managers. Japanese Embassy commercial personnel made the final choice of the two. The end result was not a literal translation but one focusing on the intended meaning of the inventory and its questions. This version of the EMI is enclosed in the "Appendix" as Attachment F.
B. CORPORATE EXECUTIVES: THE MULTINATIONAL SAMPLE

In Chapter I.C. of this thesis we stated that,

"The population under study is executive managers in technology-based multinational organizational environments, principally those engaged in hi-tech activities -- a rather homogeneous population. To minimize contamination of this population the intervening variable of work location (host country within which multinational companies perform their work) will be consistent among the sample."

During much of the time that research for this thesis was being performed, this author's employer, a U.S. multinational corporation, was performing work within the Kingdom of Saudi Arabia. With hundreds of firms from throughout the free world taking part in the Kingdom's development and modernization efforts this environment provided a unique opportunity within which to perform this field research. This opportunity provided the basis for studying, first-hand, executive managers from many parts of the industrialized world.

Consistent with the issues and problems cited in Chapter I of this thesis, -- (Franko 1978; "the main event in international business during the past decade has been the dramatic gain in the international competitive position achieved by non-American, and particularly Continental European and Japanese companies" (p. 95) -- (including) "much more rapid growth in industrial productivity in Japan and the Continent
Ph.D Thesis

than in the United States and the United Kingdom" (p. 97) --
the sample base for Phase 3 of this research will be comprised of three regional clusters:

Anglo-American managers - United States and United Kingdom

Nordic-European managers - West Germany and Sweden

Far-Eastern managers - Japan and Korea

These descriptive regional terminologies have previously been identified by Haire, Ghiselli, and Porter (in Gannon 1977). Their study of management styles in 14 countries "clustered into five major groups on the basis of similar responses: the Nordic-European, the Latin-European countries, the developing countries, the Anglo-American, and Japan" (p. 414).

Embassy and consulate personnel located in the Kingdom and representing each of the six national groups were contacted to identify their respective multinational corporations. The key individuals within these foreign embassies and consulates were the Commercial Attachés and Counsellors. It is their job to develop and maintain strong commercial relations between their government and the host country. This includes contacts with the sundry corporations representing their country and, in particular, key corporate executives.

Using information provided by the Commercial Attachés, 1,005 companies were identified as a possible pool. This number was
screened using previously established criteria. They were:

1. Inclusion of technology-based companies only.
2. Corporate size of 15 or more personnel in the host country.
3. A minimum of 3 top managers per company.
4. Corporate longevity of at least 2 years in the host country.

Subsequent randomization and stratification yielded a sample of 180 corporations:

- 100 Anglo-American
- 50 Nordic-European
- 30 Far-Eastern

These companies comprised the corporate pool used in this research.

The revised Executive Management Inventory was posted to the Chief Executive Officer, usually the General Manager, of each of the 180 corporations requesting completion by him. A cover letter plus a self-addressed, stamped envelope were also included. (See Bouchard, "Design Distribution, and Documentation of Questionnaires," 1983 pp. 382-384, and Cammann's "Field Administration Practices," 1983 pp. 77-78.)

The cover letter used, dated 15 February 1986, is shown in the "Appendix" as Attachment G. Three weeks following, on 7 March 1986, a follow-up letter (Second Request) was posted to the same 180 executives. Each Japanese executive received an
English and a Japanese version of both the cover letter and the inventory. This provided a double check to assist in responding (as requested to this researcher by the Japanese Consulate). A short paragraph in Korean was further included with the English cover letter for the Korean executives (as recommended by a Korean manager). No notes or translations were required or requested for the Swedish or German executives.

Using these field procedures, 69 questionnaires were returned, each questionnaire representing a different multinational company. This yielded a return ratio of 38.3%. The number of executives and ratio per regional cluster is as follows:

- Anglo-American: 29 (29%)
- Nordic-European: 19 (38%)
- Far-Eastern: 19 (63%)
- Nationality unknown: 2

Total: 69

The 69 respondent inventories were further screened to assure that all research criteria were met. This process resulted in the elimination of 14 inventories. This included 2 due to unknown nationality. Another 5 did not meet the "response consistency" test; that is, their response patterns to the 3 antonym questions (items 1, 31, and 61) of the EMI were inconsistent. An additional 5 were eliminated due to "national origin inconsistencies;" the country of origin of the company
and that of the executive did not match. Two were excluded because their companies were not technology-based. One was a packaging firm and the other a cigarette distributor.

This resulted in a total useable number of 55 inventories. Of this, 37 or two-thirds represented hi-tech industries such as Electronics, Aerospace/Aviation, Computer Systems, Engineering, and Petro-Chemicals, and 18 represented other technology-based activities including Manufacturing, Trading, and Automobile and Shipping industries.

The 55 respondents by region and nationality are as follows:

**ANGLO-AMERICAN:**
- American 14
- British 8
  - 22

**NORDIC-EUROPEAN:**
- Swedish 8
- German 7
  - 15

**FAR-EASTERN:**
- Japanese 13
- Korean 5
  - 18

**Grand Total:** 55
C. RESULTS FROM FIFTY-FIVE EXECUTIVE MANAGERS

This section covers the results obtained from the survey of the 55 executives each representing a different multinational corporation. From the "position titles" provided in Part I, question 8 of the inventory, the vast majority of these managers had principle authority for the conduct of the company's business in their particular international setting. Their responsibilities were country-wide and for some several countries over a regional area. Most of these executives were General Managers including Managing Directors. Others were titled Project Manager, Area or Country Manager, and President or Vice-President.

In keeping with the problems cited in the management literature, the emphasis of this section will be on an analysis of the regional groups of managers; that is, Anglo-American, Nordic-European, and Far-Eastern. The individual national groups will be discussed, where important, in supplementing or clarifying the regional results. To assist in this process, summary results by both regional and national group are provided. They are shown on the pages following as Exhibits 29 and 30.

PART II. The critical part of the EMI focuses on the
Exhibit 29. SUMMARY RESULTS - EXECUTIVE MANAGEMENT INVENTORY -
BY REGIONAL GROUP

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<thead>
<tr>
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<th>NORDIC-EUROPEAN N=15</th>
<th>FAR-EASTERN N=18</th>
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**PART I.**

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Exhibit 30. SUMMARY RESULTS - EXECUTIVE MANAGEMENT INVENTORY BY NATIONAL GROUP

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<td>6.15</td>
<td>6.46</td>
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</table>

**PART III.**

1. PRODUCTIVITY       | 4.79          | 4.50        | 4.00        | 4.86       | 4.77           | 3.80       | 4.55       |
| HONESTY              | 2.64          | 2.38        | 2.50        | 3.57       | 2.95           | 3.40       | 2.82       |
| COMPANY PROFITS      | 5.00          | 4.00        | 3.25        | 4.57       | 3.62           | 4.40       | 4.16       |
| QUALITY RESULTS      | 3.50          | 4.00        | 5.63        | 2.57       | 5.00           | 4.20       | 4.18       |
| HUMAN RESOURCES      | 4.29          | 3.75        | 3.88        | 3.43       | 3.62           | 2.00       | 3.53       |
| INNOVATION           | 5.50          | 5.50        | 4.75        | 5.00       | 4.54           | 6.00       | 5.15       |
| CLIENT/CUST. SVC.    | 2.29          | 3.89        | 3.38        | 4.29       | 4.23           | 4.20       | 3.56       |
| 2. COMPANY EFF. HERE | 6.71          | 6.75        | 6.50        | 6.14       | 5.15           | 6.00       | 6.18       |
| COMPANY EFF. WORLDWIDE | 7.29        | 6.13        | 7.50        | 7.14       | 5.62           | 5.80       | 6.60       |
particular practices and characteristics of the managers -- the 72 items. This is the part, Part II, we will cover first.

The total results (mean values) for all 55 executives are shown on the far right of the exhibits. For Part II they are for the tri-divisional categories -- Analytical, Social, and Emotional R -- 6.71, 6.71, and 6.00 respectively. The total or composite mean for all three categories is 6.50. The Far-Eastern managers have the lowest total value of 6.22 and the Nordic-Europeans the highest with 6.71.

An important finding from the results is the consistently lower values derived for the Emotional R division. Referring to Exhibit 29, they respectively are 6.02 for the Anglo-Americans, 6.06 for the Nordic-Europeans, and 5.94 for the Far-Eastern managers. These clearly are lower than both the Analytical and Social divisions. The significance of the differences will be assessed in the following section on hypothesis testing. The important consideration here is that of the three divisions representing the work of these executives, Emotional R is the least characteristic of them. This was also the case in the previous test phase covering the sample of 7 executives.

Turning to the results by national group, Exhibit 30, the findings are again consistent. Each of the six groups are lowest in the Emotional R division -- from lows of 5.90 for the
Ph.D Thesis

German executives and 5.93 for the Japanese to a high of 6.20 for the Swedish. This is consistent, then, with the previous statements cited for the 7 executives of the test phase and published in the October 1986 issue of INTERNATIONAL MANAGEMENT:

"They were weak in the ebbs and flows, the contracts between the clear and the ambiguous, the subtle, reacting to opportunities, and organizational values of essence -- all of which our new research shows are critical in order to adapt and keep pace with a changing, technologically-oriented, global world" (p. 88).

The balance of the statistical results of the inventory (Parts I and II) of Exhibits 29 and 30 will be discussed later in this section. At this point we will take a look at the detailed results, by division, for Part II. These are graphically shown in Exhibit 31. This exhibit provides a profile of each regional group based on responses to each of the 37 scales of the EMI. Each of the three divisions will in turn be reviewed.

Analytical

This is the division that focuses on the diagnostic and conceptual skills and abilities of the executive. It principally reflects the rational mind as well as the some emphasis on the intuitive. It covers a manager’s perceptiveness and awareness of the total enterprise, its direction, strategies, information needs and the
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FE Mean = 6.33  NE Mean = 7.00  AA Mean = 6.82

FE Mean = 6.35  NE Mean = 6.94  AA Mean = 6.86

FE Mean = 5.94  NE Mean = 6.06  AA Mean = 6.02

LEGEND:
Anglo-American (AA)
Nordic-European (NE)
Far-Eastern (FE)

Exhibit 31. SCALE PROFILE EXECUTIVE MANAGEMENT INVENTORY
Ph.D Thesis

problem-solving and decision-making processes in assessing situations and forces in or out of the organization.

Thirty-four (47%) of the 72 items of the EMI fall into this division. In other words, according to the types of effectiveness-based practices and characteristics derived from the literature, Analytical abilities comprise (or should comprise) nearly one-half of the work of technology-based corporate executives. These 34 items are further grouped into 16 scales or categories. These are identified on the upper left of Exhibit 31. Reviewing the profiles in the Analytical division, we see higher values -- peaks to the right -- shown for the Nordic-European managers (NE). They excel, in comparison to the Anglo-American (AA) and Far-Eastern (FE) managers, in areas such as Visualizing - Vi (a wholistic view of the organization), Scanning - Sc (looking out for ideas and situations), Focusing - Fo (building on the organization's strengths and uniqueness), and Structuring - Su (tailoring the organization to fit its tasks and people).

On the other hand, the Far-Eastern managers, in comparison to the Anglo-Americans and Nordic-Europeans, have lower values -- peaks to the left -- in six categories. They are comparatively weaker in areas such as Boundary Spanning - Bs, Technological Imperative - Ti, Focusing - Fo, Strategyzing - St, Information
Gathering - Ig, and Sensitivity - Se. (For category definitions and specific items of the EMI relating to these categories see Exhibits 11 and 15 in Chapter III.)

While showing some technological superiority in products or services (Technological Imperative - Ti), the Anglo-American managers are weaker in Insightful - In (gaining insight into and awareness of others) and in Intuition - It (trust in instinct and sense data).

Social
The focus of the Social division is the human being, those working in the organization as well as those external to it that impact on the organization. It covers the manager's ability to work with and through people, communicating, motivating, and building teamwork and a network of people as well as influencing them for work accomplishment.

Seventeen (24%) of the EMI's 72 items fall into this division. It comprises, therefore, one-fourth of the executive's job. The 17 items are further grouped into 10 categories.

Two categories that peak to the right that the Nordic-Europeans excel in are Client Obligation - Co (staying close and providing quality to customers or clients) and Motivating - Mo (treating people with respect and understanding and having high
expectations of them). The Anglo-American managers excel in Resource Handling - Rh category (hiring and assigning key personnel; making appropriate changes) and are also comparatively higher in Reputation Building - Rb (nurturing one’s professional reputation).

As with the Analytical division, the Far-Eastern managers again reveal comparative weaknesses. This is particularly the case with respect to the following categories: Network Building - Nb (developing an informal and useful network of people), Client Obligation - Co (as above), Resource Handling - Rh (as above), and to a lesser extent, Developing Personnel - Dp (promoting, stretching, and monitoring the development of one’s managers).

Emotional R
This is the division, of the three, that is consistently least characteristic of the managers. It is a new division in that few references are found in the literature, whether in name or context. Many researchers, though, have alluded to it through their identification of characteristics which effective managers should possess. Yet the categorization of these characteristics as well as operationalizing them for field research and application have principally alluded them.
The definition of this division in our Tri-Divisional Model of Management Behavior points to the potential difficulties in exercising the behaviors described. This includes working in and tolerating stressful situations; having the stamina, perseverance, and tenacity to take actions and risks in response to changing needs and to chaos and ambiguity; dealing with threatening events yet maintaining integrity and a sense of values in coping and flowing with organizational situations.

If the Analytical division principally typifies the "Rational/Conceptual Manager" and the Social the "Interpersonal/Influencial Manager," the Emotional R Division typifies the "Resilient/Coping Manager."

Twenty-one (29%) of the 72 items of the EMI fall into this third division. This represents nearly one-third of the manager's job. The 21 items are further grouped into 11 categories. Referring to the scale profiles of Emotional R on the bottom of Exhibit 31, three "characteristic" peaks (to the right) are shown as well as three "uncharacteristic" peaks (to the left). In both cases they reflect the behavior of the Anglo-American and Nordic-European managers. Both of these groups, for example, are characterized by high Entrepreneurial - En skills and abilities (encouraging independence and competitiveness), high Personal Drive - Pd (persistent and
aggressive in getting things done) and high in Values – Va (maintaining a company’s character through a sense of honesty and fairness), the latter which is also high for Far-Eastern managers.

The practices uncharacteristic of the Anglo-American and Nordic-European managers, which also reflect the lowest mean values of the EMI’s entire 72 items, are shown to the far left of the Emotional R scale profile. They are: Flowing – Fl (allowing strategies and decisions to evolve through a continuous, incremental process), Ambiguity/Clarity – Ac (shifting between chaos and continuity, appearing imprecise yet resilient), and the lowest scale value of all, Reacting – Re (accepting disorderly processes and reacting in an opportunistic way to the flow of events).

While the Far-Eastern managers are lower than the other two regional groups on Entrepreneurial – En Skills and abilities as well as their own Personal Drive – Pd, they are higher in four categories. These are: Flowing – Fl (as above), Grasping – Gr (responding to the need of the moment by grasping at opportunities), Ambiguity/Clarity – Ac (as above), and Reacting – Re (as above). The Far-Eastern profile shows less variance and therefore greater stability in Emotional R behavior than either the Anglo-American or the Nordic-European. Due to the
nature of this EMI division, that is, its Resilient/Coping behaviors, this stability (or ability) may be a key to better understanding the often quoted successful style of the Japanese manager (and now his Korean counterpart). These also may be difficult behaviors to train for. As Katz (1974) has stated about them, "Unless a person has learned to think this way early in life, it is unrealistic to expect a major change on reaching executive status" (p. 101).

The categories within the three divisions -- Analytical, Social, and Emotional R -- are intended to provide a comprehensive view of the varied and complex work of the executive manager in technologically-based corporations. The three divisions collectively comprise the whole manager. Recalling his earlier article (1955) written while a Dartmouth College professor, Katz (1974) in his retrospective commentary stated:

"In my original article, I took too simplistic and naive a view of the chief executive's role. My extensive work with company presidents and my own personal experience as a chief executive have given me much more respect for the difficulties and complexities of that role. -- Every decision or choice affecting the whole enterprise has negative consequences for some of the parts. -- He needs to be willing to accept solutions that are adequate and feasible in the total situation rather than what, from a single point of view, may be elegant or optimum" (p. 102).
The multi-regional and multi-cultural dimensions of this research no doubt multiply exponentially the possible complexities inherent in this executive role. Yet executives are expected to be effective and optimize results for their company whether in the domestic or international marketplace.

Parts I and II of the EMI provide further insight into the 55 executives and through them possibly to their respective national and regional counterparts.

PART I. The principal differences among the various groups with respect to their demographic and organizational variables will be highlighted. References here are to Exhibits 29 and 30.

Question 1 of Part I was used to identify the national background of the respondents and their company including the company's business. The next two questions, 2 and 3, dealt with the respondents education level and field of study and the amount of education and training in management each has had. To readily appreciate the differences, we will refer specifically to the results by national group shown in Exhibit 30.

With respect to question 2, the highest education levels are shown for the Nordic-Europeans -- the Swedish and German
managers each with 3.27 and 3.14 respectively. (Briefly, the values are based on the following: 5 = Doctoral degree, 4 = Master's degree, 3 = College/University degree, 2 = Some college or Advanced technical, 1 = Secondary or Technical schooling.) The lowest level of education (2.25) is shown for the British. The British executives are also lower in the average years of management training (.25) and in the years of management education in a university (.38) they each have had. Their total years of training and education (.63) is well below the average for all 55 executives (2.02). The Korean executives, on the other hand, show the highest -- a total of 4.00 years of training and education per executive.

The .63 years when compared to the total years that the average British respondent has been a manager (11.88), provides an interesting education to experience ratio. In the case of the British manager it is .05. This shows that for every year of management experience a British manager has on the average had a total of 2.6 weeks of education or training in management. The ratios for all the national groups are found in Exhibit 32 on the next page.
<table>
<thead>
<tr>
<th>Years Education &amp; Training</th>
<th>Years Management Experience</th>
<th>Ratio</th>
<th>Weeks Educ &amp; Trng Per Each Experience Year</th>
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</thead>
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<td>19.64</td>
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<tr>
<td>British</td>
<td>.63</td>
<td>11.88</td>
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<tr>
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<td>12.50</td>
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<td>14.00</td>
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<tr>
<td>Japanese</td>
<td>1.41</td>
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<td>Korean</td>
<td>4.00</td>
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$\bar{X}$: 2.02 13.05 .15 7.80

Exhibit 32.

RATIO OF TOTAL YEARS OF MANAGEMENT EDUCATION AND TRAINING TO TOTAL YEARS OF MANAGEMENT EXPERIENCE BY NATIONAL GROUP

While the Far-Eastern managers reveal the lowest total years of experience as a manager (Japanese 8.23 and Korean 8.60), which may be reflected in their corresponding higher education/experience ratios, it is interesting that the Koreans with a .47 ratio are much higher than any other national group. It shows that the Korean manager has had an average of 24.44 weeks of management training and education for each year as a manager. It is also interesting to note that the Japanese, while at the same executive level as the rest of the managers (that is, General Manager), do not consider themselves as executives as shown by the .15 years of executive manager experience.
Question 5, experience as an apprentice manager before becoming a supervisor or manager, is also higher for the Far-Eastern managers (3.46 years for the Japanese and 3.60 for the Korean). The American managers, on the other hand, show the least apprenticeship -- 1.39 years. Conversely, the Americans have the highest average overseas experience (12.54 years) while the Far-Eastern managers have the lowest (5.91 and 2.90 years respectively for the Japanese and the Korean).

The last question of Part I, the total number of different companies worked for during one's career, is also interesting. The Far Eastern managers, as expected, show little between company movement. The typical Japanese executive has worked principally for one company (1.15) during his career, and the Korean executive about one and a half companies (1.60). The Nordic-Europeans show more inter-company movement -- 2.43 and 3.00 companies respectively for the German and the Swedish. The Anglo-Americans are also high with the Americans having worked for nearly 3 different companies (2.71) and the British showing the most movement with nearly 4 different companies (3.88).

PART III. Returning to the summary results by regional as well as national group, Exhibits 29 and 30, question 1 of Part III asks the executives to rank the relative importance of 7 organizational factors -- from Productivity to Client/Customer.
Ph.D Thesis

Service. The value of "1" reflects the most important and "7" the least important. Of the 7, Honesty was most often chosen as the most important with Innovation usually cited as the least important. The values for Honesty are 2.55, 3.00, and 3.00 for the Anglo-American, Nordic-European, and Far-Eastern groups respectively, and 5.50, 4.87, and 4.94 respectively for Innovation.

While Honesty was important for the Far-Eastern managers, the Koreans ranked it as second (3.40). First for them was Human Resources. The Japanese managers also saw Human Resources as important by ranking it second as did the Germans. First for the Germans was Quality Results (2.57) while interestingly the Swedish managers cited this as least important (5.63). Only the Americans pointed to Client/Customer Service as the most important with 2.29. The British cited this as third (3.89) behind Human Resources (3.75) and Honesty far and above as first with 2.38.

Question 2 of Part III asked the executives to rate the effectiveness of the company they themselves manage as well as the effectiveness worldwide of the multinational company they represent. A scale of 1 to 10 was used with 10 being extremely effective. Of the 3 regional groups the Anglo-Americans believed the company they managed to be more effective (6.73) in comparison to the Nordic-Europeans (6.33) and the
Ph.D Thesis

Far-Easterners (5.39). This also is the case when compared by national group. These results are 6.71 and 6.75 for the American and British managers respectively, 6.50 and 6.14 for the Swedish and the German, and 5.15 and 6.00 for the Japanese and Korean. The Far Eastern managers also believed that the effectiveness of their parent company worldwide was lower than that of the other regional groups -- 5.67 for the Far-Eastern, 7.33 for the Nordic-European, and 6.86 for the Anglo-American. The Swedish managers saw their multinational company worldwide as the most effective with 7.50.

A point of interest is to assess the managers' own effectiveness level, as derived from Part II, to how effective they believe the company THEY manage is, as derived from question 2, Part III.2. (Company effective here). Using the Pearson Product-Moment Correlation, the comparison between the results (of Part II to Part III.2) of each national group produced a correlation coefficient of $r = .86$. According to this, the more effective the chief executive the more effective the company he manages is likely to be -- a reasonable assumption yet interesting in its validation here. This correlation, rather high and significant at a confidence level of .05, further validates, lends credence, and supports the integrity of the results derived through the inventory.
Part III - Comments

What follows in the final part of this section of the EMI results is highlights from question 3 of Part III. This was an open-ended question asking the executive to comment freely about his job as a manager -- the problems and constraints, his background and experience which helped make him the kind of manager he is.

Nearly half of the 55 executives (25) provided comments. Forty specific comments were identified. They can be grouped into five categories:

- Techniques for Managing
- Styles of Management
- Management Problems, Constraints, and Challenges
- Background Needed
- General Comments

TECHNIQUES FOR MANAGING: Nearly one-third (32.5%) of the comments fell into this category. They include the following:

* I have learned to manage large organizations successfully through the selection of a few key subordinates (American executive - Am).
* I make every effort to give employees all the amenities I can - Am.
* Be aware of what your company is looking for - Br.
* Be conscious of business opportunities - Br.
Ph.D Thesis

* Analyze the best way to approach the marketplace and manage it for my company’s situation - Ko.
* Provide a forward-moving team effort - Am.
* Important to have team work to get the job done - Jp.
* I apply common sense to the way I manage - Br.
* Common sense and timing is needed - Jp.
* Have keen awareness of abilities of others - Am.
* Train for and operate efficient management systems - Br.
* I have developed my management skills by trial and error - Br.
* I get things done - Br.

STYLES OF MANAGING: Thirty-two and one-half percent of the comments fell into this category. They are identified below:

* Flexibility of management style is needed to understand all aspects of our hi-tech business - Am.
* Flexibility is the key to dealing with a multinational workforce - Am.
* Keep an open mind - Br.
* Leader should be open, sharing information - Gr.
* Informal relations on a collegial basis accomplishes more - Am.
* Deal with people at all levels - Br.
* Have great patience and tolerance - Br.
* Make allowances for personal work on-the-job - Am.
* Change personality and values - Sw.
* Argue, discuss, cooperate and fight with colleagues to achieve goals - Gr.
* Have a strong mind to look ahead and achieve more than usual - Jp.
* Force in management is necessary to keep the organization on course - Am.
* Enforce strong work ethic at the office - Am.

MANAGEMENT PROBLEMS, CONSTRAINTS, AND CHALLENGES: This category accounted for 15% of the comments. They are:
* A major constraint is to adhere to worldwide corporate policies, practices, and strategies often in conflict with practices needed to operate effectively in international markets - Am.
* Most management problems are people or customer related - Am.
* It is difficult dealing with the workforce because they are just working for money - Br.
* One of the interesting but difficult aspects of the job is that this country is one big melting pot of nationalities - Gr.
* The rich variety of problems to tackle -- that is why I enjoy my work in a multinational company - Sw.
* Changing problems, good chance for promotion, free decisions -- these make me happy in my job - Gr.
BACKGROUND NEEDED: This category accounted for 12.5% of the executives' comments. They are:

* My strength in management is that I have worked in most areas I have to deal with - Br.
* I understand the problems many managers face - Br.
* A generalist business experience is needed with technical education and international experience - Am.
* A background as personnel administration manager then moving into general management allows a manager to exercise the qualities needed - Br.
* Support from the family is important and having good housing facilities for them - Gr.

GENERAL COMMENTS: This is the fifth and last group for categorizing the comments in Part III of the EMI. Only three comments will be covered, quoted, plus in somewhat greater length than the previous comments. The first general comment is from an American executive, the second from a Swedish executive, and the third a British executive.

"One of the keys to my own success is the commitment of the Corporation to management education and development and the breadth of experience gained through assignments in a variety of divisions within the Corporation and a variety of international countries" - Am.
"My feeling is that management is something you have to grow into. Your background is not of highest importance but must have given you the basics in logical thinking. You can, however, not learn management from the school books" - Sw.

"I am not happy with the lack of management training or development and the lack of a formalized and realistic career development plan. -- I feel that this type of survey or inventory should be encouraged and should be part of management development within most companies" - Br.

Each completed EMI instrument provides 102 different items of information (variables) on each manager responding. This is exclusive of combinations, cross-references or cross-tabulations that are possible both within each instrument or in comparison with other EMI instruments (respondents). With such combinations and permutations several hundred thousand items of information are possible from our research with the 55 executives. For purposes of brevity we have and are limiting our discussion to some 5,610 possible information items (102 x 55) which form our data base.

Each EMI instrument attempts to view the manager from a composite viewpoint; that is, the whole manager. The focus is on the three divisions comprising the practices and characteristics of managers -- Part II of the EMI. Supplementing this are the variables in Parts I and III.
Each executive brings to the workplace his own educational and experiential history and repertoire of behavior for getting the job done. The EMI attempts to capture this for each individual manager and for a composite range of managers.

To further clarify our data base, the following statistics on the 55 executives are provided. They are total figures covering all the executives.

- Years of management training (47.0) and education (64.0)...Total: 111.0 years
- Years as an executive manager (312.0) and at other management levels (406.0)...Total: 718.0 years
- Years as an apprentice manager...Total: 131.5 years
- Years of service in this country (176.6) and in other foreign countries (346.0)...Total: 522.6 years
- Number of different companies worked for...Total: 125.0 companies

Our sample data base of 55 executives represents a rather broad-based group. This includes management experience of 718.0 years and international work experience of 522.6 years. The specific assessment of their practices and characteristics follows next in the testing of hypotheses, previously identified in the "Introduction" of the thesis. The intent is to statistically validate differences existing relative to the data.
Chapter I provided the conceptual framework of this thesis, the issues and problems to be addressed, and the design and objectives of this research. Our focus has been on the work performed by executive-level managers. As stated in Chapter I, "The management literature finds this area replete with problems, confusion, and contradictions."

We have attempted to tackle this problematic area by presenting our research findings through a 3-phased systematic process. This has included (1) to identify what it is that effective executives do, (2) to develop and test an instrument which captures these effective practices and characteristics, and (3) to apply the instrument in a field setting. "Each phase is interdependent yet each is designed to provide a significant contribution to better understanding executive-level management."

An important part of the 3rd phase is the testing of hypotheses. These hypotheses were derived from theoretical constructs surrounding management. According to Kerlinger (1973),

"A theory is a set of interrelated constructs (concepts), definitions, and prepositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the
The very nature of a theory lies in its explanation of observed phenomena" (p. 9).

The theory put forth in this research is that the practices and characteristics of executive managers are directly related to their effectiveness on-the-job and in that respect to their competitiveness. To operationalize the theory the scientific method was followed. Kerlinger (1973) states, "Scientific research is systematic, controlled, empirical, and critical investigation of hypothetical propositions about presumed relations among natural phenomena" (p. 11). He further states:

"The scientist will usually experience -- a curiosity as to why something is as it is. -- After intellectualizing the problem, after turning back on experience for possible solutions, after observing relevant phenomena, the scientist may formulate a hypothesis. A hypothesis is a conjectural statement, a tentative proposition, about the relation between two or more phenomena or variables" (pp. 11-12).

Hypotheses are normally of two kinds (Williams 1979). One is the Null Hypothesis which can be evaluated in terms of probabilities. The other is a Research Hypothesis, the prediction we wish to test which is always the logical opposite of the Null Hypothesis (p. 52). He further states, in accepting the Null Hypothesis we are saying that whatever differences occur between sample means are due to sampling error, no other reason than laws of chance. The samples, therefore, have the same population mean (p. 53). But, he states, "our primary interest is not in the acceptability that
some difference occurred by chance. Instead, we are interested in the acceptability of a statement that there is a difference" (p. 54). Often, he says, the Null Hypothesis is implied rather than stated (p. 57). But the Research Hypothesis, we actually want to test, needs to be unambiguous and rather precise (p. 55).

Miller (1983) provides further clarification by stating:

"If a theory is to be productive, it must be sufficiently precise to be 'determinate'. Precision is an integral element of the criterion of 'testability'. The prevailing pressure toward the utilization of statistical data -- to control and test theoretic inferences has a justifiable basis --. The more precise the inferences (predictions) that can be drawn from a theory, the less the likelihood of 'alternative' hypotheses that will be adequate to these predictions" (p. 20).

Our theory, focused on the effectiveness of executive managers (effectiveness as the dependent variable), is derived from the literature-based issues as cited in Chapter I. Franko (1978) highlights these issues by stating, as previously cited,

"...the main event in international business during the past decade has been the dramatic gain in the international competitive picture achieved by non-American, and particularly Continental European and Japanese companies" (p. 95). (Not only has there been) "more rapid growth in industrial productivity in both Japan and the Continent than in the United States and the United Kingdom" (p. 97) (but the) "Continental European and Japanese capabilities in product and process innovation have grown considerably relative to those of the United States and the United Kingdom" (p. 98).
Hayes and Abernathy (1980) in discussing European, Japanese, American and British managers believe that it is American "...preference for analytic detachment rather than insight" -- (and) "short-term cost reduction rather than long-term development which has played a major role in undermining the vigor of American industry" (p. 68).

Pascale and Athos (1981) also point to a Japanese/American comparison while lauding Japanese management.

But Tichy et al (1982) believe that looking to Japan is not the answer. They state:

"...when American industry is unfavorably compared to that of Japan or West Germany, two major factors are underscored: (1) our lack of a long-term perspective in management; and (2) our lack of skill in managing people" (p. 60).

A former British ambassador to Japan, Sir Hugh Cortuzzi, warned (June 1985) that,

"Japanese industry is neither omniscient nor unbeatable. -- A better approach (for Britain) is to isolate the qualities which are responsible for the crushing competitive performance of Japan; and to inquire how British industry could adapt them for use in its own, very different conditions" (pp. 88-89).

And Chaplin's article (October 1985) reveals that,

"A radical rethink of some very basic practices, from delivery performance to office procedures, is urgently required (for Britain) to match EEC competitors" (p. 101).

In attempting to slice through the complexity of these issues yet provide meaning to questions surrounding the apparent lack of effectiveness of Anglo-American management practices (the
of our theory), three hypotheses were developed. The first explores executive management effectiveness in general. The second deals specifically with differences in management effectiveness among national groups. The third explores differences in the three skills groups comprising the work of managers. The specific hypotheses are as follows:

**HYPOTHESIS #1**

Executive managers in technology-based multinational corporations have an effectiveness level different (lower) than that identified for effective performance on-the-job.

**HYPOTHESIS #2**

Executive managers in technology-based multinational corporations from Anglo-American regions have an effectiveness level different (lower) than the level identified for Nordic-European and Far-Eastern regions.

**HYPOTHESIS #3**

Executive managers have an inadequate (lower) level of Emotional R skills and abilities in comparison to Analytical and Social skills.

Hypothesis #1 has very broad-based implications. If, in fact, the hypothesis is proven correct, that is, executive managers typically perform at a level lower than that identified for effective performance, it not only may lead to an indictment of the technology-based executive population but also to
Ph.D Thesis

far-reaching concepts of organizational productivity, quality of work, market share, maximization of resources, etc., not to mention national implications of gross national product or balance of payments. It is not the intent of this research to attempt such extensive statistical inferences but instead to assess the significance of the differences provided through our data and from this to extrapolate as appropriate to larger populations.

The same is true for Hypothesis #2. The intent here is to assess the differences among the three regional groups of executives. Are Anglo-Americans different from Nordic-European and Far-Eastern executives? Are the differences significant or are they just due to chance? Here also implications to the larger population are important.

Hypothesis #3 is more narrow in intent. It assesses the differences in three skills groups related to technology-based managers. Of importance is the new skills category identified through this research -- Emotional R. This group was found to be the least characteristic of the managers. This was true for each of the three regional groups (as well as each of the six national groups and each executive within these groups). If the difference is found to be significant implications may apply to programs of education and training critical to the greater management population.
HYPOTHESIS #1

The first hypothesis covers the differences to be assessed between two means: The mean representing the effectiveness of our total sample of 55 executives and a mean representing a criterion of effectiveness against which the 55 executives can be assessed. This is derived from the specific hypothesis itself:

#1. "Executive managers in technology-based multinational corporations have an effectiveness level different (lower) than that identified for effective performance on-the-job."

Mathematically this Research Hypothesis states that $m_1 < m_2$ ($m = population mean$). In other words, the general executive population has an effectiveness level "less than" that of successful executives. The Null Hypothesis we are hoping to reject would be $m_1 \geq m_2$ (greater than or equal to) implying a one-tailed test as opposed to two-tailed or both ends of a normal curve. (See Williams 1979 pp. 55-63, Blalock 1979 pp. 186-190, and Miller 1983 pp. 211-212.)

From the summary results previously shown in Exhibits 29 and 30, the overall mean for the 55 executives was identified as 6.50. (Values from the forthcoming mathematical calculations may differ slightly due to rounding and other statistical manipulations.) The mean of 6.50 represents the first half of Hypothesis #1; that is, executive managers in technology-based,
multinational corporations. The measure used for the second half of the hypothesis, effective performance on-the-job, is based on a "criterion" of effectiveness. In Chapter III.A. we defined criterion as a "predicted measure for judging the effectiveness of persons--" (Smith in Dunnette 1983 p. 745). And plurally it was defined as "behaviors against which employees are judged -- those factors that constitute 'doing the job well'" (Schneider 1976 p. 48).

Smith also stated that the relevance of a criterion

"...is a matter of judgment. Some group or person must decide which activities are most relevant to success. Once these activities have been identified, efforts must then be directed toward developing psychometrically sound awareness of these activities" (p. 746).

The Executive Management Inventory served this purpose. Its psychometric properties were previously discussed in Chapter IV.F. Using the scale of the EMI as a measure for the second part of Hypothesis #1 we can use the maximum value of 10.0 as our criterion of effectiveness. But as Peter Drucker (1967) stated "...men of high effectiveness are conspicuous by their absence in executive jobs" (p. 1). Therefore, this "maximum effectiveness," derived from literature-based research, is clearly the epitome of executive excellence difficult to achieve.
Ph.D Thesis

To more realistically test Hypothesis #1 a second criterion of effectiveness will be used. That criterion is the behavior of successful executives as measured through the EMI. Of six such executives interviewed three completed the EMI. Their derived mean was 6.95. While the value clearly falls short of a maximum possible score, these executives were identified as successful in their job and represent a valid and reasonable criterion of effectiveness.

The test to be used for assessing the significance of the difference between these two means -- 6.50 and 6.95 -- is the "t test for means" also called the "t distribution" (Roberts 1979 p. 201) or "t ratio" (Kerlinger 1973 p. 209). Williams (1979) states:

"...the t test -- is used for testing the difference between two population means, based on the observed difference between two sample means and their distribution" (p. 71).

He further states:

"...a probability of .05 is taken as a level suitable for rejection of the null hypothesis" (p. 57).

Roberts believes that,

"In most research applications being 68% confident (one standard deviation) is not good enough. More acceptable levels of confidence are 95% and 99%. The 't' value represents how many standard deviations out in a sampling distribution you would have to go to isolate 95% or 99% of the area. In a normal distribution these values would be 1.96 and 2.58 respectively" (p. 215).
Using the .05 level of significance (critical value of $t_{.05}$) for testing our $t$ distribution, the calculations for Hypothesis #1 including the formulae required are shown in Exhibit 33. Only summary calculations are shown.

The resultant $t$ distribution from the calculations is 4.4424. Referring to a "$t$ table" (in Blalock 1979 p. 603) we find that with a df (degrees of freedom) of 56 and a significance level of .05, a $t$ value of 1.6710 or greater for a one-tailed test (2.000 for a two-tailed test) is required to reject the null hypothesis. A $t$ value less than 1.6710 would signify that the differences in means occurred purely by chance and therefore the means are equal. Our $t$, calculated at 4.4424 in Exhibit 33, is clearly beyond a chance probability of occurrence. We, in fact, are 95% confident that a mean of 6.50 (or 6.5095 as shown in Exhibit 33) would have less than a 5% chance of being found if the means were equal. The observed difference between the means are, therefore, statistically significant. There is reason to believe, then, that the two samples represent different populations in terms of their means. (See Roberts 1979 p. 225 and pp. 229-234.)

"HYPOTHESIS #1 IS ACCEPTED"

Executive managers in technology-based multinational corporations have an effectiveness level different (lower) than that identified for effective performance on-the-job.
Exhibit 33.
CALCULATIONS - STATISTICAL TEST
FOR HYPOTHESIS #1

STATISTICAL TEST: "t Test for Means"

FORMULAS REQUIRED:

\[ S = \sqrt{\frac{\sum X^2 - (\sum X)^2}{n}} \]

Estimate of the population mean. Used for two sample groups: \( S_1 \) and \( S_2 \).

\[ S_{\bar{X}} = \frac{S}{\sqrt{n}} \]

Standard error of the mean (for \( S_1 \) and \( S_2 \)).

\[ S_{\text{diff}} = \sqrt{(S_{\bar{X}_1})^2 + (S_{\bar{X}_2})^2} \]

Standard error of the differences in means.

\[ t = \frac{\bar{X}_1 - \bar{X}_2}{S_{\text{diff}}} \]

t Test for Means (the \( t \) distribution)

CALCULATIONS:

\[ \Sigma X_1 = 358.02 \quad \Sigma X_2 = 20.86 \]
\[ \Sigma X_1^2 = 2357.74 \quad \Sigma X_2^2 = 145.05 \]
\[ \bar{X}_1 = 6.5095 \quad \bar{X}_2 = 6.9533 \]
\[ n_1 = 55 \quad n_2 = 3 \]
\[ S_1 = .7101 \quad S_2 = .0424 \]
\[ S_{\bar{X}_1} = .0957 \quad S_{\bar{X}_2} = .0245 \]
\[ S_{\text{diff}} = .0999 \]

\[ t = 4.4424 \]
\[ df = 56 \]
\[ t_{.05} = 2.0000 \text{ (two-tailed)} \]
\[ t_{.05} = 1.6710 \text{ (one-tailed)} \]
HYPOTHESIS #2

The second hypothesis to be tested covers the differences assessed among three regional groups of executives.

Specifically, the hypothesis states:

#2. Executive managers in technology-based multinational corporations from Anglo-American regions have an effectiveness level different (lower) than the level identified for Nordic-European and Far-Eastern regions.

In arriving at the significance of the differences we will first assume the equality of means; i.e. the implied null hypothesis of $m_1 = m_2 = m_3$. The test to be used in attempting to reject the null hypothesis is "single-factor analysis of variance." Whereas the "t test" was used for assessing the differences between two means, "analysis of variance" is a "procedure that allows one to test hypotheses about more than two population means at one time" (Roberts 1979 p. 243). But as cautioned,

"..analysis of variance will tell us only if there is a significant variation among the means -- it will not tell us about the comparison of individual means --. In other words, analysis of variance centers upon the question of whether the three samples represent the same population in terms of their means" (Williams 1979 p. 80).

Using again the .05 level of significance for testing our results, the calculation for Hypothesis #2, including the formulae required, are shown in Exhibit 34. The calculated result is an "F ratio," a ratio of between group variance (SSbg) to within group variance (SSwg). (See Williams 1979 pp. 78-89 and Roberts pp. 268-274.)
Exhibit 34.
CALCULATIONS - STATISTICAL TEST FOR HYPOTHESIS #2

STATISTICAL TEST: "Single Factor Analysis of Variance"

FORMULAS REQUIRED:

\[ N_c = n_1 + n_2 + n_3 \]

Combined sample sizes.

\[ \Sigma x_c = \Sigma x_1 + \Sigma x_2 + \Sigma x_3 \]

Combined sum of the values.

\[ \Sigma x^2_c = \Sigma x^2_1 + \Sigma x^2_2 + \Sigma x^2_3 \]

Combined sum of the squared values.

\[ SS_T = \Sigma x^2_c - \frac{(\Sigma x_c)^2}{N_c} \]

Sum of the squared deviations around the mean.

\[ SS_{BG} = \Sigma_g \left[ \frac{(\Sigma x_1)^2}{n_1} + \frac{(\Sigma x_2)^2}{n_2} + \frac{(\Sigma x_3)^2}{n_3} \right] - \frac{(\Sigma x_c)^2}{N_c} \]

Sum of the squared deviation between groups.

\[ SS_{WG} = \Sigma_g \left[ \Sigma x^2_1 - \frac{(\Sigma x_1)^2}{n_1} \right] + \left[ \Sigma x^2_2 - \frac{(\Sigma x_2)^2}{n_2} \right] + \left[ \Sigma x^2_3 - \frac{(\Sigma x_3)^2}{n_3} \right] \]

Sum of the squared deviation within groups.

\[ F = \frac{SS_{BG}}{SS_{WG}} \]

Analysis of Variance. The F ratio.

CALCULATIONS:

\[ \Sigma x_1 = 145.11 \quad \Sigma x_2 = 100.65 \quad \Sigma x_3 = 112.56 \]

\[ \Sigma x^2_1 = 963.85 \quad \Sigma x^2_2 = 679.65 \quad \Sigma x^2_3 = 714.24 \]

\[ \bar{x}_1 = 6.5955 \quad \bar{x}_2 = 6.7100 \quad \bar{x}_3 = 6.2344 \]

\[ n_1 = 22 \quad n_2 = 15 \quad n_3 = 18 \]

\[ N_c = 55 \quad \Sigma x_c = 358.02 \quad \Sigma x^2_c = 2357.24 \]

\[ SS_T = 127.2251 \quad SS_{BG} = 102.1070 \quad SS_{WG} = 25.1181 \]

<table>
<thead>
<tr>
<th>Term</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS_{BG}</td>
<td>3 - 1 = 2</td>
<td>2.1070</td>
<td>1.0535</td>
<td>2.1812</td>
</tr>
<tr>
<td>SS_{WG}</td>
<td>55 - 3 = 52</td>
<td>25.1181</td>
<td>.4830</td>
<td></td>
</tr>
<tr>
<td>SS_T</td>
<td>55 - 1 = 54</td>
<td>27.2251</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ F = 2.1812 \]

\[ F_{.05} = 3.1100 \]
With an Anglo-American mean of 6.5955, Nordic-European mean of 6.7100, and Far-Eastern mean of 6.2344 the derived F ratio is 2.1812. With 2df for the between group deviation and 52 for the within group the value for F.05 (the critical value) is 3.1100. (Refer to Blalock 1979, Distribution of F Table, p.614.) With the F ratio less than the critical value we are saying that the differences in means may likely be due to errors in the sample itself and not differences in the populations which the samples represent; i.e. the independent variables of different groups (Roberts 1979 pp. 271-274). The differences are therefore not significant and the null hypothesis of equality of means is accepted.

"HYPOTHESIS #2 IS REJECTED"

Anglo-American executives are not significantly lower in effectiveness than Nordic-European and Far-Eastern executives.

Lowering our level of confidence, though, from .05 to .10 would have resulted in acceptance of the hypothesis; i.e. rejecting the null hypothesis. But in this case rejecting the null hypothesis when it should have been accepted is identified in hypothesis testing as a "Type one error" (Williams 1979 p.64). This is due to the fact that while the effectiveness mean of 6.5955 for the Anglo-American is lower than the Nordic-Europeans (6.7100) and hence consistent with the research hypothesis, it is actually higher than the Far-Eastern mean of 6.2344.
Based on research of the literature the results expected would have been a Far-Eastern mean higher than both the Nordic-European and the Anglo-American. This is graphically shown in Exhibit 35. The actual result of the Far-Eastern group is 6.2344 identified in the lower right. The expected result would have been more consistent with the Anglo-American to the Nordic-European trend, i.e. to the top right of the chart as shown by the dotted line -- most likely approximating 7.000. This was not the case.

**Exhibit 35.**
ACTUAL VS. EXPECTED EFFECTIVENESS LEVELS OF FAR-EASTERN EXECUTIVES IN COMPARISON TO NORDIC-EUROPEANS AND ANGLO-AMERICANS
Ph.D Thesis

Other factors rather than aggregate management practices and characteristics (all 37 categories of the EMI) must be considered.

While we are interested in knowing that there are significant differences among the three groups, Williams (1979) also states that "follow-up or post hoc tests" may be needed in further assessing the differences in the groups (p. 84).

In Exhibit 31, which identifies the results of the three groups to each of the EMI's 37 scales or categories, we found that the Far-Eastern executives showed greater stability -- least variance -- in the Emotional R (ER) division among the 3 regional groups. In 4 of the ER categories the Far-Eastern executives were in fact higher than the other 2 groups. These categories included Flowing - Fl, Grasping - Gr, Ambiguity/Clarity - Ac, and Reacting - Re. The Anglo-American and Nordic-European executives had virtually identical lower values in these areas than the Far-Eastern did.

A post hoc test was therefore run on the Anglo-American versus the Far-Eastern executives to assess if, in fact, the differences here were meaningful. The "t test" was used. Calculations are shown in Exhibit 36.
Exhibit 36.
CALCULATIONS - POST HOC STATISTICAL TEST
FOR HYPOTHESIS #2

STATISTICAL TEST: "t Test for Means"

FORMULAS REQUIRED:

\[ S = \sqrt{\frac{\sum X^2 - (\bar{X})^2}{n}} \]

Estimate of the population mean. Used for two sample groups: \( S_1 \) and \( S_2 \).

\[ S_{\bar{X}} = \frac{S}{\sqrt{n}} \]

Standard error of the mean (for \( S_1 \) and \( S_2 \)).

\[ S_{\text{diff}} = \sqrt{(S\bar{X}_1)^2 + (S\bar{X}_2)^2} \]

Standard error of the differences in means.

\[ t = \frac{\bar{X}_1 - \bar{X}_2}{S_{\text{diff}}} \]

t Test for Means (the t distribution)

CALCULATIONS:

\[ \Sigma X_1 = 18.38 \quad \Sigma X_2 = 21.89 \]
\[ \Sigma X_1^2 = 85.76 \quad \Sigma X_2^2 = 120.12 \]
\[ \bar{X}_1 = 4.5950 \quad \bar{X}_2 = 5.4725 \]
\[ n_1 = 4 \quad n_2 = 4 \]

\[ S_1 = \ .6595 \quad S_2 = \ .3305 \]
\[ S_{\bar{X}_1} = .3298 \quad S_{\bar{X}_2} = .1653 \]

\[ S_{\text{diff}} = .3689 \]

\[ t = 2.3787 \]
\[ df = 6 \]
\[ t_{.05} = 2.4470 \text{ (two-tailed)} \]
With an Anglo-American mean of 4.5950 and a Far-Eastern mean of 5.4725 the resulting $t$ value is 2.3787. Assuming a two-tailed test, that is the results falling on both ends of a normal distribution, the critical value of $t_{0.05}$ with 6df would be 2.4470. This is higher than the $t$ value of 2.3787. Hence, the 5% level of significance is barely rejected. Reducing the significance to $t_{0.10}$ (90% confidence level) we find from the $t$ table the critical value would be 1.9430, enough to accept the inference that these two means are significantly different -- they are derived from different populations.

While not exhaustive, evidence does point to the need for discriminate analysis of management practices in assessing differences among groups. In this case, meaningful differences in Emotional R categories were evident. Other variables such as in Part I of the EMI would also be candidates for further assessment of possible reasons for differences in the regional groups.

**HYPOTHESIS #3**

The third hypothesis covers the tri-divisional skills and abilities model characterizing the Executive Management Inventory. It has been hypothesized that Analytical and Social skills and abilities, due to their emphasis by educational and training institutions, more clearly characterize executive
behavior. Not so characteristic are the Emotional R skills and abilities. In testing this premise, Hypothesis #3 was devised.

#3. "Executive managers have an inadequate (lower) level of Emotional R skills and abilities in comparison to Analytical and Social skills.

We are in fact interested in assessing the differences among all three means of the Tri-Divisional Model. The means are for Analytical 6.7088, Social 6.7159, and Emotional R 6.0019. Again, the "single factor analysis of variance" will be the statistical test used. Exhibit 37 provides the results of the calculations.

The derived F ratio of the between group variance (SSbg) and within group variance (SSwg) is 5.8933. With a df of 2 in the numerator and 69 in the denominator and a significance level of .05, the F table provides a critical value of 3.1600. If the means are equal (m1 = m2 = m3) as prescribed by the null hypothesis the chances of obtaining the mean scores as derived from our data are less than 5%. This chance occurrence (in other words, sampling error) is remote. On the other hand, we are 95% confident that other factors, such as different populations, are the cause of these differences. An F value of 5.8933 which is larger than the F.05 of 3.1600 (both values shown on the bottom of the exhibit) signifies this. The differences are therefore significant.
Exhibit 37.
CALCULATIONS - STATISTICAL TEST
FOR HYPOTHESIS #3

STATISTICAL TEST: "Single Factor Analysis of Variance"

FORMULAS REQUIRED:

\[
\begin{align*}
N_c &= n_1 + n_2 + n_3 \\
\Sigma X_c &= \Sigma X_1 + \Sigma X_2 + \Sigma X_3 \\
\Sigma X_c^2 &= \Sigma X_1^2 + \Sigma X_2^2 + \Sigma X_3^2 \\
SST &= \Sigma X_c^2 - \left(\frac{\Sigma X_c}{N_c}\right)^2 \\
SS_{BG} &= \sum \frac{\left(\Sigma X_1\right)^2}{n_1} + \frac{\left(\Sigma X_2\right)^2}{n_2} + \frac{\left(\Sigma X_3\right)^2}{n_3} - \frac{(\Sigma X_c)^2}{N_c} \\
SS_{WG} &= \sum \left[ \frac{\Sigma X_1^2}{n_1} - \frac{(\Sigma X_1)^2}{n_1} \right] + \left[ \frac{\Sigma X_2^2}{n_2} - \frac{(\Sigma X_2)^2}{n_2} \right] + \left[ \frac{\Sigma X_3^2}{n_3} - \frac{(\Sigma X_3)^2}{n_3} \right] \\
F &= \frac{SS_{BG}}{SS_{WG}} \\
\end{align*}
\]

CALCULATIONS:

\[
\begin{align*}
\Sigma X_1 &= 228.10 \\
\Sigma X_2 &= 114.17 \\
\Sigma X_3 &= 126.04 \\
\Sigma X_1^2 &= 1542.78 \\
\Sigma X_2^2 &= 779.26 \\
\Sigma X_3^2 &= 775.25 \\
\bar{X}_1 &= 6.7088 \\
\bar{X}_2 &= 6.7159 \\
\bar{X}_3 &= 6.0019 \\
n_1 &= 34 \\
n_2 &= 17 \\
n_3 &= 21 \\
N_c &= 72 \\
SS_T &= 51.2588 \\
SS_{BG} &= 7.4838 \\
SS_{WG} &= 43.7750 \\
SS_{BG} &= 7 - 1 = 2 \\
SS_{WG} &= 72 - 3 = 69 \\
SS_T &= 72 - 1 = 71 \\
\end{align*}
\]

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<td>.6344</td>
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</tr>
<tr>
<td>SST</td>
<td>71</td>
<td>51.2588</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[
F = 5.8933 \\
F_{.05} = 3.1600
\]
"HYPOTHESIS #3 IS ACCEPTED"

Executive managers have an inadequate (lower) level of Emotional R skills and abilities in comparison to Analytical and Social skills.

The direction of the Emotional R mean (6.0019) is consistent with the stated hypothesis (i.e. lower) with respect to either Analytical (6.7088) and Social (6.7159). Post hoc tests are not required. It is clear that Emotional R skills and abilities are least characteristic of executive managers.

These statistically validated results of assessing the significance of differences between and among the various means derived through our research are in themselves highly significant. Hypothesis #1 provides evidence that the general population of technology-based multinational corporate executives are less effective than required for successful management. Hypothesis #2 establishes that the differences among the various regional groups of managers are indeed significant. The direction of the difference, though consistent with trends expected for Anglo-American and Nordic-European executives, is inconsistent with the Far-Eastern result which was lower than expected. A further test showed that analyzing specific practices such as those of
Emotional R may hold a key to the Far-Eastern image of effectiveness proclaimed by many worldwide. Credence to this follow-on inference is provided by Hypothesis #3. Here, evidence is shown of a lack of sufficient resiliency (Emotional R skills and abilities) in the technology-based multinational corporate population.

The last section of this chapter covers interviews held with six successful corporate executives. Their comments provide further enlightenment to the test results above as well as substantive support to the previous 2 phases of this research presentation.
E. INTERVIEWS WITH SIX SUCCESSFUL GENERAL MANAGERS

The final part of the field research covers interviews with six successful General Managers. It is designed to supplement and enhance the statistical responses analyzed in the previous section.

The sources for the identification of these executives were the Commercial Attaches and Counsellors from the embassies and consulates of the respective national groups studied. These commercial representatives from the executives' home countries were previously instrumental in identifying the corporations to be sampled. The knowledge by these representatives, their insight and understanding of the various corporations and their leaders enabled them to identify a key executive to be interviewed by this researcher. Through the good offices and support of the embassies and consulates follow-up contacts were made by phone, by this researcher, with each of the six executives and in some cases followed up by personal, pre-interview visits. The purpose of the research was discussed and appointments made for the interviews.

Bouchard (1983) identifies the interview as one of five major data collection methods (discussed in Chapter III of this thesis). "Few researchers," he states, "fail to use, at some time, some sort of focused conversation with participants."
But a successful interview (will) "depend heavily on mutual trust and the goodwill of the respondents. If they are to yield useful information, that goodwill and trust must be maintained, cultivated, and validated by the interviewer" (pp. 368-369).

Bouchard also identifies types of interviews from the totally structured (Type I) to the very nondirective (Type IV) -- (pp. 371-372). The type used in this research was mid-way between these extremes -- structured but with an open-ended response format.

Consistent with our interview methodology was its focus on management effectiveness as we have done throughout this research. Bouchard identifies such a focused interview as,

"a specialized procedure developed for use on persons who are known to have been involved in a particular situation. Generally, the situation is one which the investigator has controlled and analyzed provisionally prior to the interview" (p. 374)

A major part of this thesis was research conducted on the literature. This included the effectiveness-based models discussed in Chapter II. From these models seven categories of similarity in executive work were identified. They are:

- Information
- Network
- Adaptable
- Influence
- Competitiveness
Values
Driving Will

This 7-variable composite model along with other more general and some more specific managerial variables were incorporated into a 4-page interview format. Responses from each executive (General Manager) are summarized in Exhibit 38 shown at the end of this section. The exhibit contains 24 pages, 4 for each executive.

What were the overall results of these interviews with six successful international General Managers? Were there any critical findings or common threads of possible importance to this research? In answering these questions, we will take a look at some of the background data on the GMs and their companies.

Background Data

Each of the six executives interviewed served as General Manager -- in name or by job duties. All had operational responsibility of their company in the host country or regional area; i.e. were Chief Executive Officers. One was specifically titled President, three General Manager, one Deputy General Manager, and one as Manager. All worked in technology-based industries from Aerospace and Electronics to Manufacturing and Service Industries. The annual sales of the companies they
themselves managed totaled £139 million in 1985, an average of £23.17 million (about $35 million) for each GM. The annual sales worldwide of the companies they represent totaled £44.300 million or an average of £7.383 million for each company (about $11.000 million).

The workforce they supervised ranged from a low of 15 for the Korean GM to a high of 225 for the American. The average was 95. Worldwide, the staffing of these companies ranged from 13,000 personnel for the Japanese company to 350,000 for the German. The average was 121,000 personnel for each company. Each GM worked an average of 14 years for their present company ranging from 7 years for the British to 24 for Japanese.

The number of years each GM served as a manager averaged 13.17, very close to the average of 13.05 years for the previous 55 executives. Experience as an executive was also similar. This averaged 5.50 years for those interviewed and 5.67 years for the 55 executives. There was a difference, though, in the average amount of overseas experience of the two groups. The successful executives were more experienced averaging 13.17 years overseas with the sample of 55 executives averaging 9.50 years.
Views on Managing

A significant feature of each of the six successful executives interviewed was the exuberance each manifested in their job. They appeared committed, very interested in as well as challenged by their work and the opportunities it provided. In their presence it seemed obvious that such attitudes and feelings were key motivational attributes critical in fueling the organization, its people, and its overall operations.

Consistent with this enthusiasm for their work, four factors seemed to underline their approach to managing. They are:

1. Being flexible and adaptable (the most important).
2. Having high regard for people.
3. Keeping up with their business’s state-of-the-art.
4. Maintaining a high competitive edge.

But within these four factors are woven the basic philosophy and goals of the company each GM represents. These can be considered the glue that provides cohesion to the four factors and the overall framework for the organization’s existence. As the British GM stated:

"I work within the management parameters structured from headquarters for the profitability of the company."

This is echoed by the Swedish GM who stated:

"I run things the blue-eyed Scandinavian way -- have independent people as long as they follow our general line. -- We have people control
themselves as long as they are steared by the overall goal of the company (back home)."

While guidance from headquarters is important, the American GM stated:

"We must be allowed to run the local office as we see it, not by headquarter rules."

This was reinforced by the German GM who stated that too much link to the home office limits the possibilities in the local market.

It is clear, however, that some American companies do exercise a tight control over their foreign subsidiaries, as is evidenced by the research of Goldberg and Negandhi (1983) in their assessment of "level of formalization" in 117 multinational companies: 33 American, 44 German, and 40 Japanese. They found that with respect to the "Extent to which subsidiaries depend on written policies from headquarters," 88% of the American firms depended a "great deal," 32% of the German firms did so, and only 12% of the Japanese firms (p. 25).

The results from the Japanese GM interviewed were consistent with this finding. He saw his job as "very comprehensive" with "full power." The Korean GM felt his job has "more flexibility than in the head office." He also provided an interesting approach to his job:
"I follow the philosophy of management of my company. (1) Business can help my country. We are proud of our job. It is for our country. (2) Most important is manpower. (3) Take a reasonable approach to business -- profits and goals to survive."

This sense of purpose yet selflessness was evident in interviews with both the Korean and the Japanese executives. Retrospective notes prepared by this researcher subsequent to each interview provides some insight into this. An example is the Japanese executive.

"He is a man with confidence in himself and his abilities to perform well. Yet, he showed a sense of humility in his manner as though to underplay the power of his position. A westerner may unwittingly believe this to be a sign of weakness yet his strength and convictions as a man who get results appears evident."

While the other four GMs did not display humility as above, all six reflected signs of their successfulness in various ways but with the exuberance and underlining factors previously mentioned. On that line, the Swedish GM reflects another interesting point. He states:

"...we don't have managers, we have leaders. Everyone is a leader, impacting as colleagues with each other."

Each executive finds working overseas quite different than back home. The British GM states it quite well.

"It is completely different -- a million light years. A manager in the U.K. or Europe may have tremendous qualifications but be a disaster here. In the U.K. a manager tends to have a particular job such as in marketing or production. They don't overlap. Here a manager must be multidisciplined, understand
Ph.D Thesis

every facet of running the business including facets of the host country."

This is echoed by all the General Managers:

American: "Abroad is different in every way."

Swedish: "There is more time abroad for real business -- we can also learn to deal with others -- different cultures."

German: "The mentality in a foreign country is different."

Japanese: "The difference is in the country you are working in. Those who will work abroad must be taught to be flexible -- in thinking and attitudes."

Korean: "It is different abroad -- different personalities. -- Training is needed before coming here."

And as stated by the Japanese executive, "Competition is most keen." "High consciousness is important," states the American GM. The British GM explains, "We think, believe, and work in a hi-tech environment with hi-tech equipment. -- This is the sharp end of the business. -- It is a hot seat. -- Technology is what it's all about. We fall by the wayside if we are not on top of it." Technological competence is critical to the German GM. He states, "Technology is very important. -- We have to convince the customer that ours is the best."

"The nature of our business," the Swedish GM states, "is hi-tech and very complex." He and the British GM seem to summarize the qualities needed to be a successful manager in such an environment.
Ph.D Thesis

SWEDISH GM: "It is important to be interested in your work, adaptable, and constantly trying to achieve. You need a proper base back home -- at least a short career in the head office to learn the company culture, its goals and general heading. But you must maximize locally your own small business unit and know how it fits into the overall corporation."

BRITISH GM: "You need alot of drive and aggressiveness. You have to have a high profile -- not just plod away in the office. I have stuck out my neck based on what I feel is needed. Have to stand up and be counted but be right 9 out of 10 times. High pressure? Yes! But pressure is what you want it to be. I enjoy being on the sharp end of the business. You have to put in in order to get out."

The results of each interview are shown in Exhibit 38 (38-1 to 38-6) in the several pages following this section. The format for each GM's interview results is structured into four parts as follows:

- Background Questions
- Management Philosophy
- Management Practices
- General Questions

Highlights and significant findings from the interviews as they impact on this research have been addressed in the preceding pages. One last item to further highlight is that covering flexibility and adaptability defined in the interview format as "Changing to circumstances and situations, being open and
Ph.D Thesis

flexible to internal and external needs, even if your actions seem imprecise." Comparable to Emotional R, this was earlier in this section identified as the most important of the four factors underlying the six GMs' approach to managing. It was a factor consistently mentioned in the interviews and one that has been a consistent finding in this research as that LEAST CHARACTERISTIC OF EACH EXECUTIVE SAMPLED.

Here is what the successful executives stated about the importance of flexibility and adaptability to their job.

American GM: "In the international scene this is the name of the game. -- Be flexible but without compromising integrity."

British GM: "Flexibility. That's a very, very important word. A manager can be successful because of this (with his product). -- A manager may have to change his style completely when coming overseas. -- Must be flexible and adaptable with people -- have trust."

Swedish GM: "Abroad a leader has more awareness. We are allowed to make mistakes but we must also take initiatives. -- (With respect to competition) we have a marginal strategy. This is full of pitfalls but it -- keeps us open -- to opportunities in the market."

German GM: "You have to adapt the organization according to the market situation. -- Competition (here) is different than the home market. But alot of progress can be made."
Japanese GM: "Those who will work abroad must be taught to be flexible -- in thinking and attitudes. -- One may make mistakes but if he is frank and flexible corrections can be made. -- Have a flexible mind to understand the different cultures in the world. If not, you will become frustrated and tense which can lead to misjudgments in the country you are doing business. It is not necessary to love the country but try to understand it with a broad mind."

Korean GM: "We should overcome and adapt. If not we cannot survive. Compete with change. -- This is a sharply changing business. Study continuously. To compete with the economic situation of the world study new technology, new management systems, new skills. That way you can cope with a changing world situation."

This input is an appropriate ending to the field research findings from our corporate executives. The "Conclusions" to this research follow next in Chapter VI.
EXECUTIVE INTERVIEW

Exhibit 38-1

Interviewee AMERICAN EXECUTIVE
Job Title PRESIDENT
Field AEROSPACE
SIC Code 35, 36, & 37

BACKGROUND QUESTIONS

Total years as a manager 32. Executive 19. Overseas Experience 37.
Total people representing your company here 225. World-wide 184,000.
Nature of your company Aerospace, Aircraft, and Industrial Equipment.
Annual sales here £15 million. World-wide £10,000 million.
Total different companies including this one you worked for 3.
Total years with this company 11.

MANAGEMENT PHILOSOPHY

How do you view your role as a top manager in your company?

My role is that of senior representative of my company. More like a coordinator -- to tie loose ends together. Two General Managers work with me with each having technical responsibility over their units. Financial plans are integrated. I am responsible to the Board back home for overall performance. But I need more hands-on management here and not 7000 miles away.

What is your philosophy about managing people?

I have to set an example of discipline and hard work. I have good people here -- selected by myself, hopefully. People make mistakes but we have to draw the line. Must be tolerant, though, because of the many different nationalities. Have to make allowances, treat people fairly, and respect their background and religion.

How do you deal with competition?

My company has competition worldwide. The strategies to meet it are done back home at headquarters. Everyone must insure that they do a good job -- maintain a good position with our customer. Their own jobs depend on this. We are a customer support element with products coming from the United States. We must be best from a customer viewpoint.

323
What impact does technology have on the work of your company?

We think, believe, and work in a hi-tech environment with hi-tech equipment. Therefore, we need to do things right because the financial consequences are critical. We have security-based products. Our company spends nearly $1 billion each year on R & D. High consciousness is important.

How important is management training and education to the job of managing?

All my training has been in the U. S. Air Force. It was less theoretical and more practical. In this corporation I have had none. My degree was in Engineering not Management. I would like some management theory. We now have a new corporate President who has started top training. This is good for ones career and motivation.

How different is it being an international manager than managing back home?

Abroad is different in every way. First the people are different. You are managing Americans but also many people from different nations. Managing them is alot different than managing back home. Have to be sensitive to differences among people. There are times when you can see we are more inefficient than an equivalent organization in the U. S. Have to recognize this and buy it. Computers in the office help to reduce this inefficiency.

MANAGEMENT PRACTICES

What follows are seven categories of work which research shows are related to executive managers. What are your specific views on each of them.

INFORMATION - The need to keep well-informed on your company and the business you are in; to seek information aggressively.

In our company it is critical worldwide that our managers be well-informed. We have to be technically capable, make great effort to keep up with aerospace technology and know what is going on inside and outside the company. The personnel manager should know also. This information is basic. In the military we call it intelligence.
NETWORK OF PEOPLE – Interacting with and developing relations with people you may be dependent on in and out of the company.

For us this is important. We depend on a lot of people for our products and technology. I have gone out of my way to meet people. This leads to results. My company is not vain. It was developed by Connecticut yankees.

ADAPTABLE – Changing to circumstances and situations, being open and flexible to internal & external needs, even if your actions seem imprecise.

In the international scene this is the name of the game.

INFLUENCE – Obligating people and moving them in directions you feel are important for the company as a whole.

The connotation here is bad. Motivate people instead. I have been fortunate in having people who are quite well motivated. I influence them by setting examples; by good strategic goals. I’m not prepared to go beyond that.

COMPETITIVENESS – Focusing on those products or services that your company knows best and have the greatest long-term impact; promoting quality and reliability.

Since we are a service corporation here, I have no control over this. But headquarters uses the words quality and reliability. It is difficult for us to compete on cost. But quality, yes.

VALUES – Promoting honesty and openness, cooperation among people, respect for individuals and motivating them to give their best.

All of these are a definition of what a leader is.

DRIVING WILL – Action and risk-taking, encouraging people to think independently and competitively; creating the environment to achieve results.

We are leaders in our field -- 2 or 3 years ahead of others. I’m careful with risk-taking. Risks must first be calculated with as many options on your side, then take them. Harnessing the results of our people's thinking is important; and yes, we need the right tools to achieve results.
GENERAL QUESTIONS

Overall, how structured or unstructured would you say is the job of a general manager or other such top position in a company?

In a normal GM job our company tends to be fairly structured with an inordinate amount of help from our headquarters. There are rules, permission needed -- too centralized for best results. But here it is unstructured and based on local needs.

Concerning structure again, what type of organization structure would you say exists in your company?

Pretty structured -- traditional. This is not the way to optimize. Need to decentralize. We must be allowed to run the local office as we see it, not by headquarter rules.

On a scale of 1 of 10, with 10 being the best, how would you rate the overall effectiveness of the following multinational executives:

American ___1___ Swedish ___3___
British ___2___ Japanese ___4___
German ___6___ Korean ___5___

You are considered a successful executive manager. If a newly appointed young manager asked you 'what does it take to be a successful manager in a multinational company,' what would you tell that person?

Be conscientious. Know how to tilt. Forget the organization chart. Have ambition and the drive to get ahead. Have standards of integrity and honesty. These are very important. They can't be taken away from you. Be flexible but without compromising integrity. Basic moral values are the same here as in the U. S. although they are more difficult here.
EXECUTIVE INTERVIEW

Exhibit 38-2

Interviewee  BRITISH EXECUTIVE
Job Title   GENERAL MANAGER
Field     ELECTRONICS
SIC Code  33, 35, & 50

BACKGROUND QUESTIONS

Total years as a manager _15_. Executive _5_. Overseas Experience _15_.
Total people representing your company here _50_. World-wide _50,000_.
Nature of your company  Electrical Manufacturing and Engineering.
Annual sales here _£ 8 million_. World-wide _£ 2,100 million_.
Total different companies including this one you worked for _3_.
Total years with this company _7_.

MANAGEMENT PHILOSOPHY

How do you view your role as a top manager in your company?

This is the sharp end of the business. There is a big marketplace here and results play a major part of our sales. I have a top responsible position. It is a hot seat. Planning is important and my strategy is to plan 2 to 3 years in advance.

What is your philosophy about managing people?

I try to remember that they are individuals. That's important. I have an open door to all from the bottom to the top. I gain respect for that. A manager must keep his finger on the pulse of people -- get involved with them -- and get feedback. But each person must know what his job is.

How do you deal with competition?

First is to know your competition. We have alot here but we deal with them by knowing what they are doing. Attack areas where they are not so good. We also try to work with our competition. But there is a certain sector of the marketplace which is ours. We focus on doing a good job here instead of trying to take the whole market.
What impact does technology have on the work of your company?

We are a leader in technology in our field. We spend a great deal of money on R & D. People know us -- what we do -- our quality, etc. We are a brand leader. Technology is what it's all about. We will fall by the wayside if we are not on top of it. We keep on top in our offices as well as with our MIS's.

How important is management training and education to the job of managing?

I believe it is a fundamental necessity. It is very important. Good managers are educated not born. With natural ability you can get away with very little. Engineers, accountants, forklift operators, etc. -- all need training. Management courses are meant to make you think so they include some theory. I have a good general background so I am a good General Manager.

How different is it being an international manager than managing back home?

It is completely different -- a million light years. A manager in the U. K. or Europe may have tremendous qualifications but be a disaster here. In the U. K. a manager tends to have a particular job such as in marketing or production. They don't overlap. Here a manager must be multidisciplined, understand every facet of running the business including facets of the host country. A manager may have to change his style completely when coming overseas.

MANAGEMENT PRACTICES

What follows are seven categories of work which research shows are related to executive managers. What are your specific views on each of them?

INFORMATION - The need to keep well-informed on your company and the business you are in; to seek information aggressively.

This is tremendously important. It helps to run a company. I have a computer to give me real-time information. I can see at a glance how my company is doing plus historical information. The guys on the ground floor need to talk to me. Every situation is different. Need to get the feel to get the best. Reports don't do that. The previous manager had daily, weekly, then monthly paper inputs. I'm against that. I talk to my people 5 times a day.
NETWORK OF PEOPLE - Interacting with and developing relations with people you may be dependent on in and out of the company.

This is an extension of the first item. Good relations with your senior management plus guys of the ground floor are important. I need to know what senior management wants out of me. Therefore, I must keep very close to them. Must be flexible and adaptable with people -- have trust. Atleast you are talking.

ADAPTABLE - Changing to circumstances and situations, being open and flexible to internal & external needs, even if your actions seem imprecise.

Flexibility. That's a very, very important word. A manager can be successful because of this. He may have a good product but now it may not be selling so he should adapt the product or throw it out. I have been flexible and have diversified in many directions.

INFLUENCE - Obligating people and moving them in directions you feel are important for the company as a whole.

I tend to build up a relationship with people -- educate them to being responsible to the company. I do influence them through promotion, career development, etc. Obligation is not right. Have to build up relations/trust. Therefore, you influence them. You're looking after their interests. They feel this.

COMPETITIVENESS - Focusing on those products or services that your company knows best and have the greatest long-term impact; promoting quality and reliability.

Perhaps a mixture of both is important. We are known for our product lines but have been flexible in how much resources we put into certain areas. We have diversified, though, by acquiring products that compliment ours. Knowing product life-span is important also.

VALUES - Promoting honesty and openness, cooperation among people, respect for individuals and motivating them to give their best.

Respect for the individual is a fundamental requirement. All people are different. You can't put them into boxes. I have young MBA's plus people in their 50's. You've got to respect them all. An honest guy is worth 1000 times that of a dishonest.

DRIVING WILL - Action and risk-taking, encouraging people to think independently and competitively; creating the environment to achieve results.

This is another key to success. You have got to be completely motivated. Commitment must be there, lots of job satisfaction, and entrepreneurial flare -- taking controlled risks. If you are going to be successful you have to have a flare for -- be continually inundated with -- ideas. If not you tend to stagnate. That's business; something new everyday. It fires people.
GENERAL QUESTIONS

Overall, how structured or unstructured would you say is the job of a general manager or other such top position in a company?

I work within the management parameters structured from headquarters for the profitability of the company. I input by virtue of the budget. All management parameters have to be satisfied: Parameters on how you handle inventory control, customer relations, etc. Within these I run the company as I see fit. But we work out objectives together.

Concerning structure again, what type of organization structure would you say exists in your company?

Like most we are a very traditional British company. My managers report to me. They don't go above me. Each person reports to his manager. It's a hierarchy. That's how we do it. I would not write to the Chairman but to my boss instead. This is my discipline. It would not be right to jump over others.

On a scale of 1 of 10, with 10 being the best, how would you rate the overall effectiveness of the following multinational executives:

American ___3____ Swedish ___5____
British ___4____ Japanese ___1____
German ___6____ Korean ___2____

You are considered a successful executive manager. If a newly appointed young manager asked you 'what does it take to be a successful manager in a multinational company,' what would you tell that person?

You need a lot of drive and aggressiveness. The world's a tough place. No one is going to give you anything. You have to have a high profile -- not just plod away in the office. I have stuck out my neck based on what I feel is needed. Have to stand up and be counted but be right 9 out of 10 times. High pressure? Yes! But pressure is what you want it to be. I enjoy being on the sharp end of the business. You have to put in in order to get out.
EXEClTTIVE INTERVIEW

Exhibit 38-3

Interviewee  SWEDISH EXECUTIVE
Job Title    GENERAL MANAGER
Field       AVIATION
SIC Code    45 & 48

BACKGROUND QUESTIONS

Total years as a manager 10. Executive 4_. Overseas Experience 13_.
Total people representing your company here 100. World-wide 29,000.
Nature of your company Aviation Services and Communication Systems.
Annual sales here £20 million. World-wide £4,500 million.
Total different companies including this one you worked for 1.
Total years with this company 14.

MANAGEMENT PHILOSOPHY

How do you view your role as a top manager in your company?

My first duty is to identify the goals for a particular activity
and make sure that the staff is well aware of them. Equally
important is to act as a medium -- make people aware of the
general strategies of our company.

What is your philosophy about managing people?

People are the most underestimated resource we have plus the most
expensive. The only way we can survive is to be able to motivate
without pushing. If people are so well aware then they are self-
propelled. You can't have layers controlling others. People will
revolt.

How do you deal with competition?

We use two main strategies. The first is to define our niche in
the business we are in -- where we want to be and where it pays
to be. This gives us high yield. We have done so providing full-
alternatives to our clients. Second, we have a marginal strategy.
This is full of pitfalls but it is temporary each time it is done.
This keeps us open, though, to opportunities in the market.
What impact does technology have on the work of your company?

Very much impact. Computers first come to mind. Computer technology and development of an on-line system with our headquarters is important. All sales, accounting, etc. are by computer. The nature of our business is hi-tech and very complex.

How important is management training and education to the job of managing?

It is important but our training policy has its character. Our company has management training for all employees -- to make them aware of the company. We don't have managers, we have leaders. Everyone is a leader -- impacting as colleagues with each other. Every contact with our clients is a moment of truth. So our training has to show in real life.

How different is it being an international manager than managing back home?

There is more time abroad for real business. Back home there are union meetings, staff meetings, etc. which we have to do. There is less efficiency back home. Abroad we can also learn to deal with others -- different cultures. Abroad a leader has more awareness. We are allowed to make mistakes but we must also take initiatives.

MANAGEMENT PRACTICES

What follows are seven categories of work which research shows are related to executive managers. What are your specific views on each of them.

INFORMATION - The need to keep well-informed on your company and the business you are in; to seek information aggressively.

This is very critical to our company. It absolutely is needed. It's needed also to motivate people. It matters to follow a certain line of the company.
NETWORK OF PEOPLE - Interacting with and developing relations with people you may be dependent on in and out of the company.

I maintain liaison with various government agencies and ministries that are important to our business. But not just by myself. We try to make use of one another but in a consistent way. We update one another. The message must be one.

ADAPTABLE - Changing to circumstances and situations, being open and flexible to internal & external needs, even if your actions seem imprecise.

We need to set priorities. There is a danger when making exceptions. We must know the why of exceptions, how it affects us so we don't go away from our principles.

INFLUENCE - Obligating people and moving them in directions you feel are important for the company as a whole.

People must be kept well-informed. That way they can take action.

COMPETITIVENESS - Focusing on those products or services that your company knows best and have the greatest long-term impact; promoting quality and reliability.

We try to define our product. We have a full line of products we offer our clients. But our best quality is provided in one line of service. Here we have been first in our business and have expanded. We must be careful that expansion does not affect our quality.

VALUES - Promoting honesty and openness, cooperation among people, respect for individuals and motivating them to give their best.

I run things the 'blue-eyed Scandinavian way' -- have independent people as long as they follow our general line. Motivation comes with freedom and independence. Discussions are not for my approval but for my management.

DRIVING WILL - Action and risk-taking, encouraging people to think independently and competitively; creating the environment to achieve results.

People here have permission to make mistakes but they must do things. Some are frustrated with too much freedom or flexibility. So we try to involve everyone in open discussion groups to understand how others are working. Make sure people go for the right thing -- take a decision without coming back to us. Think for yourself, use common sense provided it follows our strategies.
GENERAL QUESTIONS

Overall, how structured or unstructured would you say is the job of a general manager or other such top position in a company?

More unstructured. I am very free to take decisions to build the organization or create a system etc. for that which I have been asked to achieve. I previously have inputed into our targets. I then receive targets and a budget from the home office.

Concerning structure again, what type of organization structure would you say exists in your company?

The underlying idea is to have such units that are controllable and pay off in decentralizing them into profit or cost centers. We build the organization to measure profitability. Can't measure it if you don't decentralize. We have people control themselves as long as they are steered by the overall goal of the company.

On a scale of 1 of 10, with 10 being the best, how would you rate the overall effectiveness of the following multinational executives:

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You are considered a successful executive manager. If a newly appointed young manager asked you 'what does it take to be a successful manager in a multinational company,' what would you tell that person?

It is important to be interested in your work, adaptable, and constantly trying to achieve. You need a proper base back home -- atleast a short career in the head office to learn the company culture, its goals and general heading. But you must maximize locally your own small business unit and know how it fits into the overall corporation.
Exhibit 38-4

Interviewee: GERMAN EXECUTIVE
Job Title: DPTY. GENERAL MGR.
Field: ELECTRONICS
SIC Code: 35, 36, & 38

BACKGROUND QUESTIONS

Total people representing your company here: 130. World-wide: 350,000.
Nature of your company: Electronics & Electrical Components/Equipment.
Annual sales here: £70 million. World-wide: £19,000 million.
Total different companies including this one you worked for: 3.
Total years with this company: 20.

MANAGEMENT PHILOSOPHY

How do you view your role as a top manager in your company?

My company is in Germany. My job is to keep the links with them. This requires quite a bit of administrative work and contact with customers.

What is your philosophy about managing people?

I have a lot of technicians and engineers. I try to delegate to all personnel — hand over authority to the employees — then just check to see if it is done. This is the philosophy of the mother company also. Also we try to keep customers satisfied.

How do you deal with competition?

Normally we just compete with the prices. The rest is up to the customer to see if our techniques are the best. Otherwise competition is on prices.
What impact does technology have on the work of your company?

Technology is very important. The technology comes from Germany. We have to convince the customer that ours is the best.

How important is management training and education to the job of managing?

This is also very important. Training is done back in Germany mostly in the company but sometimes in a university. Sometimes we go to Switzerland.

How different is it being an international manager than managing back home?

The mentality in a foreign country is different. Have to fight with your mother company and customers or competitors in the market. Competition is different than the home market. But a lot of progress can be made.

MANAGEMENT PRACTICES

What follows are seven categories of work which research shows are related to executive managers. What are your specific views on each of them.

INFORMATION - The need to keep well-informed on your company and the business you are in; to seek information aggressively.

Without information there is no decision. It is everything. It's so important otherwise you can't run the business.
NETWORK OF PEOPLE - Interacting with and developing relations with people you may be dependent on in and out of the company.

This depends on the human being. Some people run the business very independently others not so.

ADAPTABLE - Changing to circumstances and situations, being open and flexible to internal & external needs, even if your actions seem imprecise.

Yes, this is critical. You have to adapt the organization according to the market situation. This cuts out alot of headaches.

INFLUENCE - Obligating people and moving them in directions you feel are important for the company as a whole.

This is important. We can't have people doing things that will result in a different outcome than we had expected.

COMPETITIVENESS - Focusing on those products or services that your company knows best and have the greatest long-term impact; promoting quality and reliability.

This again depends on the prices. Now the customers are asking for low prices. This is a problem. It can affect quality. We have to lower prices or lose the contract.

VALUES - Promoting honesty and openness, cooperation among people, respect for individuals and motivating them to give their best.

The better the people are motivated the better they are apt to be their best -- for their ability to come out.

DRIVING WILL - Action and risk-taking, encouraging people to think independently and competitively; creating the environment to achieve results.

We stated earlier that we delegate our responsibility to the bottom. That's for all of our employees. This is the best thing that we can do. But we have certain limits. I don't mean the employee himself but the management. That's the best way to run the business. Otherwise the employees won't do the best they can do.
GENERAL QUESTIONS

Overall, how structured or unstructured would you say is the job of a general manager or other such top position in a company?

Due to time no opportunity to respond.

Concerning structure again, what type of organization structure would you say exists in your company?

Due to time no opportunity to respond.

On a scale of 1 of 10, with 10 being the best, how would you rate the overall effectiveness of the following multinational executives:

American ______ 5  Swedish ______ 2
British ______ 6  Japanese ______ 1
German ______ 3  Korean ______ 4

You are considered a successful executive manager. If a newly appointed young manager asked you "what does it take to be a successful manager in a multinational company," what would you tell that person?

Be open and straightforward and reliable. Whatever you have promised to the customer provide, and whatever you have said make sure it is correct and the truth. The main point is reliability -- of the person and the product, and the freedom to do the job.
EXECUTIVE INTERVIEW

Exhibit 38-5

Interviewee: JAPANESE EXECUTIVE
Job Title: GENERAL MANAGER
Field: PROPERTY SERVICES
SIC Code: 63, 64, & 73

BACKGROUND QUESTIONS

Total years as a manager _10_. Executive _2_. Overseas Experience _6_.
Total people representing your company here _50_. World-wide 13,000.
Nature of your company: Property Insurance and Business Services.
Annual sales here _1.6 million_. World-wide _1.7 million_.
Total different companies including this one you worked for _1_.
Total years with this company 24.

MANAGEMENT PHILOSOPHY

How do you view your role as a top manager in your company?

It is rare in this country that a Japanese General Manager is
given full power. I have that. It is based on full trust.
My role is very comprehensive -- President plus Finance, Personnel,
and Administrative Officer as well as responsible for profit and
loss.

What is your philosophy about managing people?

It is not so simple here compared to Japan. It is complex.
There are many races. They have their historical background --
nuances of thinking. Have to clarify management policy as clearly
as possible -- explain what is expected. The job for Japanese
workers here is much heavier.

How do you deal with competition?

Competition is most keen. We are completely free in this country.
No regulation of our industry -- partly for religious reasons.
We can't pursue accounts here in a similar way -- like in Japan
where there is protection of the client.
What impact does technology have on the work of your company?

The head office has sophisticated office computer systems. We have computers here to make our work more efficient. The hardware is easy but not the software. Bottlenecks happen with know-how in using computers. In our work Engineers make assessments of risk in providing service coverage to our clients. Technical knowledge is required.

How important is management training and education to the job of managing?

It is very important in our industry. Theoretical education is not sufficient. On-the-job training is more important. Higher education does not always mean much. Experience in a diversified field is the real world of our business.

How different is it being an international manager than managing back home?

There is some common sharing. Our industry is our industry! The difference is in the country you are working in. Those who will work abroad must be taught to be flexible -- in thinking and attitudes.

MANAGEMENT PRACTICES

What follows are seven categories of work which research shows are related to executive managers. What are your specific views on each of them.

INFORMATION - The need to keep well-informed on your company and the business you are in; to seek information aggressively.

Quite agree. Without up-to-date information a manager is miserable. Experience and the ability to make proper assessments and to pick out information necessary to his organization is very important.
NETWORK OF PEOPLE - Interacting with and developing relations with people you may be dependent on in and out of the company.

This is one of the most important points I put my weight on. A manager should be able to develop relations in and out of the company. This provides more opinions/voices for decisions.

ADAPTABLE - Changing to circumstances and situations, being open and flexible to internal & external needs, even if your actions seem imprecise.

Agree with this. One may make mistakes but if he is frank and flexible corrections can be made.

INFLUENCE - Obligating people and moving them in directions you feel are important for the company as a whole.

This is important but the method should be considered. People I work with need to convince themselves so I must explain. If not they will resist.

COMPETITIVENESS - Focusing on those products or services that your company knows best and have the greatest long-term impact; promoting quality and reliability.

Our product is invisible not like a motor car. It is difficult to show a client the difference. But in the long run they will know. We must sell the best quality. In Japan we can diversify but here we focus on businesses.

VALUES - Promoting honesty and openness, cooperation among people, respect for individuals and motivating them to give their best.

Our industry produces an invisible product. Therefore, we are dependent on honesty, openness, and cooperation with our clients.

DRIVING WILL - Action and risk-taking, encouraging people to think independently and competitively; creating the environment to achieve results.

We always try to improve by giving concrete targets and having clear discussions with people to let them understand what I expect them to do. Sometimes the discussions are personal.
GENERAL QUESTIONS

Overall, how structured or unstructured would you say is the job of a general manager or other such top position in a company?

Something like the almighty. But I can't manage everything. The work is divided according to function but we share in the feeling of participation. Here I have two deputy GM's in different parts of the country.

Concerning structure again, what type of organization structure would you say exists in your company?

In Japan it is very clear. I have an organization chart here also but I try to make it intentionally loose according to the situation. I don't make barriers among the sections, but I mix them for common aims and purposes. There is a standard but I deviate.

On a scale of 1 of 10, with 10 being the best, how would you rate the overall effectiveness of the following multinational executives:

<table>
<thead>
<tr>
<th>Executive</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>American</td>
<td>2</td>
</tr>
<tr>
<td>Swedish</td>
<td>5</td>
</tr>
<tr>
<td>British</td>
<td>1</td>
</tr>
<tr>
<td>Japanese</td>
<td>4</td>
</tr>
<tr>
<td>German</td>
<td>3</td>
</tr>
<tr>
<td>Korean</td>
<td>5</td>
</tr>
</tbody>
</table>

You are considered a successful executive manager. If a newly appointed young manager asked you 'what does it take to be a successful manager in a multinational company.' what would you tell that person?

Have a flexible mind to understand the different cultures in the world. If not, you will become frustrated and tense which can lead to misjudgments in the country you are doing business. It is not necessary to love the country but try to understand it with a broad mind. If you understand 50 to 60 percent you can adjust yourself.
BACKGROUND QUESTIONS

Total years as a manager _4_. Executive _1_. Overseas Experience _4_.
Total people representing your company here _15_. World-wide 100,000.
Nature of your company Trading/Manuf. (Steel, Electronics, Textiles)
Annual sales here K.20 million_. World-wide K.7,000 million_.
Total different companies including this one you worked for _1_.
Total years with this company _10_.

MANAGEMENT PHILOSOPHY

How do you view your role as a top manager in your company?

I follow the philosophy of management of my company: (1) Business can help my country. We are proud of our job. It is for our country; (2) Most important is manpower; (3) Take a reasonable approach to business -- profits and goals to survive.

What is your philosophy about managing people?

People are first -- quality, services to be the best not second. We ask people to promote and develop something new like technology, products, and customers, to act honestly, do the work completely without mistake, and to respect and help each other. These are the guidelines of the job.

How do you deal with competition?

We can compete by providing better services and quality from the contract to the actual service. If they have better we should improve ours. We should search for a way -- our own way.
What impact does technology have on the work of your company?

To survive with competitors this is the most important point especially the electronics part. Try to develop new technology from all possible sources.

How important is management training and education to the job of managing?

This is important. Cannot survive without it. My company pays close attention to training. Korean companies have developed quickly so training is important. Training inside and outside the company is provided including abroad such as in the U.S.

How different is it being an international manager than managing back home?

It is different abroad -- different personalities. We have local staff here helping us to do the job together. Four different nationalities work on our staff. Their backgrounds, morals are different. Close communication among our staff is needed. Without that it would be difficult. Training is needed before coming here.

MANAGEMENT PRACTICES

What follows are seven categories of work which research shows are related to executive managers. What are your specific views on each of them.

INFORMATION - The need to keep well-informed on your company and the business you are in; to seek information aggressively.

My principal job is trading. Information is most important to the business. Without information we could not do the work. We open our ears and always try to get correct and current information. We have many branches over the world. We get information this way. Customers also want correct information. We provide it. This reinforces relationships between us.
NETWORK OF PEOPLE - Interacting with and developing relations with people you may be dependent on in and out of the company.

This is part of communication. Staff, employees, managers communicate for better business. If not, problems occur. This office meets every other day to discuss better ways of doing business. We have contacts with other Korean companies, Japanese companies with similar products, the Embassy, and other countries.

ADAPTABLE - Changing to circumstances and situations, being open and flexible to internal & external needs, even if your actions seem imprecise.

We should overcome and adapt. If not, we cannot survive. Compete with change.

INFLUENCE - Obligating people and moving them in directions you feel are important for the company as a whole.

To reach a goal this is needed. We need correct guidance provided by experienced people. If we go our own way the goal cannot be reached. Ideas of the total members should be considered but guided by experience.

COMPETITIVENESS - Focusing on those products or services that your company knows best and have the greatest long-term impact; promoting quality and reliability.

As a trading company we have many products. Quality is important.

VALUES - Promoting honesty and openness, cooperation among people, respect for individuals and motivating them to give their best.

Basically, Korean companies ask that the person work for the company their whole life, the same as the Japanese. If an employee moves to find work with me I would check to see if there is a problem. We need new technology. Our company may scout people with technology.

DRIVING WILL - Action and risk-taking, encouraging people to think independently and competitively; creating the environment to achieve results.

This is motivation to do the job well. For a better department and company situation we should take risks. It is inevitable for profit and competition with others. But we should consider all situations and measure the unexpected risk, then take it.
GENERAL QUESTIONS

Overall, how structured or unstructured would you say is the job of a general manager or other such top position in a company?

More flexibility here than in the head office. More right to make decisions -- handle many items and products compared to being in Korea. I report to the Overseas Control Department in the head office.

Concerning structure again, what type of organization structure would you say exists in your company?

After 20 years you can become a top manager. The Chief or Director in Korea manages and controls his own department such as the Electronics, Steel, or Textile Departments. He has total responsibility. Jobs are specialized so it is difficult to move.

On a scale of 1 of 10, with 10 being the best, how would you rate the overall effectiveness of the following multinational executives:

American _______3______  Swedish _______5______

British _______6______  Japanese _______2______

German _______1______  Korean _______4______

You are considered a successful executive manager. If a newly appointed young manager asked you 'what does it take to be a successful manager in a multinational company,' what would you tell that person?

This is a sharply changing business. Study continuously. To compete with the economic situation of the world study new technology, new management systems, new skills. That way you can cope with a changing world situation.
CHAPTER VI

CONCLUSIONS
VI. CONCLUSIONS

This thesis has focused on the work of executive managers. It is literature-intensive in that its raison d'être and overall foundation has been molded and guided by the numerous educators, practitioners, researchers, and analysts whose published writings comprise and advance the growing field of management. It is this same literature, though, that has found the work of executive managers replete with problems, confusion, and contradictions.

From over 30 years ago with Robert Katz whose Conceptual/Human dichotomy of executive management work has highly influenced the field to the last 5 years with Rosemary Stewart's three divisions (tri-division model) of Analytical/Social/Emotional R, concerns over managers and their effectiveness grow. To highlight a few:

Katz (1955): "There is surprisingly little agreement among executives or educators on what makes a good administrator."

DRUCKER (1967): "To be effective is the job of the executive. -- Yet men of high effectiveness are conspicuous by their absence in executive jobs."

NOTE: With the exception of references not previously cited, sources in this "Conclusions" chapter will include author and date only.
Ph.D Thesis

Campbell et al (1970): "...the area of management effectiveness (is) more complicated than we had previously realized or imagined. -- Quite frankly, most research has been rather simpleminded."

Mintzberg (1975): "Considering its central importance to every aspect of management, there has been surprisingly little research on the manager's work and virtually no systematic building of knowledge from one group of studies to another."

Glover (1979): "...'management' is a messy and complicated affair, riddled with culture bound assumptions and extremely difficult for the observer to understand."

Pascale and Athos (1981): "We are, I believe, at the beginning of a period where significant new research into the practice of management is essential" (Introduction by D.R. Daniel).

Stewart (1984): "The argument of this paper is that we need to understand what it is that managers do before we can decide what managers should know and how they can best acquire this knowledge." This, she stated, despite "seventy-five years of management education to draw upon" (relating to the 75th anniversary of the Harvard Business School in 1983).

Brodie and Bennett in "Perspectives on Managerial Effectiveness" (1979) seem to summarize the growing concerns.

"How effective are managers? How effective can they become? -- These are two basic questions which go to the heart of some of the most serious challenges which face contemporary societies" (Introduction).

They further stated:

"There is an urgent need for improvements in managerial performance in the UK, but the subject of managerial effectiveness is currently a maelstrom of definitions and concepts. -- More knowledge is needed
concerning the determinants of management effectiveness and the MSC considers that more research and development is required in this field."

The intent of this thesis has been to present such research. Throughout, we have focused on management effectiveness. The implications of research in this area are, as we have previously stated, very broad with wide-ranging practical and theoretical impact on the field of management. Three criteria were therefore used to limit the bounds of the research. They included the study of:

1. Executive-level managers, in
2. Technology-based industries, working for
3. Multinational organizations.

This is a relatively homogeneous group characterized by a high rate of change. It is situation specific, focused, and consistent with Burns and Stalker's (1961 and 1966) "organic" system of organization. They stated:

"Organic systems are those which are best adapted to conditions of change. -- The code of conduct characteristic of organic systems -- (are) those better fitted to survive and grow in changing conditions -- (and) comprehend more eventualities than that necessary under stable conditions."

This situationalism provides both the framework for the identification of characteristics of effectiveness from the literature and as such is built into the inventory developed to assess these characteristics among executives in technology-based firms. It is these technology-based firms,
and in particular the hi-tech, that are on the cutting-edge of change.

But the last decade and a half has seen a marked decline in the image and competitiveness of Anglo-American firms in comparison to the Continental European and Japanese (Franko 1978). Hayes and Abernathy (1980) ask, "What exactly have American managers been doing wrong?" From a study of 236 top executives, Judson (1982) found that "Management ineffectiveness is by far the single greatest cause of declining productivity in the United States." A "programme of learning" is what Malcolm Trevor (Management News September 1985) says is needed as "an urgent, practical response to severe industrial weakness such as the UK is suffering from now." Chaplin (October 1985) states, "A radical rethink of some basic practices, from delivery performance to office procedures is urgently required to match EEC competitors." These are but some of the concerns voiced by Anglo-Americans vis-a-vis Continental European and Far-Eastern counterparts.

This market competitiveness is the other half of the management effectiveness coin that this research has examined (literature concerns about executive work being the first half). The bridge intergrating the two has been the creation of a new assessment tool, the Executive Management Inventory. The
results from this research were therefore presented in a
3-phased format:

Phase 1. To identify what it is that effective executives do.

Phase 2. To develop and test an instrument designed to measure what executives do using effectiveness-based criteria.

Phase 3. To apply the instrument to regional groups of executives worldwide in technology-based multinational corporations.

Each phase is independent yet they link together to provide a comprehensive, systematic view of the complex, confused, and problematic area of executive management.

A lack, as identified in the literature, at attempts to synthesize existing research-based results on effective management has helped to perpetuate these problems. One major result of this research was to conduct such a synthesis. This was a major result of Phase 1.

While each phase will be discussed separately, the intent here is not to summarize the thesis but to present salient features of the results and their implications. New ideas, thoughts, and references will be introduced as part of these overall conclusions where appropriate for better understanding what Burns (in Stogdill 1981) has called "one of the most observed and least understood phenomena on earth" (p. 5).
A. WHAT DO EFFECTIVE EXECUTIVES DO?

The research for Phase 1 clearly supports the complex and contradictory nature of executive management. Yet despite this apparent inherent nature of the field, the systematic process of identifying the skills, abilities, and qualities that characterize successful executive managers provided a meaningful synthesis of management practices and characteristics. The critical factor enabling this research to cut through the confusion and provide reasonable order, cohesion, and stability to the practices and characteristics is the two criteria established for "effectiveness." First is that the literature sources used (i.e. the practices and characteristics defining successful or effective managers) should be research-based as opposed to theoretical notions of effectiveness. Second, is that the research be accomplished directly through first-hand observation in the workplace or direct understanding (by researchers) of managers, particularly executives. This was previously discussed in Chapter I.

Such first-hand observation and insight of workplace phenomenon is critical to the whole concept of criterion-based research. As Smith stated (in Dunnette 1983):

"We cannot emphasize too strongly that observation of actual behavior on the job is the core of establishment of a successful criterion."
Smith added that by criterion we mean a,

"...predicted measure for judging the effectiveness of persons, organizations, treatments, or predictors of behavior, results, and organizational effectiveness."

It is what Schneider (1976) calls,

"...standards of excellence -- (and) behaviors against which employees are judged -- those factors that constitute 'doing a job well'."

Adhering to our criteria enabled this researcher to exclude literature sources which may otherwise have been included. This includes, for example, the work of Boyatzis (THE COMPETENT MANAGER 1982) whose study of over 2000 managers appeared very alluring. He stated:

"...this book establishes for the first time the essential characteristics of the competent manager."

Yet the sources of his research are group sessions in training programs. While meaningful and useful, such results are based on indirect sources, with unknown consequences of group dynamics, and hence questionable. Adhering to the criteria enabled us to exclude this source and other sources which could have contaminated our research base.

This provided further confidence and validity of the literature sources used and the practices and characteristics derived from them. Sixty-seven literature sources were used. This included 88 different authors. From these, 548 practices and characteristics (indicators or variables of effectiveness) were
identified which through a systematic process of enumeration and classification were grouped into 37 categories of executive work.

CUTTING THROUGH THE RHETORIC surrounding managers and their work and FOCUSING ON THE REALITY of it such as through research derived from the workplace itself -- the alpha and the omega of the management field -- was the key to the identification of effectiveness-based management characteristics.

This Phase 1 research and its results has hopefully succeeded, and the author believes it has, in responding to the often cited question:

WHAT IS IT THAT EFFECTIVE EXECUTIVES DO?

This research has found that effective executives perform 72 characteristic functions of work, categorized into 37 scales or categories, and further grouped into 3 major divisions. This is done, as Mackenzie (1969) states, while concentrating now on one function then on another while at all times sensing the pulse of the organization. This is done despite the challenges and dilemmas found in their jobs which Kotter (1962) identified as,

"Figuring out what to do despite uncertainty, great diversity, and an enormous amount of potentially relevant information. (and) Getting things through a large and diverse set of people despite having little direct control over most of them."

This is what effective executives do!
Ph.D Thesis

B. HOW DO WE OPERATIONALIZE OUR ABILITY TO ANALYZE EFFECTIVE BEHAVIOR? -- By developing and testing an instrument designed to measure what effective executives do.

Along with a lack of synthesis of management research, this thesis has also argued that published research instruments designed to measure the work or styles of managers, are basically narrow in intent, measuring aspects of behavior, often have little, if any, validation results, are often developed as profit-making ventures, or have been out-dated by a changing, technology-based society. The first part of the Phase 2 research has shown this to be the case. Also, of the 25 published instruments reviewed, only one was targeted for middle- or upper-level management. A scientifically-based instrument rooted into the results of Phase 1 was the result of Phase 2.

The instrument, the Executive Management Inventory (EMI), has three parts. Part II is the principal one. Here the 37 categories, identified from Phase 1, were weighted based on the number of specific characteristics comprising each category. This yielded 72 items or questions on executive managers.

The EMI is intended as a practical research tool for assessing management behavior and provides a sound base line for comparative and cross-cultural analyses.
Brodie and Bennett (1979) have stated:

"There is a lack of simple, applicable methods of monitoring management effectiveness so that appropriate methods of management development can be identified unequivocally. -- It is not a matter of research for its own sake, but research which is capable of practical use within a finite span. The jargon created by experts for discussion between themselves has its place, but the ideas must also be converted into plain language for dissemination to practitioners in the form of useful and practical concepts and tools."

The EMI was subsequently tested on a sample of 7 executives. This allowed us to test the psychometric properties of the instrument -- its validity and reliability. We concluded that reasonable validity and reliability was established. Sound probabilistic readings using the EMI can be achieved. Highlights from this analysis follow below.

Content Validity: This consists essentially of judgment by others of the representativeness of the instrument to the universe being sampled. A sample of this validity is shown in the following statement: "It is an excellent instrument. -- Does it measure effectiveness? Definitely."

Criterion-related Validity: Predictive validity of the EMI is critical here. This compares the instrument to some external criterion. The external criterion in this case was the successful executives interviewed as part of this research.
Their EMI results were significantly higher than the other executives sampled. This is consistent with predicted results from the EMI.

Construct Validity: Constructs are intervening variables, such as those in Part I of the EMI, which account for behavior. Three such variables from the EMI and their hypothesized relationship to executive effectiveness were assessed using correlation analysis. The three and their correlation ($r$) were as follows:

- Management Experience $r = .78$
- Management Training $r = .68$
- Career Moves $r = -.64$

The resulting correlations are significant. Construct validity is established.

Reliability - Test/retest Method: This refers to the stability of the EMI -- applying the same instrument to the same persons at different points in time to see if comparable data are achieved. Analysis of variance was used in obtaining reliability coefficients for each major division of the EMI. These coefficients were as follows:
Ph.D Thesis

Anaytical Low of .51 to high of .90
Social Low of .22 to high of .65
Emotional R Low of .73 to high of .92

These reliability coefficients provide a sound probabilistic reading of the stability of the EMI.

We conclude that the Executive Management Inventory is a valid instrument in that it measures what it is supposed to measure and it is reliable -- it is stable through time. This gives us every confidence in believing that the EMI, while not error free, possesses reasonably sound psychometric properties. It would be a useful tool both for management research, analysis, and development in improving executive management as well as for position and job analyses in appraising the person and the job.

The EMI, though, should not be considered a static instrument. It is intended to capture the dynamic nature of the corporate environment and specifically the executives who lead and manage within them. This is similar to what Schneider (1976) refers to as the "dynamic criterion".

The instrument was through testing with 7 executives further improved. A Japanese translation was also made. A larger sample of 55 executives representing six industrialized nations worldwide was subsequently assessed using the instrument. This comprised Phase 3.
C. MANAGEMENT PRACTICES AND BEHAVIOR HOLD A KEY TO THE SUCCESS OF EXECUTIVES

The argument of Phase 3 is that management practices and behavior hold a key to the success of executives in general and globally to the success of Japanese and Continental European firms in comparison to the Anglo-American. The intent was to apply the revised EMI to multinational executives from the industrialized free world to test these premises. Several variables were examined both in aggregate -- all 72 items of the EMI -- as well as differentially -- isolating specific groups of variables. Significantly different practices and characteristics were also isolated. These differences would provide critical linkages in further understanding executive behavior and what it takes to be successful.

A critical finding from our comparative analysis of the data was the consistently lower value (reflecting less characteristic skills and abilities) for the category labeled EMOTIONAL R. This occurred for each and every executive sampled -- without exception -- from the 7 in our original test group to the group of 55 executives worldwide. Of the three divisions of the Tri-Divisional Model -- Analytical/Social/Emotional R -- it was the latter category that invariably was least characteristic of the executives. This related to their overall resiliency, their ability to
flow with situations, grasp at opportunities, have the personal drive yet the subtlety needed to understand interpersonal processes and be flexible and adaptable in the face of changing circumstances and situations.

It is this area of flexibility and adaptability and basically the Emotional R process itself which the six successful executives interviewed pointed to as the most important to their job of managing.

All three regional groups -- Anglo-American, Nordic-European, and Far-Eastern -- were lowest in Emotional R skills and abilities. Statistically, their results appeared fairly consistent yielding 6.02, 6.06, and 5.94 respectively in this area. Results by national group were: American 5.96, British 6.13, Swedish 6.20, German 5.90, Japanese 5.93, and Korean 6.13 reflecting a wider range.

Other interesting differences were shown in the intervening variables of Part I of the EMI. The British executives revealed the lowest amount of training and education in management. Their average was .63 years per executive. This was far below the average of 2.02 years for all 55 executives. The highest interestingly enough was 4.00 years for the Koreans followed by 2.57 for the Americans. The general
educational level for the British was also lowest. The Swedish was highest with the German next highest.

As expected, the Far-Eastern executives had more apprenticeship training as a manager. This was 3.46 years for the Japanese and 3.60 for the Korean. The overall average was 2.39 years for the 55 executives. Lowest was the American with 1.39 years.

As also expected, the Japanese and Koreans showed greater stability with respect to the number of companies worked for in ones career. This was 1.15 for the Japanese and 1.60 for the Koreans. The British, on the other hand, worked for more different companies in their career than any other national group -- 3.88. This is significant in that our results showed career moves to be negatively correlated to effectiveness. The greater the career moves the less one's management effectiveness tends to be.

The same was the case for management training. But here the relationship was positive. The greater the management training the greater the manager's effectiveness. British executives were lowest here also -- .25 years per executive compared to .86 years as the average for all the national groups.

IT IS OBVIOUS THAT THESE FINDINGS IN PART I OF THE EMI REVEAL IMPORTANT WEAKNESSES AMONG BRITISH MANAGERS.
Many other differences as well as similarities were derived from the results. Of prime importance were the hypotheses tested based on these results.

Hypothesis #1:

"Executive managers in technology-based multinational corporations have an effectiveness level different (lower) than that identified for effective performance on-the-job."

The value tested for all the executives was 6.50 versus 6.95 for the criterion group of successful executives. Using the "t test for means" the derived $t$ value was $t = 4.4424$. At a significance level of .05 the critical value needed for acceptance of the null hypothesis of equality of means was $t = 1.6710$ or less for a one-tailed test. The value derived was higher. The null hypothesis was rejected. Therefore, Hypothesis #1 was accepted. Executives are less effective on-the-job than they should be.

The implication of this finding is very broad. Inferences are that the broader population of technology-based multinational executives, at the least overseas, are also less effective. If this is the case, it has far-reaching consequences worldwide particularly in the international environment. It is, in essence, an indictment of that population as it affects
critical outcome variables from productivity and product quality to market share, national GNP, and international competitiveness. It is a concern that all multinational corporations should have a vested interest in remediating.

For example, a 1979 study (Public Administration Times March 1979) showed:

"U.S. Gross National Product could jump by $100 billion or more a year if employers improved procedures for selecting people for jobs. -- Selection procedures predicting -- differences at the point of hiring can therefore produce large increases in the later workforce productivity."

The management skills, abilities, and qualities identified in the EMI can be useful for this purpose. We have previously cited Judson's study (1982) in which management ineffectiveness was clearly pointed to as the reason for America's poor productivity showing.

Based on the statistical findings it is not the intent of this thesis to in any way predict a corresponding relationship to the entire executive population. This research is focused and specifically on situations surrounding technology-based, multinational corporations and their executives. This group no doubt influences the GNP of any industrialized nation.

Our inferences to the larger population are tempered by the size of our sample and its composition but are consistent with
probabilistic theory. Kerlinger (1973) states:

"To infer is to derive a conclusion from premises or from evidence. To infer statistically is to derive probabilistic conclusions from probabilistic premises. We conclude probabilistically, that is, at a specified level of significance" (p. 211).

With a significance level of .05 we support our inferences with a confidence of 95% whether we accept or reject a hypothesis. Accepting Hypothesis #1 we can in turn make meaningful predictions to a larger number of executives. This we have done.

It should be noted that of our corporate executives sampled it was the Nordic-European group that recorded the highest values in the EMI. They reflected more effectiveness than the Anglo-American or Far-Eastern groups. Within the Nordic-European it was the Swedish managers who had the higher means. This national group had the highest overall mean of 6.81 and was also highest in each of the EMI’s three divisions: Analytical, Social, and Emotional R. While their values were lower than those of successful managers (6.81 vs. 6.95 overall) they were sufficiently high to single them out as the most effective of all the six national groups evaluated. This is also reflected in Hypothesis #2 from which highlights follow next.
Hypothesis #2:

"Executive managers in technology-based multinational corporations from Anglo-American regions have an effectiveness level different (lower) than the level identified for Nordic-European and Far-Eastern regions."

The mean values tested here were 6.59 for Anglo-American, 6.71 for Nordic-European, and 6.23 for Far-Eastern managers. "Single-factor analysis of variance" was the statistical test used.

With $F = 2.1812$ and a critical value at the .05 level of significance of $F = 3.1600$ the hypothesis is rejected. While the Nordic-European mean is higher than the Anglo-American, which is consistent with the hypothesis, the Far-Eastern is lower. Collectively, the results from the three groups are not significantly different. Furthermore, the direction of the difference with respect to the Far-Eastern group is inconsistent with the hypothesis.

To examine this area further, a post hoc test was run. The EMI results were examined -- each of the 37 categories individually -- to determine if significant differences could be possible based on sub-variables within the EMI. Four such variables were identified all falling in the Emotional R category in which the Far-Eastern executives showed comparatively greater stability. The four were Flowing, Grasping, Ambiguity/Clarity, and Reacting. The means tested here, using the "t test for
mean, were 4.59 for the Anglo-American and 5.47 for the Far-Eastern (the Nordic-European mean was the same as the Anglo-American). Here the differences were tested as significant. The resilience of the Far-Eastern executives is greater and significantly different than that of the Anglo-Americans.

Are the differences in management practices and characteristics the factors, therefore, that point to the apparent success of the Japanese and Europeans as opposed to the Anglo-Americans? The answer is not clear-cut. We could say both Yes and No! Yes, if we isolate specific variables within the full range of management behavior. This we have done with four Emotional R variables. No, if we attempt to include the full range of behavior -- all the management practices and characteristics.

Inferences here to the larger population of executives in the free world also are not clear-cut. Differential analysis of selective variables is needed. What is important is the finding that the Far-Eastern executives show less variance and hence greater stability in the Emotional R category, and in four of the variables in this category they are, in fact, significantly higher (more effective) than the Anglo-Americans. Selective inference is made here to reflect this result. The Far-Eastern executives exhibit greater situational tolerance.
Ph.D Thesis

That is, their ability to accept variations whether from disorderly processes, shifting conditions, evolving circumstances, or momentary opportunities are greater than for Anglo-Americans, or for that matter, Nordic-Europeans. This may very likely be a factor in their worldwide successes.

As to their overall effective management practices, this may be more myth than reality. Results from the EMI point to such myth. Such a myth is also supported by remarks from the Japanese executive interviewed. In a response to a question on the esteem to which Japanese management is held, he stated:

"To some extent I feel it is a sort of fashion, some exaggerated feeling of mystery of the orient. -- Japanese style of management is nothing new. It is based on a very, very basic ABC of management. The different thing is that Japanese companies work very faithfully to implement themselves and try to execute with utmost effort. While in the U.S., for example, top management, especially those who are graduates of Harvard or other such business schools, are highly sophisticated in their theory but not in the practical experience of work. -- I don’t think there is too much gap between American or European styles of management and the Japanese. But, of course, there is some difference in approach."

Peters and Waterman in their bestseller, IN SEARCH OF EXCELLENCE (1982), follow this same line. They find an "...absence of any 'Eastern magic' underpinning Japan's astounding productivity record. (noting another commentator) 'it is simply human -- loyalty, commitment through effective training, personal identification with the company's success and, most simply, the human relationship between the employee and his supervisor.' (Quoting a Japanese executive)
Ph.D Thesis

'We are very different from the rest of the world. Our only natural resource is the hard work of our people.' (p. 39).

Little published research has been available on the other half of the Far-Eastern group -- the Koreans. The statistical data in this research, particularly its depth of assessing management practices and characteristics, is probably one of the first available. The Koreans have been included based on published reports found in popular periodicals such as "Business Week" and "International Management."

They are a growing factor in the international marketplace and received in our research higher values than the Japanese in each of the three categories of the Tri-Divisional Model. The inroad made by Korean companies into global markets is among other factors supported by the a low average hourly labor cost for workers of $1.53 compared to $7.76 for the Japanese, $7.67 for the British, $12.53 for Swedish, $13.29 for Americans, and $13.85 for the Germans (Wall Street Journal October 17, 1986).

A good example of the insight and determination of a successful executive was revealed in the interview with the Korean executive quoted in the previous chapter. He stated:

"We should overcome and adapt. If not we cannot survive. -- Compete with change. This is a sharply changing business. -- Study continuously. To compete with the economic situation of the world study new technology, new management systems, new skills. That way you can cope with a changing world situation."
The ability to deal with change is the focus of the third and last hypothesis tested. It covers the differences in the three divisions of the Tri-Divisional Model; i.e. Analytical or the Rational/Conceptual Manager, Social or the Interpersonal/Influencial Manager, and Emotional R or the Resilient/Coping Manager. Is Emotional R in fact significantly lower?

Hypothesis #3:

"Executive managers have an inadequate (lower) level of Emotional R skills and abilities in comparison to Analytical and Social skills."

"Single-factor analysis of variance" was also used in testing this hypothesis. The means were: Analytical 6.71, Social 6.71, and Emotional R 6.00. With $F = 5.8933$ and a significance level of .05 the critical value of $F$ was 3.1600. The hypothesis was accepted. Emotional R behavior is significantly the least characteristic of the executives.

Of the three divisions comprising our effectiveness-based model, this new category called "EMOTIONAL R" MAY HOLD THE GREATEST SIGNIFICANCE TO THIS RESEARCH. Acceptance of Hypothesis #3 points to this as have numerous references to it throughout this thesis. The inference here is for programs of education and training to the greater population of technology-based multinational executives. The strong evidence of weaknesses shown in the Emotional R category, for each and every executive sampled, may possibly harbor implications of
some need for education and training of other management populations -- mid-and lower-level management, non-technology-based companies, government agencies, etc. A case for some kind of resilient behavior for these populations could possibly be made. It no doubt would be sine qua non where a high degree of change is prevalent. These provide excellent areas for further research.

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The multinational manager's job is not easy. Sir Christopher Hogg (Management News September 1986) a UK corporate chairman, states it very poignantly:

"International competition -- by its nature -- (is) neither gentle nor 'fair'; on the contrary it is tough to face, remorseless, and intensifying as communications and the transfer of technology 'globalize' markets. -- the qualities required in international trade (are) openmindedness, energy, the will to progress, commitment, and flexibility. But these are in sharp contrast to some of our most deeply-rooted national characteristics: insularity, lethargy, anti-industrial bias, nostalgia, and rigidity of institutions. -- So time and again we fail to be as effective as we should and thus lose ground against other countries. (We must be willing) to accept an endless process of change in the search for improvement" (p. 3).

British Cabinet Minister Peter Walker, whom we previously quoted (Management Today February 1986), has stated:

"...if we were to have a revival of the country's fortunes there was only one element
that was going to provide it -- the managers of British industry and commerce. It is only if we achieve a radical, revolutionary change in their skills, their qualifications, their application, their enthusiasm, their dynamism - that we are going to transform the overall scene."

This research has taken but one small slice of the management population -- executive managers in technology-based, multinational corporations in the industrialized free world. We have (1) identified those management practices and characteristics which are requisite to managing effectively in today's dynamic, global environment; (2) developed, tested, and validated a research instrument for assessing the effectiveness of executive managers; and (3) surveyed and analyzed six national groups of executives whose countries' are leaders and trend-setters in the field of management and in the world marketplace. We have, in other words, grounded our research in the literature, created a new assessment tool, and applied it in solving real problems.

We have found that executive managers are generally less effective than good management would prescribe. We have shown that management practices in aggregate do not account for Japanese successes but that selectivity of these practices such as their "situational tolerance" does. We have also cited the "myth" of their effectiveness plus the growing competition expected from the Koreans. And finally we have documented, throughout this research, the emergence of resilient behavior
identified by Emotional R skills and abilities. Education and
training and programs of development are needed to remedy the
consistent deficiencies found here among executives.

Remarks to this researcher by the British executive interviewed
is somber evidence of the real world we are dealing with and
what it takes to effective in it:

"This is the sharp end of the business. -- It
is a hot seat. -- The world's a tough place.
No one is going to give you anything. -- High
pressure? Yes! But pressure is what you want
it to be. -- You have to put in in order to get
out."

FINIS
# APPENDIX

<table>
<thead>
<tr>
<th>Attachment</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Article: &quot;Behavioral Technology: A Challenge to Modern Management</td>
<td>374</td>
</tr>
<tr>
<td>B</td>
<td>Executive Management Characteristics Identified by Author</td>
<td>383</td>
</tr>
<tr>
<td>C</td>
<td>Executive Management Characteristics Identified by Category</td>
<td>412</td>
</tr>
<tr>
<td>D</td>
<td>Article: &quot;Mastering 'Dynamic Complexity': The Key to Managing Change&quot;</td>
<td>455</td>
</tr>
<tr>
<td>E</td>
<td>Letter: School Superintendent</td>
<td>458</td>
</tr>
<tr>
<td>F</td>
<td>Japanese Translation: Executive Management Inventory</td>
<td>457</td>
</tr>
<tr>
<td>G</td>
<td>Cover Letter: Executive Management Inventory</td>
<td>472</td>
</tr>
<tr>
<td>H</td>
<td>Bibliography</td>
<td>473</td>
</tr>
</tbody>
</table>
BEHAVIORAL TECHNOLOGY: A CHALLENGE TO MODERN MANAGEMENT

JAMES G. BRIANAS

With greater understanding of his own nature, man will be better able to harness the forces that will optimize his potential.

When we view an organization, we are essentially looking at a microcosm of the larger society. Within this microscopic society are found many of the problems existing in the world today—its anxieties, fears, depersonalization, and materialistic values. As a consequence of the close proximity and daily contact among employees, some of these problems are, within the organizational setting, magnified many times. Bold leadership designed to promote organizational improvements through meaningful change must of necessity follow if the enterprise or organization is successfully to perpetuate its reason for being within an increasingly competitive society.

Too often, though, organizational change is predicated upon technological innovations without corollary emphasis on the human beings affected by them, or on any attempt at human innovations. These technical improvements, whether of automation or engineered work systems including application of mathematical methods, often become ends in themselves instead of valuable tools to be used for the benefit of man. Through research from behavioral science, managers are beginning to see the value of placing more emphasis on improving the role of human beings in organizations. Research findings point to the necessity for improving interpersonal communications, a foremost problem of management, providing for employee participation in the decisions affecting one's work, and developing organizational climates that will motivate its people to achieve greater levels of productivity, while at the same time attempting to maximize their human worth.

The discussion following focuses on the concept of humanization in the working environment as a means for establishing a sound organizational climate and a springboard from which to direct man's energies. The Managerial Matrix, a methodology for identifying existing organizational climates and defining the direction for change, is presented. From this framework will develop the central theme for a more humanistic society exemplified both within and without the organization as a necessity in working for a more meaningful tomorrow. The vehicle for achieving this society is the emergence of a new field of science Behavioral Technology, the harmonizing of.

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man the technical being, and man the human being.

The Managerial Matrix

One approach in establishing a foundation for change within organizations is to try and determine the climate that currently exists and the subsequent direction for improvement. One well known method for accomplishing this is the Managerial Grid. Specifically the Grid, as applied to organizations, attempts to pinpoint existing styles of management graphically, from managerial concern for production (authoritarian style) on the one extreme, to concern for people (laissez-faire style) on the other. The proponents of this approach emphasize the need to establish managerial styles midway between these two extremes, i.e., the 9,9 manager. While this method would be valid for a large number of organizations, the Grid does not provide for basic differences existing among organizations, i.e., the differences in (1) kind of work performed and (2) the type of people employed to perform the work.

An alternate approach, developed by this author, recognizes these differences. Similar to the Grid, the method is labeled the Managerial Matrix. The Matrix method is principally based on the concept of participative management. On one end of the scale is the degree of participation or control by management and on the other the degree of participation or control by employees. This is graphically portrayed in Exhibit A.

The Matrix is divided into three numerically designated horizontal and vertical areas: (1) the lower left 1 by 3 quadrant referred to as the marginally effective area, or Area C, (2) the middle area formed by the 4 by 6 matrices referred to as the moderately effective area, or Area B, and (3) the upper right area formed by the 7 by 9 matrices referred to as the highly effective area, or Area A. The numbering system, 1 through 9 along the X and Y axes, is adapted from the Managerial Grid—9 referring to maximum concern for participation and 1, minimum concern, or just enough to get by. Superimposed on these areas are four diagonal lines which further divide the areas into five lettered sub-areas: A through A5, B through B5, and C through C5. Of these, A through A5 defines the optimum results area and direction towards which efforts should be channeled.

This division of the Matrix into three primary areas—A, B, and C—is based on the theory that any point or climate on a continuum within the same area is of equivalent effectiveness. For example, 9,1 within area A5, or 9,9 within A5, as well as 1,9 within A1, are equally effective depending on two variables: (1) the job to be performed by the organization; and (2) the people employed to do the job. This approach provides the flexibility necessary for accommodating the wide spectrum of complex organizational entities existing today. It is understood, though, that while this participative or control flexibility provides a more sound foundation for organizational change, most companies would actualize their effectiveness within an A5 system of management (Likert's System 4, Blake's 9,9, and in large part McGregor's Theory Y).

In essence, we are trying to move from a management controlled organizational environment, area A through B, which exists in most companies and agencies, towards area A6 and B6, one that incorporates more concern for the employee through his participation in the decision-making process, allowing him greater control over his work.

A Useful Diagnostic Tool

The addition of criteria for pinpointing the existing participative and control climate in an organization in relation to the Matrix will create in this approach a valuable diagnostic tool. In this regard, Tannenbaum and Schmidt² describe a continuum of leadership behavior, boss-centered on one extreme, characterized by the manager who maintains a high degree of control, to subordinate-centered at the other extreme characterized by the manager who releases a high degree of control. Adapting some of their “behavioral points” we are able to de-
Exhibit A. Managerial Matrix System of Management Style

The factor dictating the area applicable, and the corresponding climate within it, is the mutually definable levels of participation existing between management and employees. As stated, most companies today have managerial styles falling in areas A5 and B5, characterized by a high degree of management or supervisory control. The direction of change is thereby channeled to a more participative and humanistic approach.

five five criteria identifying the lettered areas.

Area A1, B1, C1: Employees make decision, accepted by manager after manager defines the problem.

Area A2, B2, C2: Employees make decision, accepted by manager after manager defines the problem.

Area A3, B3, C3: Employees make decision, tentatively accepted by manager after some participation by him and his setting guidelines of the problem.

Area A4, B4, C4: Manager makes decision after presenting ideas and inviting some participation of the employees.

Area A5, B5, C5: Manager makes decision without employee participation and announces it.

Area A6, B6, C6: Manager makes decision after mutual participation of manager and employees. Self-respect and confidence are implied.

Area A7, B7, C7: Employer makes decision, tentatively accepted by manager after some participation by him and his setting guidelines of the problem.

The factor dictating the area applicable, and the corresponding climate within it, is the mutually definable levels of participation existing between management and employees. As stated, most companies today have managerial styles falling in areas A5 and B5, characterized by a high degree of management or supervisory control. The direction of change is thereby channeled to a more participative and humanistic approach.
to organizational management. It calls for the development of a new breed of manager, with greater human values and mutual self-respect, than exists in the vast majority of managers today.

Results management or management by objectives tends to promote the development of this type of manager. Schlich, one of the more human among writers on the subject, sees this approach as attempting to integrate an individual's personal needs with the needs of the organization. He believes that management's primary job is "to foster a work climate that encourages individuals to develop and broaden to their fullest capabilities at the same time . . . shoulde­ring their individual part of the responsibility for achieving the objectives of the enterprise." Though many large companies have tried this results approach, its marginal success is principally due to its emphasis on goals development and technique orientation in lieu of establishing a sound foundation upon which future growth can be built.

The Managerial Matrix method attacks the problem by first identifying existing managerial climates within the context of given work and the people who are there to do the work. This is followed by the direction necessary to provide for meaningful change in behavior. It ultimately proposes a need for managers who can continually grow and mature in life, and have the requisite knowledge and know-how to provide a productive balance of control between themselves and their employees.

Behavioral Technology: An Emerging Discipline

Consistent with a meaningful methodology for identifying and promoting the need for organizational change is the vital question of how do organizations minimize the many anxieties, fears, depersonalizations, and increasingly materialistic values which permeate society and organizational settings? It is obvious that existing concepts of management have been unable to cope successfully with these problems.

Behavioral science has within the last few decades provided a sound basis for understanding the complex nature of man, particularly focusing through psychology on man the individual, through sociology on man within a group context and through anthropology on man as a member of a culture. Although the field is young and its parameters not totally defined, it is a powerful force in the study of the nature of man. With the increased concern and conflict over the role of human beings within the organizational setting, we are seeing a new branch evolving from this young science.

It is the field called Behavioral Technology—a melding together of man the technical being and man the human being in the working environment. As defined by this author, its emphasis is not only on behavioral science, but on both behavioral and technological (hard) sciences such as engineering and mathematics, to provide for man's full participation both as a human and as a technical resource. As an outgrowth of trends developing during the 1950's and 1960's, Behavioral Technology is mirrored in the "socio-technical system" of Eric Trist, referred to as the Tavistock model, by Robert Gayne's "psychotechnology," and by the "techanthropic" (or techumanic) approach to management developed by Brianas.

Since man spends the vast majority of his life in a working environment, it is in this arena that the forces of Behavioral Technology can most fully provide the mechanism for redirecting emphasis to the purpose of man as the center of human life. It is through this approach that we will be able to direct the forces of the second industrial revolution currently in process. Whereas the first dealt with the development and use of machinery to replace man-power, the second industrial revolution is concerned with sophisticated automation, based on computers, designed directly or indirectly to replace man's brainpower—his thought processes.

But the computer and other advanced non-human forces developed by man must benefit and support his role in an ever-

BEHAVIORAL TECHNOLOGY 293
changing society and not become its dominant force. Man must not subjugate himself to any power created and institutionalized by man himself. He must remain the master of his inventions and not their servant.

In searching for scientific truth, man has developed a vast knowledge base through which he has been tremendously successful in providing great technical and materialistic advances. These advances have created a great imbalance and have far outstripped the other necessity of providing for new and meaningful human experiences to complement the technical revolution. By his concentration on technical and material values, Erich Fromm feels that man has "lost touch with himself, with life —lost the capacity for deep emotional experience . . . [he has] become the prisoner of his own creation and [is] in serious danger of destroying himself." He speaks of a new movement calling for profound changes in our society, "its aim being the activation of the individual, the restoration of man's control over the social system, the humanization of technology."

In conjunction with the above views of the famous psychoanalyst, anthropologist Ashley Montagu believes that although technology and industry are admirable and necessary to society, they vitally need improved human relations. "Technology and industry," he feels, "must be humanized, and (conversely) we must eliminate the technology and industrializing of human relations . . . it is not on economics that human societies must be based but on human relations." Our knowledge must be put into action so that man can control the changes in civilization.

Imbalance Created

Peter Drucker, expressing his viewpoint as a management consultant, believes that although in the past technological development was based principally on human experience, today it is knowledge—"systematic, purposeful and organized information"—which has become the "central economic resource" and the "foundation for a productive capacity and performance." Along with this knowledge comes responsibility in its exercise. With the many discontinuities existing today in the world, "No one needs to be told," he believes, "that our age is an age of infinite peril. No one needs to be told that the central question we face with respect to man's future is not what it shall be, but whether it shall be." The task we have today is one of "patching the fabric of civilization rather than designing a new garment for a new Adam."

This pattern of pessimism stressing a need for rebirth of man's purpose, a new look at our technology, a redirection of the powerful forces at work in our society which were created by man and yet seem to eat at the fabric of man himself, are echoed by still others. Zoologist Desmond Morris believes that by recognizing our biological nature, man can assure himself of survival. He feels that "we should tailor our intelligent opportunistic advances to our basic behavioral requirements. We must somehow improve in quality rather than in sheer quantity. If we do this, we can continue to progress technologically in a dramatic and exciting way without denying our evolutionary inheritance."

In his book, Beyond Freedom and Dignity, B. F. Skinner, the behavioral psychologist, introduces a new and undoubtedly controversial theory for insuring the survival of man through the redesign of his culture. It is based on a system of behavioral controls imposed upon individuals in society through specialists possessing behavioral reinforcers. His approach seems to be a cold, regimented and manipulative form of human control—a control which he feels largely exists today but which must be improved in order to instill people with altruistic behavior. Such a philosophy, while recognizing the necessity for action in a changing society (the source of an organization's manpower), seems to promote a kind of mental hygiene police force directed by psychoanalytical do-gooders. Although such extremes as proposed by Skinner, should be avoided, it may be bene-
ficial to think in terms of restructuring society by means of educational reforms not only to provide greater flexibility for more meaningful learning experiences, but also to reach out and integrate the family into the educational process.

**Capacity for Adjustment Essential**

The complexities and problems of modern life, both in the area of technology and of man's social and cultural institutions, continually place demands on humans. Caught in this mesh of constant change, we need more than anything else, according to educator, John Gardner, "a high capacity for adjustment to changed circumstances, a capacity for innovation... It is not just technical competence which is needed. A society such as ours is dependent on many kinds of achievement, many kinds of complex understanding. It requires large numbers of individuals with depth of judgment, perspective and a broad comprehension of the problems facing our world."

We are seeing then, the dramatization of humanistic forces compelling a redirection of man's knowledge away from the primary emphasis on materialistic technological advances to a more balanced pronouncement of humanistic behavioral advances. This is what the new field of Behavioral Technology will provide. As its consequence, it will reaffirm the dignity of man that has been shrouded to a large extent in centuries of veiled darkness. It will provide him at all levels of the organization with tools of knowledge and learning patterns designed to utilize an increasing amount of his dormant potential, and to fulfill his own self-actualizing needs and balance them with the needs of the organization. As well as reaffirming a return to a more humanly oriented environment, Behavioral Technology (BT) reaffirms the need for technology and its great warehouse of continuing improvements wrought by man for his own benefit. Of necessity, BT must initially emphasize the requirement for improving human behavioral characteristics in the working environment and de-emphasize the technical, except where definite mutual benefits are derived, until a level of balance in human and technical improvement has been achieved.

We have seen clear signs of this reorientation during the last decade through greater emphasis and research in human behavior. On a broader scale, America's current shift in national priorities has focused on the problem and has provided some impetus to new thinking. One example of this shift has been the elimination of the supersonic transport program. Another has been the ecology movement (not to exclude such forces as the Sierra Club and Friends of the Earth) and related methods to control environmental pollutants brought on as a result of our technological improvements. In line with this shift, the federal government has also developed programs to retrain many of the scientists and engineers affected by the shift to stimulate use of their talents towards areas of social reforms.

This reorientation is also becoming evident within the working environment. The job enrichment program of the A.T.&T. Corporation which began in 1965 is but one example. Other examples include the organization development effort at Corning Glass Company, the team concept instituted at the General Foods Topeka plant and the Volvo plant in Sweden, the job enrichment program at Travelers Insurance Company and the Chesapeake and Potomac Telephone Companies; the rearranged workweek concept at Lufthansa Airlines, Control Data Corporation, and at numerous European companies; and the participative management program at U. S. Envelope. This nation's largest employer, the federal government, has also begun to explore the benefits of behavioral science research with its first major job enrichment study being initiated in early 1973 at the Social Security Administration. The organization development program of the U.S. Postal Service is also another example of the shift towards human resource concerns.

What we are seeing is a renaissance of purpose—a rebirth of the dignity and im-
importance of man in the universe. It is a movement away from the strictly technological approach to the good life. This is the force that Behavioral Technology provides within the organization—a redirection, a harmonizing of man the human being and man the technical being; a renaissance of man's purpose to sustain his very being.

How to Provide for Change

In the Managerial Matrix (Exhibit A), we have a method for obtaining a fix on the climate existing within an organization and the direction to be pursued in meeting an optimum balance between the organization and its employees. Effectuating required change is an altogether different ball game. If we assume, as this author does, that active employee participation and a humanistic climate are two of the most vital aspects of an effective organization, how does one develop them as part of a philosophy of management? Or as Schein states it, how does an organization “develop in its personnel the kind of flexibility and adaptability . . . for the organization to survive in the face of a changing environment.”

First of all, it should be stated that not all efficient and effective organizations need the active participation of its employees in the decisions affecting them, or for that matter do employees always need to be treated with human dignity in a supportive, democratic manner. Likert emphasizes this point. For example, all the attributes leading to a highly productive organization such as favorable employee-management attitudes, good leadership, trust, confidence, etc., may be present, but if high performance goals are absent, increased productivity could always remain a mythical goal. Morse and Lorsch also point to this factor. They feel that the organization must be tailored to fit both task and the people. Some tasks and people are more comfortable under authoritarian than supportive styles of management. There are organizations, then, where participative management may not be effective because (1) of a lack of thorough planning in implementing such a system within the characteristics of a given organization, and (2) the tasks involved and people performing the work may not be conducive to it.

Meaningful improvements, though, are possible in just about any given situation. Within the complexities of organizational life, there is no plateau of excellence limiting the possibility of further improvement in the realm of human dynamics. The many pressing problems in the vast majority of companies and governmental agencies call for new methods to meet the continual demands brought upon by an ever-changing society.

“Change Agents” has been one label applied to those concerned with organizational effectiveness and methods for achieving improved results. These agents may exist in the organization or they may be private consultants.

Three of the more popular formal training methods used in planning for change through use of behavioral science have been (1) sensitivity training, (2) Managerial Grid seminars, and (3) Menninger seminars. Of these, sensitivity training, also known as laboratory, T-group, or group dynamics training, is the most widely used. While sensitivity and Managerial Grid training have moved from the emphasis on personal growth to focusing more attention on group processes or “organization development,” the Menninger seminars emphasize the individual’s mental health and his adjustment in the working environment.

Participation Builds Self-Esteem

Exclusive of formal training programs, much can be done to promote meaningful change in organizations. Sorcher provides a skeletal guide on motivating employees through participative management. “Employees,” he feels, “should be asked how they would like to try running a piece of the business by making decisions that were formerly made by management or by specialists.” In this first step he feels the emphasis should be on management’s con-
fidence and trust in them. He sees the participative approach as building self-esteem which is vital to employee motivation. Since participative management would be a new experience for most employees, the process of learning, he feels, should be a developmental one.

American Telephone and Telegraph's approach to organizational change took on the label "job enrichment." The high turnover rate in many of its departments was, through analysis of exit interviews, largely attributable to lack of adequate responsibility in one's work. The company decided to apply some of Herzberg's five basic motivators—learning, achievement, recognition, responsibility, and advancement—on some 120 female employees whose work and morale were poor. About 70 per cent were college graduates. The girls' jobs were changed to include more responsibility (relinquished by supervisors) and more meaningful participation. From this approach, turnover dropped 27 per cent, 34 jobs were found unnecessary (28 per cent of the total) which included 8 supervisory jobs, and cost savings over 18 months were calculated at $558,000. With such dramatic results, the program was extended throughout the company. In a personal discussion in early 1973 between this author and Dr. Robert Ford, father of the job enrichment program at A.T.&T., he mentioned that a key to the initial success of the program was his personal interest in attempting to cope with the causes of job dissatisfaction by virtue of the fact that he was responsible for hiring most of those 120 girls in the first place.

As did Sorcher, A.T&T. shows the process to be a developmental one. Six months was the approximate lead time needed to retrain the employees and another six months were required to acclimate the redesigned jobs into the company's work system.

Providing for participation and change is rooted in the understanding of human behavior and the application of behavioral science skills and knowledge in influencing subordinates in their work and their performance. Peter Drucker feels that Taylor, 75 years ago, began the process of applying knowledge in improving work. Yet with all our knowledge, Drucker believes we still do not fully understand the social and psychological needs of the "knowledge workers" who are increasingly comprising a major part of the work force. To motivate the worker, he must be challenged, he must know that he is contributing. The concept here is not one of "a fair day's work for a fair day's pay" but rather "an exceptional day's work . . . with the opportunity to also earn exceptional pay."

A New Challenge

We are faced with a new challenge. It is a challenge which strikes at the heart of both the quality and quantity of man's existence.

Change has been paramount in our society. As a nation, we have reaped the benefits of technological progress, particularly of the immense strides we have made over the last fifty years. During no other period in the existence of humanity has so much been accomplished in such a short period of time.

This new technology brought on by the knowledge explosion has set in motion a second industrial revolution. With all man's genius for technological innovations, he has made but few strides in the area of human behavioral innovations. Little has been done to find new and improved techniques designed to unleash the dynamics of human relationships which may be on the verge of falling prey to depersonalized forces.

The mobility of modern man, his migration to urban centers of living, his higher level of education, the voices of the masses of people which are being heard, the effect of the mass communication media, the increasing problems of urban and suburban life, are, to a large extent, filtered into man's working environment. The organization tends to project itself, then, as a microcosm of the larger society.

A new breed of leader is therefore needed to manage the new breed of worker that is
emerging; a leader with vision and vitality. No longer can traditional theories of managerial control provide a sound base for organizational effectiveness. New methods of human interaction are needed to motivate people for the benefit of the organization as well as for the employees themselves.

The Managerial Matrix system of organizational style provides a practical frame of reference from which to proceed into better understanding current organizational problems and the direction necessary to successfully provide for meaningful change. A new discipline—Behavioral Technology is emerging as a vital concept designed to cope with these increasing problems. It is a field of endeavor that can meet the challenge of humanizing man’s rampant technological growth. In essence it is a harmonizing of man the human being and man the technical being—it provides for the rebirth of man’s purpose, a redefinition of his reason for being.

With greater understanding of the nature of man, man himself will be better able to discover and harness those forces of humanity through which optimization of his potential can become a reality. In this manner we can assure ourselves of a more meaningful tomorrow.

Notes
8. Ibid., pp. 381-385.
<table>
<thead>
<tr>
<th>PRACTICES AND CHARACTERISTICS</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>2. Information - locked inside brain - we call it Intuition or Judgement</td>
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<tr>
<td>3. Entrepreneur.</td>
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<tr>
<td>4. Lookout for new ideas.</td>
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<td>5. Strategy for understanding and responding to pressures and dilemmas of the job. Need to be introspective.</td>
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<tr>
<td>6. Establish information network.</td>
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<tr>
<td>7. Sensible risk taking and innovation.</td>
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<tr>
<td>8. Work at unrelenting pace.</td>
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<tr>
<td>9. Activities - brevity, variety, discontinuity.</td>
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<td>10. Action-oriented.</td>
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<td>11. Jump from issue to issue. Respond to need of moment/job pressures.</td>
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<td>12. Ritual &amp; ceremonies, negotiations.</td>
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<td>13. Favor verbal media - telephone calls, meetings.</td>
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<td>14. Cherish soft information -- gossip, hearsay, speculation (may be tomorrow's fact).</td>
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<tr>
<td>15. Collecting tidbits of data -- odds and ends (illuminate the underside of issues).</td>
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<td>17. Resource allocator.</td>
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<td>18. Information sharing - primarily verbal.</td>
</tr>
<tr>
<td>19. Develop peer relationships.</td>
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<tr>
<td>20. Motivate subordinates.</td>
</tr>
<tr>
<td>22. Decision - making in extreme ambiguity.</td>
</tr>
</tbody>
</table>
23. Obligation from others - creating power.

24. Develop true friendships with those on whom dependent.

25. Build reputation as expert.


27. Sensitive to impressions their actions have on others.

28. Use various behavior - develop all types of power.

29. Invest their power to secure high rate of return.

30. Maturity, self-control - Power orientation tempered by these.

31. Manage relationships with others.

32. Persuasion - most important method of influence.

33. Establishing power over others.

34. Forceful in areas of one's expertise.

35. Try to look and behave in ways others respect.

36. Selective in use of available behavior.

37. Comfortable in using power to influence others.

38. Figuring out what to do despite uncertainty, great diversity, and an enormous amount of potentially relevant information.

39. Loosely connected goals and plans that address long-, medium-, and short-term responsibilities.

40. Both vague and specific items.

41. Plans include immediate future (1-30 days) & longer (5-20 yrs.) compared to 3 mo. to 5 yrs. for most written plans.

42. Develop a network of cooperative relationships among those people they feel are needed to satisfy emerging agendas.

43. Try to make others feel legitimately obliged to them.
44. Carefully nurture professional reputations in eyes of others.

45. Create appropriate environment in which people are willing to work hard for GM.

46. They plan to react – do not plan days in much detail.

47. Whole approach to job involves interacting with others.

48. Good planning system -- help GM create intelligent agenda & strong network to implement it.

49. It should encourage GM to think strategically rather than impose a rigid number crunching requirement & paperwork.

50. Select basic direction for areas of responsibility.

51. Less systematic, more informal.

52. Less reflective, more reactive.

53. Less well organized, more frivolous.

54. 25% of time alone, only.

55. Getting things done thru a large and diverse set of people despite having little direct control over most of them.

56. Job requires a complex & subtle approach to planning, org, etc.

57. Conscious (analytical) and unconscious (intuitive) decisions largely internal to their minds.

58. Aggressively seek info from others including bad news to address longer time frames for planning & wider range of issues.

59. Move, fire, hire subordinates to develop own network.

60. Use personal influence -- asking or suggesting something i.e. Direct or indirect influence.

61. Motivate others with great skill in face to face situations.
62. Adept at grasping and taking advantage of each item in the random succession of time & issue fragments that crowd their days (per Peters 1979).

63. React in opportunistc way to flow of events around them.

64. Sensitive to problems.

65. Initiate communication at lower levels of management and percolate upward.

66. Explicit place to the unknown value of things.

67. Dual frame of reference - recognizing value of both the clear and the ambiguous.

68. Gradual change rather than head on assault (can outflank organizational obstacles; have time to).

69. Patiently flow with a solution.

70. Recognition most important reward but must be shared.

71. East in turn has Implied Recognition -- reputation for being trustworthy, skilled in making things happen.

72. Seek others opinion - i.e. respect for his insight.

73. Continuous unfolding of events. Let things flow as opposed to value of logical goal-blinded action.

74. Treat people as equal without treating as the same.

75. Human relationships versus secular efficiencies.

76. Company character - shared sense of values - enforced by group norms i.e. Institutional way of doing things that is different from efficiency alone.

77. Makes allowances for uniqueness of people.

78. Chemistry of human relationships as well as Mechanics of human accomplishment.
79. Subtle ways of dealing with others.  
(example - let situation remain ambiguous - avoid premature conclusion)

80. Intuition.

81. Subtleties of the communication process.

82. Nuances in interpersonal communication.

83. Insights within easy reach to our thinking.

84. Ambiguity - tentativeness legitimate.

85. Agreement needing time to evolve.

86. Widening and narrowing dialogue to correspond to subordinate sensitivity as opposed to get the cards on the table -- brute integrity, clear the air, High noon shoot 'em out, macho confrontation.

87. Sensitive to "face". West regard it as weakness.

88. Permit workable arrangement to evolve not a penchant to make formal announcements.

89. Incremental, gradually shift boundaries.

90. Appropriate limitations of the ego (as a virtue) rather than assert and maintain control.

91. Ambiguity, uncertainty, Imperfection.

92. Significant meanings.

93. Shared values.

94. Knit together individual & organizational purposes.

95. Pass savings to consumer.

96. Don't fire people - use elsewhere.

97. Maximum use of potential - rotate, etc.

98. Develop employees.

99. Resilience and vitality of organization.

100. Isolate problem at lowest level.

Pascale and Athos  
The Art of Japanese Management: Applications for American Executives  
1981
101. Strong belief system.
102. Vote of confidence from society.
103. Societies give rise to organizations so reward them.
104. Trainers & developers of human resources.
105. Balancing various matters.
106. Resist drive for closure.
107. Contemplative.
108. Flow with the situation.
110. Attend to details.
111. Non-verbal data — use of.
112. Versatility.
113. Trust in instinct.
114. Interweaving human values.
115. Driving will, energetic.
116. Committed, determined, pragmatic.
117. Forceful, disciplined, attentive.
118. Small business-like.
119. Initiative, integrity.
120. Conflict without conflicting.
121. Make adjustments.
122. Strive to pull together.
123. Press but let people come around to point of view.
124. Build acceptance time.
125. Create right climate for people to accept the new. No orders.
126. Resilience.
127. Harmony & cooperation.
128. Sensitivity -- rooted in reality to know what is happening.
129. Tune into yourself, test perceptions against realities.
130. More aware of oneself.
131. Finding out when and how one works best.
132. When not to make decisions.
133. What people & situations are upsetting.
134. What one needs to learn and relearn.
135. Take feedback from others seriously but cautiously i.e. is feedback well founded.
136. Know how you come across to others -- impact your behavior has.
137. Awareness of the persons with whom you deal (Executive insensitivity or toughness can prevent you from relating to others).
138. Tuned into people and events in and out of the org.
139. What developments are occurring in your company or industry.
140. How will department be affected by economic or business changes.
141. Develop informal, personal network in & out of org.
142. Accumulate list of people to trade info with.
143. Work harder and smarter than most people.
144. Look, sound, and act like high-potential people.
145. Acquire solid job and professional skills.
146. Well-informed.
147. Develop good interpersonal skills.
148. Possess energy and intelligence.
149. Be a good listener.
150. Learn to ask.

151. The further you go up the greater the sensitivity you must have to what is going on -- at all levels of your org. i.e. Awareness - high level of.

152. Sizing people up.

153. Taking a reading of a situation.

154. Understanding hidden agendas of others.

155. Sees the enterprise as a whole.

156. How various functions in org depend on one another.

157. Visualizes relationships of one's business to the industry, community, and social and economic forces in the nation.

158. Achieves maximum good for the total org.

159. Works effectively as a group member.

160. Builds cooperative effort within the team he leads.

161. Sensitivity in day-to-day behavior.

162. Naturally developed and unconsciously and consistently demonstrated human skill.

163. Confident, aggressive spirit.

164. Determination or motivation to succeed.

165. Alert and alive to changing conditions.

166. Insight can start chain reactions thruout org.

167. Sensitivity sessions and confrontation meetings part of larger program of company development.

168. Mgrs. who give themselves up to org. rather than give of themselves --reason for lack of valid info for dealing w/ important problems.
169. Awareness of how your leadership style affects org.
170. Articulate.
171. Competitive.
172. Persuasive.
173. Compete vigorously for air time.
174. Stronger the win-lose dynamics the more carefully they measure and plan their statements.
175. Emphasize novelty.
176. Few predetermined roles.
177. Experimentation.
178. Autonomy.
179. Vary behavior.

180. Use cues - form a lens thru which one views others -- and to which their worth as people will be judged.
181. Weighting of cues -- amounts to statements of probability.
182. Cues used to build probability model about others.
183. Sensitivity to cues important.
184. Relationship between cues and actual behavior must be correct.
185. Focus on contribution -- outward toward goals.
186. Stress responsibility.
187. Focus on results.
188. Turn attention from own narrow specialty to performance of the whole.
189. Define boundary conditions of decisions -- objectives to reach.
190. Think through what is strategic and generic.

191. Look for strength in others (and put up with weaknesses).

192. Look for opportunities.

193. Concentrate -- first things first -- important contributions.

194. Feedback -- see firsthand what is happening.

195. Put your strengths to work -- what do you do well?

196. You and everyone with whom you work should know what is going on -- your priorities.

197. Take charge of your relationships and your communications.

198. Sensitive to all the nuances of the situation that surrounds him.

199. Shaper of values.

200. Respond to major issues with trial balloons.

201. Important decisions emerge only after top mgmt has vacillated for months or years.

202. Disorderly bits of info are opportunities to fine tune his org. sense of direction -- the general strategic direction.

203. Build strong consensus to assure minimal correction over time.

204. Gradual, incremental development.

205. Shape business values thru adhoc opportunities.

206. Educate by example.

207. Develop greater attachment of everybody to the bottom line -- more agony and ecstasy.

208. Build support.

209. Blends strategic foresight w/ shrewd sense of timing & political acumen to build stable workable coalitions.
210. Almost hit and run mgmt -- 9 minutes per decision.

211. Ad hoc adaptation to shifting circumstances.

212. Tolerates interruption because he does not wish to discourage the flow of current info.

213. Foray into detail as a shield against surprise.

214. Deal with a flow of info.

215. Muddle about on the way to major change not purely a matter of political maneuvering but provides marinating time.

216. Communicator, persuader, consummate opportunist.

217. Adept at grasping and taking advantage of each item in the random succession of time & issue fragments that crowd each day.

218. Disorderly, non-rational.

219. Able to artimulate his vision in compelling way.

220. Has a range of sensitive responses to subtle feedback cues.

221. Adept at all sorts of intervention by which he can nudge disorderly process in desired direction and to some degree control its course (not to impose abstract order on it).

222. "Boundary spanners" - those in org. responsible for info. and substantive exchanges w/ environment.


224. Ongoing chain of perceptions & actions leading to org's adaptation to its environment.


226. Scanning: Impacting on own prod/svcs.


228. Scanning: Govt. regs., taxes, sanctions, etc.
229. Growing person examines self.

230. Self concept - a filter to hear/see or not -- patterning of attitudes, habits, knowledge, drives, etc.

231. Change in response to new insights and understandings.

232. Many facets of a person like a diamond.

233. See self in relation to environment -- not in isolation.

234. Strong men in history have been themselves -- overcome personal obstacles.

235. Self-concept constantly evolving.

236. Changes as he continuously realizes self. This is genuine growth.

237. How much do I value my life - has clear cut answer.

238. What do I want to do with my life - has clear cut answer.

239. What must I do to be myself - has clear cut answer.

240. Dedicated man: Personal goals, company goals, and job goals have coincidence.

241. Complex man.

242. Successful mgr. must be a good diagnostision.

243. Successful mgr must value a spirit of inquiry.

244. Flexible, accept variety of interpersonal relations, patterns of authority and psychological contracts.

245. Complexity in Org - looking at it thru contingency theory.

246. Different people have different needs.

247. Tailor org. to fit task and people.

248. Complexity based on variability of tasks and people.
Tosi and Carroll 249. Power -- basis of compliance.
Management: Contingencies, Structure and Process 1976

Differing views are exactly what the exec. needs to hear in order to grasp reality first hand.

George Jr. 250. Conceptual aspect of mgrs job is reasoned not instinctive. He may not consciously enumerate every aspect & alt. but done as part of reflective process of experience stored in his mind.
The History of Management Thought 1968

Coxon 251. Strategic planning to determine right direction.
"How Strategy can Make Projects Prosper" Mgt Today April 1983

Stewart 252. Analyze nature of your Job and the choices it offers -- the opportunities.
Contrasts in Management 1976

253. Weigh up aspects of the job to emphasize (what work is important).

Marshall and Stewart 254. How individual tackled his job i.e. his working strategy: Project approach 29%
"Manager’s Job Perceptions, Part I: Their Overall Frameworks and Working Strategies" JMS April 1981

255. Work conceptually in terms of the demands and constraints and choices open.
Machin, Stewart, and Hales Toward Managerial Effectiveness 1981

256. Strategic orientation -- operating in an environment inside, and where relevant to the job, outside the company, which he tries to control, to develop and to mould as he desires.

257. Embrace and harness new technology.

258. Become more aware of the scope for new technology.

259. Approach job analytically and imaginatively.

260. Learn to integrate doing, managing and learning.

261. Analyzes job strategically in terms of the

262. Strategic orientation -- operating in an environment inside, and where relevant to the job, outside the company, which he tries to control, to develop and to mould as he desires.

263. Intellectual ability.

264. Sensitive human relations.
265. Better communication.

266. Greater coherence (or overlap) of expectations.

267. Understanding of his own nature.

268. Harness the forces that will optimize his potential.

269. Need mgers who can continually grow and mature in life.

270. Harmonize man the technical being and man the human being.

271. Contingency approach to effective mgmt.

272. Theory of "Organizational Relativity". An organization's operating requirements and thereby its effectiveness are dependent upon the nature of those forces at work both within and without the organization. Forces include:
   1. Kind of work to be performed.
   2. Type of people employed to perform the work.
   3. The system of managing that surrounds the work.

273. Mgmt's ability to maximize and harmonize its human and technical resources (basis of org. effectiveness).

274. Good interpersonal communications.

275. Positive attitude toward feelings and opinions of personnel.

276. Consider forces in Manager.

277. Forces in Subordinates.

278. Forces in Situation.

279. Successful leader keenly aware of forces.

280. Accurately understands self.

281. Accurately understands individuals and group.

282. Accurately understands company & broader social environment in which he operates.
283. Assess readiness for growth in subordinates.

284. Mgr able to behave appropriately in light of perception.

285. Has flexibility to direct if direction is needed, or provide freedom if called for.

286. Maintains high batting average in accurately assessing the forces that determine his most appropriate behavior at any given time.

287. Insightful.

288. Flexible.

289. Choose the strategy that is appropriate for particular situation and managerial style.

290. Approach human problems with same analytical tools as marketing or finance.

291. Effective management behavior & action depends on specifics in each situation.


293. Work behavior - result of a complex system of forces.

294. Build educational programs & staff resources for developing skill & knowledge.

295. Aware of own values and preferred mgmt styles.

296. Able to "get along w/ people".

297. Able to recognize what they must do to make their contribution to productivity.

298. Versatile and inconsistent -- adapt style to situation.

299. Persistent in analysis and self-discipline.

300. Employ practice of analysis with great effect.

301. Succeed in motivating employees and satisfying superiors.
302. Manage themselves.

303. Culture change is a pre-requisite to org. behavioral change.

304. Total system focus for change.

305. Educational, technological, economic, & family elements responsible for altering behavior that produces mgmt. style changes.

306. Style cannot be changed in a vacuum.

307. From behavior change to attitude & value change.

308. Tech changes -- increased complexity of work can not be supervised as could simple tasks of previous periods.

309. Family -- most powerful single environmental force. Changes here are mirrored in power relationships between govt, business & labor.

310. Mgmt style completely intertwined in system of cultural values. As culture change so will scientists, their findings, their seminars.

311. More autonomy.

312. Greater demand for information.

313. Wider participation.

314. Greater dependence on individual's judgement.

315. Recognition of potential power of non-managers for goal achievement.

316. More response to law of the situation.


319. Style of an effective manager in army, church, civil service, & industry may all be different.

320. Style depends on the situation.

321. Read situations correctly for what they really contain.
322. Appraise situational elements in terms of their task and relationship demands, their flex, and their relative strength.

323. Job Demands of situation - appraise.

324. Corporate philosophy - appraise.

325. Style of superior - appraise.

326. Expectation of subordinates - appraise.

327. Style of subordinates - appraise.

328. Mgr needs style awareness.

329. Knowledge of impact on others.

330. Feedback needed to correct deviations.

331. Best feedback is non evaluative i.e. computer printouts.

332. Diagnose situation.

333. Situational sensitivity is a diagnostic skill.

334. Management at all levels must be sensitive to needs of subordinates.

335. Manager sympathetic and understanding attitude towards subordinates.

336. Manager alert to own shortcomings.

337. To understand leadership necessary to consider personality of leader in relation to personality of follower and to characteristics of situation.

338. Understand conflict between requirements for economic survival and success (economic imperative) and adjustments made necessary by demands of host country (political imperative).

339. Multinational strategies -- Economic -- worldwide focus - best for market share (as opposed to national focus -- political -- or administrative focus -- combining economic and political).
340. Strategic control of subsidiaries: use organization structuring.

Prahalad and Doz
"An Approach to Strategic Control in Multinational Companies" SMR Summer 1981

341. To become sensitive to area needs (or vice-versa) structural org. changes needed.

International Management
"Why Global Business Performs Better June 1983

342. Global-centered strategy - Airlines, TVs, Heavy Elec. Equip. Go global (as apposed to country-centered) due to change in environment: 1) reduction of govt. barriers, 2) falling trans and comms costs (as opposed to country-centered).

Butler and Deardon
"Managing a Worldwide Business" HBR May-Jun 1965

343. More meaningful rationale to help management translate broad political & economic risk factors into sound decisions (Evaluate 10% return in stable country to 25% in more troubled economy).

Adler
"Cultural Synergy" in Burke et al 1980

344. The complexities of operating transnational enterprises require synergistic skills.

Rummel and Heenan
"How Multinationals Analyze Political Risk" HBR Jan-Feb 1978

345. Cultural pluralism (in the U.S.) rather than melting pot assimilation.

346. Integrated approach best in analyzing risk:
- Grands tours
- Old hands (experts)
- Delphi techniques
- Quantitative methods
- Analysis by computer

Thackray
"American's New Technology Trap" Mgmt Today June 1983

347. The most effective analysis combines insight & wisdom with mgmt science.

348. Top management involvement in technology process.

Archibald
Managing High-Technology Programs and Projects 1976

349. Project manager - single point of integrated responsibility

Franko
"Multinationals: The End of U.S. Dominance" HBR Nov-Dec 1978

350. Complex efforts - projects.

351. Create a specific result - well defined objectives -- for projects.

352. Sensitive to national customs.
353. Idea generating - Analyze/synthesize info on environment.
354. Entrepreneuring or championing.
355. Project leading.
356. Gatekeeping.
357. Sponsoring or Coaching.

358. Analytical detachment vs insight from "hands-on" experience into the subtleties and complexities of strategic decisions.

359. Success in most industries today requires an organizational commitment to compete in the market place on technological grounds.

360. Willingness to make risky long-term competitive investments.

361. Success in trade is the result of patient and meticulous preparation, w/ long period of market preparation.

362. Place central emphasis on producing technologically superior products.

363. Employ a decision-making apparatus that grinds very fine and very deliberately.

364. Must outthink and outmanage competitors.

365. Conscious of long-term implications of their day to day decisions.

366. Careful to make necessary arrangements and investments today for long-term survival.

367. Look at ROI but only after they ask is it a good product.

368. Striving to excel requires leaders -- not just controllers, market analysts and portfolio managers.

369. Culture Synergy - Recognizes and transcends cultures.

370. Understanding of own cultural assumptions (cultural self-awareness) as well as understanding of others (cross-cultural awareness).
Redding
"Cognition as an Aspect of Culture and its Relation to the Management Process"
JMS May 1980

371. Intuitive perception and more reliance on sense data.
372. High sensitivity to context and relationships (the total system).
374. Change agent skills.
375. Exec. - unique position to act as org's. "radar" scanning the environment.
376. External perspective of exec. part of sensitivity to environmental demands, opportunities, trend & change i.e. a more advantageous relationship w/ environment.

Muna
The Arab Executive
1980

377. Manage strategically.
378. Orchestration of all resources; strategically chosen planning framework.
379. Creative, flexible planning processes.
380. Understand competitor's strategy. Focus on them for annual plans. Supportive value system and climate.
381. Belief in creating own future (underlying ethic of strategically managed companies).
382. Strategic Management - links the rigor of formal planning to vigorous operational execution.
383. Long-term investment decisions.
384. Teamwork.
385. Entrepreneurial drive.
386. Open communications.
387. Strategic approach to productivity mgmt. (productivity efforts encompassing the entire organization and all of its systems and procedures) willingness to look carefully at all aspects of a company's operations.

388. Assume role of sponsor for entire productivity effort.

389. Long-term investment decisions.

390. Entrepreneurial risk.

391. Involve directly and ensure support of managers (part of the process of making strategic choices).

392. Free exchange of opinions in vigorous open debate.

393. Organization is a dynamic system. Complex org. more like a modern weapons system than an old-fashioned fixed fortifications. Has 4 parts: Tasks, structure, tools, people.

394. Flexibility (of organization).

395. Open communication. (based on the Systems model & the Humanistic model as opposed to old structure model).

396. Periodic shift between chaos and continuity - dynamic framework.

397. Business focus - concentrate products in your org's area of strength i.e. little diversification.

398. Adaptability - willingness to undertake major and rapid change when necessary.

399. Sensitive to market needs as a balance to engineering excellence.

400. Organizational cohesion - tap energy and creativity of the whole org.

401. Collaborate rather than compete.

402. Job rotation to facilitate communality about people.
403. Multidisciplinary project teams.

404. Long-term employment.

405. Entrepreneurial culture (fierce activism in promoting internal agents of change).

406. Tolerance of failure.

407. Allow people to pursue outside projects.

408. Sense of integrity - Honesty, openness, and fairness.

409. Only constant is continued change.

410. Manage ambivalently.

411. Knowing when and where to change from one stance to the other.

412. Power to make the shift (when change required).

413. Strong Leadership.

414. Top executive more visible and accessible i.e. good communication with others.

415. Self-understanding.

416. Blend of strength and humility.

417. Ask lots of questions.

418. Strategy - means to carry out mission.

Tichy, Fambrum, and DeVanna
"Strategic Human Resources Management"
SMR Winter 1982

419. More sophisticated approaches to HRM (for long-run competitiveness of American industry).

420. Strategic role of HRM in formulation and implementation of long-run plans. (Congruence between human resources systems and firms' strategies).
Mantel
"The Systems Approach and Good Management"
Bus Hor i Oct 1972

421. Systems approach needed.
422. Integrated complexity of interdependent parts.
423. Sensitive and accurate interaction among parts with their environment.

Hulme and Maydew
"A View of the Top"
Bus Hor i Oct 1972

424. Collective top management (as opposed to one-man rule) particularly in multi-nationals. Collective found more so in Continental Europe than in North America or U.K.
425. Effective communications.

Livingston
"Myth of the Well-Educated Manager"
HBR Jan-Feb 1971

426. Find and exploit opportunities.
427. Maximization of opportunities.
428. Discover and deal with potentially serious problems before they become critical.
429. No best way to manage all situations. Natural style and practices consistent with our personality.
430. Have need to manage, influence performance of others.
431. Have need for power - as appropriate to situation and people involved.
432. Capacity for empathy - cope effectively with emotional reactions that inevitably occur when people work together.

Shimada
"Japan's Success Story"
Technology Review
May-June 1983

433. Job rotation.
434. Promotion from within.
435. Open communication through joint consultation (to pave the way for later cooperation).
436. Implement new management strategies slowly -- over the years.
437. Select key subordinates -- who share perceptions of each others' roles and share common goals & obj. though personalities may be different.
438. Diagnose the environment:
   Superiors
   Associates
   Organization
   Followers
   Job Demands

439. Vary behavior, adapt style to the situation

440. Analyze each situation and the people involved in it to decide appropriate leadership style.

441. Diagnose what is reality then use appropriate leadership pattern.

442. Self-awareness.

443. Awareness of others.

444. Share resulting rewards.

445. Manager plays many roles all of which he should perform well to be successful: Leader, team member, organization politician, representative, corporate citizen, specialist, boss's helper, head of family.

446. Favorable attitudes toward all aspects of job (others, org., superiors, etc.)

447. High level of mutual confidence & trust.

448. Cooperative orientation toward the org & its objectives.

449. Harnessing effectively all the major motivational forces.

450. Sensitivity to others.

451. High level of skill in personal interaction.

452. Effective participation in decisions on common problems.

453. Good communications - flow of relevant info.
454. Highly effective social system for interaction and mutual influence.

455. Superiors who have most favorable & cooperative attitudes in their work groups.

456. Supportive, friendly and helpful.

457. Treat people in sensitive considerate way.

458. Serve best interests of employees as well as company.

459. Shows confidence in the integrity, ability and motivations of subordinates.

460. Has high expectations as to employees' level of performance.

461. Develops subordinates into a working team with high group loyalty.

462. Coaches and assists employees.

463. Manage ambiguity and paradox.

464. Shaping values and reinforcing through coaching and evangelism.

465. Manage the values of the org.

466. Wide range of action devices - mgmt. systems, org fluidity, & experiments. i.e. A bias for action.

467. Staying close to the customer.

468. Autonomy and entrepreneurship - breaking corp. into small companies - encourage them to think independently & competitively.

469. Loose-tight properties -- fostering dedication to central values of company combined with tolerance for employees accepting the values.

470. Service, quality, reliability for customers (Nichemanship -- tailoring better at something than anyone else). Customers reign supreme.

471. Attention to ideas -- pathfinding and soaring vision.

472. Implement visions and behave persistently.
473. Care for people in org.
474. Treating people decently.
475. Creating in all employees the awareness that their best efforts are essential.
476. Employees share in the rewards of company's success.
477. Personal visits to employees.
479. Intense communication.
480. Tolerate failure.
481. Treat people as adults.
482. Tough-minded respect for the individual.
483. Never stop traveling, never stop listening.
484. Set and demand standards of excellence.
485. Develops network of information sources.
486. Cultivates sources and keeps them no matter how high he climbs.
487. Brings his special talents to bear on only a limited number of matters having greatest, long-term impact on company.
488. Sensitive to the power structure in the organization.
489. Assesses the depth and nature of blocks in the org.
490. Recognizes need for a few trial balloons.
491. Sense of timing.
492. Cautious pressure.
493. Assesses key individuals and groups.
494. Revises strategy due to changes.
495. Evolves policies over time based on indescribable mix of operating decisions.
496. Skilled as an analyst.
497. Talented as a conceptualizer.
498. Sees relationships which no one else has seen.
499. Sees alternatives available to him in making decisions.
500. Is a muddler -- decision making as an opportunistic process not a rational one.
501. Accomplishes purposes without undermining the authority of mgers.
502. Asks perceptive questions.
503. Studies reactions of key individuals.
504. Appears imprecise.
505. Communicates objectives to subordinates in modest doses.
506. High quality service to clients.
507. Curiosity about everything.
508. Put a lot of small pieces together to make a sensible whole.
509. Focuses on the necessities.
510. Ingenuity, vision.
511. entrepreneur.
512. Guides company rather than legislate, query and judge every action.
513. Sets realistic objectives.
514. Makes sure employees -- at all levels -- develop pride.
515. Provide employees with right tools to do the jobs expected of them.
516. Decision making at lowest levels possible.
517. Work on their own growth.
518. Flexible.
519. Encourages dissent.
520. Aggressive.
521. Stretches people -- train them to become skilled in more than one area.

522. Competent, hard-driving.

523. Employees are unbridled, encouraged and supported.

524. Getting inside the employees.

525. Communication of company philosophy & goals (to know what is going on).

526. Build consensus around a few important new goals at a time (focus agreement)

527. Keep options open as long as possible.

528. Define only broad directions to allow for opportunities.

529. Team numerical goals with goals that satisfy people's most basic psychological needs.

530. Analyze how strategies will better attract skilled people and personal commitments.

531. Broad conceptual goals rather than precise mathematical targets.

532. Create new consensus through a continuous, evolving, incremental, and often, highly political process that has no precise beginning or end.

533. Blend thrusts together as opportunities permit into patterns which slowly create a new logical cohesion.

534. Seek multiple contact points in and out of the organization.

535. Illuminate problems, options, contingencies or opportunities posed by a sensed need.

536. Begin constructive movement without threatening major power centers.

537. Control premature momentum.

538. Timing highly opportunistic.

539. Crystallize emerging consensus by hammering out a few broad goals.
540. Purposely continues the change process with new faces and stimuli at the top.

541. Reinforce strategic goals through statements, decision patterns and personnel assignments.

542. Constantly moves around, shows up at unexpected stops, probes, listens.

543. Lets others suggest new thrusts and maintains the originator's identity with the idea.

544. Focus on organization's uniqueness -- its individual success factor.

545. Unique success of org. temporary -- find or create new ones as needed.

546. Initiative to think and act strategically -- slice thru routine and ritual.

547. Think things thru to logical conclusion -- find strategic openings not within framework of conventional thinking.

548. Creative in reshuffling facts and reformulating questions to come up with answers logic would not suggest.
### CATEGORY: VISUALIZING

<table>
<thead>
<tr>
<th>PRACTICES AND CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>107. Contemplative.</td>
</tr>
<tr>
<td>155. Sees the enterprise as a whole.</td>
</tr>
<tr>
<td>156. How various functions in org depend on one another.</td>
</tr>
<tr>
<td>157. Visualizes relationships of one's business to the industry, community, and social and economic forces in the nation.</td>
</tr>
<tr>
<td>188. Turn attention from own narrow specialty to performance of the whole.</td>
</tr>
<tr>
<td>251. Conceptual aspect of mgr's job is reasoned not instinctive. He may not consciously enumerate every aspect &amp; alt. but done as part of reflective process of experience stored in his mind.</td>
</tr>
<tr>
<td>282. Accurately understands company &amp; broader social environment in which he operates.</td>
</tr>
<tr>
<td>418. Strategy - means to carry out mission. Strategic Mgmt. &amp; Env. pressures: In the org - Mission and Strategy, Org. Structure, HRM; Out of org - Econ. Forces, Political forces, Cultural Forces.</td>
</tr>
<tr>
<td>420. Strategic role of HRM in formulation and implementation of long-run plans. (Congruence between human resources systems and firms' strategies).</td>
</tr>
<tr>
<td>421. Systems approach needed.</td>
</tr>
<tr>
<td>422. Integrated complexity of interdependent parts.</td>
</tr>
<tr>
<td>497. Talented as a conceptualizer.</td>
</tr>
</tbody>
</table>
4. Lookout for new ideas.

139. What developments are occurring in your company or industry?

165. Alert and alive to changing conditions.

192. Look for opportunities.


224. Ongoing chain of perceptions & actions leading to org's adaptation to its environment.


226. Scanning: Impacting on own prod/svcs.


228. Scanning: Govt. regs., taxes, sanctions, etc.

375. Exec. - unique position to act as org's "radar" scanning the environment.

471. Attention to ideas -- pathfinding and soaring vision.

507. Curiosity about everything.
BOUNDARY SPANNING

100. Isolate problem at lowest level.

189. Define boundary conditions of decisions -- objectives to reach.

222. "Boundary spanners" -- those in org. responsible for info. and substantive exchanges w/ environment.

313. Wider participation.

338. Understand conflict between requirements for economic survival and success (economic imperative) and adjustments made necessary by demands of host country (political imperative).

339. Multinational strategies -- Economic -- worldwide focus -- best for market share (as opposed to national focus -- political -- or administrative focus -- combining economic and political).

342. Global-centered strategy -- Airlines, TVs, Heavy Elec. Equip. Go global (as opposed to country-centered) due to change in environment: 1) reduction of govt. barriers 2) falling trans and comms costs (as opposed to country-centered).

365. Conscious of long-term implications of their day to day decisions.

383. Long-term investment decisions.

389. Long-term investment decisions.

424. Collective top management (as opposed to one-man rule) particularly in multinationals. Collective found more so in Continental Europe than in North America or U.K.

516. Decision making at lowest levels possible.
Entrepreneurship

3. Entrepreneur.

7. Sensible risk taking and innovation.

10. Action-oriented.


17. Competitive.

18. Autonomy.

354. Entrepreneuring or championing.

357. Sponsoring or Coaching.

360. Willingness to make risky long-term competitive investments.

385. Entrepreneurial drive.

398. Assume role of sponsor for entire productivity effort.

390. Entrepreneurial risk.

405. Entrepreneurial culture (fierce activism in promoting internal agents of change).

426. Find and exploit opportunities.

427. Maximization of opportunities.

468. Autonomy and entrepreneurship - breaking corp. into small companies - encourage them to think independently & competitively.


511. Entrepreneur.
140. How will department be affected by economic or business changes.

237. Embrace and harness new technology.

258. Become more aware of the scope for new technology.

348. Top management involvement in technology process.

359. Success in most industries today requires an organizational commitment to compete in the market place on technological grounds.

362. Place central emphasis on producing technologically superior products.
253. Analyze nature of your job and the choices it offers -- the opportunities.

254. Weigh up aspects of the job to emphasize (what work is important).

259. Approach job analytically and imaginatively.

261. Analyzes job strategically in terms of the demands and constraints and choices open.

263. Intellectual ability.

290. Approach human problems with same analytical tools as marketing or finance.

300. Employ practice of analysis with great effect.

343. More meaningful rationale to help management translate broad political & economic risk factors into sound decisions (Evaluate 10% return in stable country to 25% in more troubled economy).

346. Integrated approach best in analyzing risk:
   Grands tours
   Old hands (experts)
   Delphi techniques
   Quantitative methods
   Analysis by computer

353. Idea generating - Analyze/synthesize info on environment.

387. Strategic approach to productivity mgmt. (productivity efforts encompassing the entire organization and all of its systems and procedures) willingness to look carefully at all aspects of a company's operations.

428. Discover and deal with potentially serious problems before they become critical.

496. Skilled as an analyst.

499. Sees alternatives available to him in making decisions.

508. Put a lot of small pieces together to make a sensible whole.

510. Ingenuity, vision.

530. Analyze how strategies will better attract skilled people and personal commitments.
FOCUSING

185. Focus on contribution -- outward toward goals.

187. Focus on results.

193. Concentrate -- first things first -- important contributions.

266. Greater coherence (or overlap) of expectations.

297. Able to recognize what they must do to make their contribution to productivity.

351. Create a specific result -- well defined objectives -- for projects.

397. Business focus -- concentrate products in your org's area of strength i.e. little diversification.

487. Brings his special talents to bear on only a limited number of matters having greatest, long-term impact on company.

509. Focuses on the necessities.

526. Build consensus around a few important new goals at a time (focus agreement)

539. Crystallize emerging consensus by hammering out a few broad goals.

544. Focus on organization's uniqueness -- its individual success factor.
39. Loosely connected goals and plans that address long-, medium-, and short-term responsibilities.

41. Plans include immediate future (1-30 days) & longer (5-20 yrs.) compared to 3 mo. to 5 yrs. for most written plans.

46. They plan to react - do not plan days in much detail.

48. Good planning system -- help GM create intelligent agenda & strong network to implement it.

49. It should encourage GM to think strategically rather than impose a rigid number crunching requirement & paperwork.

50. Select basic direction for areas of responsibility.

190. Think through what is strategic and generic.

202. Disorderly bits of info are opportunities to fine tune his org. sense of direction -- the general strategic direction.

252. Strategic planning to determine right direction.

256. Working strategy: Shaping 22%

262. Strategic orientation -- operating in an environment inside, and where relevant to the job, outside the company, which he tries to control, to develop and to mould as he desires.

364. Must outthink and outmanage competitors.

366. Careful to make necessary arrangements and investments today for long-term survival.

377. Manage strategically.

378. Orchestration of all resources; strategically chosen planning framework.

379. Creative, flexible planning processes.

380. Understand competitor's strategy. Focus on them for annual plans. Supportive value system and climate.

382. Strategic Management - links the rigor of formal planning to vigorous operational execution.

(Continued)
512. Guides company rather than legislate, query and judge every action.

513. Sets realistic objectives.

528. Define only broad directions to allow for opportunities.

531. Broad conceptual goals rather than precise mathematical targets.

543. Lets others suggest new thrusts and maintains the originator's identity with the idea.

547. Think things thru to logical conclusion -- find strategic openings not within framework of conventional thinking.
6. Establish information network.

42. Develop a network of cooperative relationships among those people they feel are needed to satisfy emerging agendas.

141. Develop informal, personal network in & out of org.

142. Accumulate list of people to trade info with.

485. Develops network of information sources.

534. Seek multiple contact points in and out of the organization.
INFORMATION GATHERING

13. Favor verbal media - telephone calls, meetings.

14. Cherish soft information -- gossip, hearsay, speculation (may be tomorrow's fact).

15. Collecting tid bits of data -- odds and ends (illuminate the underside of issues).

58. Aggressively seek info from others including bad news to address longer time frames for planning & wider range of issues.

72. Seek others opinion - i.e. respect for his insight.


110. Attend to details.

111. Non-verbal data -- use of.

135. Take feedback from others seriously but cautiously i.e. is feedback well founded.

146. Well-informed.

149. Be a good listener.

150. Learn to ask.

194. Feedback -- see firsthand what is happening.

212. Tolerates interruption because he does not wish to discourage the flow of current info.

213. Foray into detail as a shield against surprise.

214. Deal with a flow of info.

243. Successful mgr must value a spirit of inquiry.

250. Differing views are exactly what the exec. needs to hear in order to grasp reality first hand.

330. Feedback needed to correct deviations.

(Continued)
331. Best feedback is non-evaluative i.e. computer printouts.

356. Gatekeeping.

417. Ask lots of questions.

483. Never stop traveling, never stop listening.

502. Asks perceptive questions.

542. Constantly moves around, shows up at unexpected stops, probes, listens.
CLIENT OBLIGATION

12. Ritual & ceremonies, negotiations.

95. Pass savings to consumer.

102. Vote of confidence from society.

103. Societies give rise to organizations so reward them.

467. Staying close to the customer.

470. Service, quality, reliability for customers (Nichemanship -- tailoring better at something than anyone else). Customers reign supreme.

506. High quality service to clients.
247. Tailor org. to fit task and people.

255. How individual tackled his job i.e. his working strategy: Project approach 29%.


340. Strategic control of subsidiaries: use organization structuring.

349. Project manager - single point of integrated responsibility.

355. Project leading.

394. Flexibility (of organization).

395. Open communication.
    (based on the Systems model & the Humanistic model as opposed to old structure model).

403. Multi-disciplinary project teams.
5. Strategy for understanding and responding to pressures and dilemmas of the job. Need to be introspective.

152. Sizing people up.

153. Taking a reading of a situation.

154. Understanding hidden agendas of others.

164. Relationship between cues and actual behavior must be correct.

242. Successful mgr. must be a good diagnostision.

276. Consider forces in Manager.

277. Forces in Subordinates.

278. Forces in Situation.

279. Successful leader keenly aware of forces.

281. Accurately understands individuals and group.

283. Assess readiness for growth in subordinates.

286. Maintains high batting average in accurately assessing the forces that determine his most appropriate behavior at any given time.

321. Read situations correctly for what they really contain.

322. Appraise situational elements in terms of their task and relationship demands, their flex, and their relative strength.

323. Job Demands of situation - appraise.

324. Corporate philosophy - appraise.

325. Style of superior - appraise.

326. Expectation of subordinates - appraise.

327. Style of subordinates - appraise.

332. Diagnose situation.

347. The most effective analysis combines insight & wisdom with mgmt science.
423. Sensitive and accurate interaction among parts with their environment.

438. Diagnose the environment:
   
   Superior
   Associates
   Organization
   Followers
   Job Demands

440. Analyze each situation and the people involved in it to decide appropriate leadership style.

441. Diagnose what is reality then use appropriate leadership pattern.

489. Assesses the depth and nature of blocks in the org.

493. Assesses key individuals and groups.

503. Studies reactions of key individuals.

535. Illuminate problems, options, contingencies or opportunities posed by a sensed need.

548. Creative in reshuffling facts and reformulating questions to come up with answers logic would not suggest.
68. Gradual change rather than head on assault (can outflank organizational obstacles; have time to).

69. Patiently flow with a solution.

73. Continuous unfolding of events. Let things flow as opposed to value of logical goal-blinded action.

85. Agreement needing time to evolve.

88. Permit workable arrangement to evolve not a penchant to make formal announcements.

89. Incremental, gradually shift boundaries.

106. Resist drive for closure.

108. Flow with the situation.

123. Press but let people come around to point of view.

124. Build acceptance time.

125. Create right climate for people to accept the new. No orders.

200. Respond to major issues with trial balloons.

201. Important decisions emerge only after top momt has vacillated for months or years.

204. Gradual, incremental development.

215. Muddle about on the way to major change not purely a matter of political maneuvering but provides marinating time.

361. Success in trade is the result of patient and meticulous preparation, w/ long period of market preparation.

363. Employ a decision-making apparatus that grinds very fine and very deliberately.

436. Implement new management strategies slowly -- over the years.

490. Recognizes need for a few trial balloons.

(Continued)
492. Cautious pressure.

495. Evolves policies over time based on indescribable mix of operating decisions.

500. Is a muddler — decision making as an opportunistic process not a rational one.

505. Communicates objectives to subordinates in modest doses.

527. Keep options open as long as possible.

532. Create new consensus through a continuous, evolving, incremental, and often, highly political process that has no precise beginning or end.

537. Control premature momentum.
11. Jump from issue to issue. Respond to need of moment/job pressures.

62. Adept at grasping and taking advantage of each item in the random succession of time & issue fragments that crowd their days (per Peters 1979).

210. Almost hit and run mgmt -- 9 minutes per decision.

217. Adept at grasping and taking advantage of each item in the random succession of time & issue fragments that crowd each day.

491. Sense of timing.

538. Timing highly opportunistic.
9. Activities - brevity, variety, discontinuity.

22. Decision - making in extreme ambiguity.

38. Figuring out what to do despite uncertainty, great diversity, and an enormous amount of potentially relevant information.

40. Both vague and specific items.

66. Explicit place to the unknown value of things.

67. Dual frame of reference - recognizing value of both the clear and the ambiguous.

84. Ambiguity - tentativeness legitimate.

91. Ambiguity, uncertainty, imperfection.

99. Resilience and vitality of organization.

105. Balancing various matters.

112. Versatility.

126. Resilience.

298. Versatile and inconsistent -- adapt style to situation.

396. Periodic shift between chaos and continuity - dynamic framework.

410. Manage ambivalently.

463. Manage ambiguity and paradox.

469. Loose-tight properties -- fostering dedication to central values of company combined with tolerance for employees accepting the values.

504. Appears imprecise.
SYNERGISM

94. Knit together individual & organizational purposes.

158. Achieves maximum good for the total org.

268. Harness the forces that will optimize his potential.

270. Harmonize man the technical being and man the human being.

273. Mgmt's ability to maximize and harmonize its human and technical resources (basis of org. effectiveness).

344. The complexities of operating transnational enterprises require synergistic skills.

369. Culture Synergy - Recognizes and transcends cultures.

400. Organizational cohesion - tap energy and creativity of the whole org.

449. Harnessing effectively all the major motivational forces.

458. Serve best interests of employees as well as company.

529. Team numerical goals with goals that satisfy people's most basic psychological needs.
ADAPTING/CHANGING

121. Make adjustments.

177. Experimentation.

211. Ad hoc adaptation to shifting circumstances.

303. Culture change is a pre-requisite to org. behavioral change.

304. Total system focus for change.

305. Educational, technological, economic, & family elements responsible for altering behavior that produces mgmt. style changes.

306. Style cannot be changed in a vacuum.

307. From behavior change to attitude & value change.

308. Tech changes -- increased complexity of work can not be supervised as could simple tasks of previous periods.

309. Family - most powerful single environmental force. Changes here are mirrored in power relationships between gov't, business & labor.

310. Mgmt style completely intertwined in system of cultural values. As cultures change so will scientists, their findings, their seminars.

316. More response to law of the situation.

374. Change agent skills.

398. Adaptability - willingness to undertake major and rapid change when necessary.

409. Only constant is continued change.

411. Knowing when and where to change from one stance to the other.

419. More sophisticated approaches to HRM (for long-run competitiveness of American industry).

492. Cautious pressure.

533. Blend thrusts together as opportunities permit into patterns which slowly create a new logical cohesion.

545. Unique success of org. temporary -- find or create new ones as needed.
232. Many facets of a person like a diamond.

241. Complex man.

245. Complexity in Org - looking at it thru contingency theory.

248. Complexity based on variability of tasks and people.

272. Theory of "Organizational Relativity". An organization’s operating requirements and thereby its effectiveness are dependent upon the nature of those forces at work both within and without the organization. Forces include:

1. Kind of work to be performed.
2. Type of people employed to perform the work.
3. The system of managing that surrounds the work.


293. Work behavior - result of a complex system of forces.

337. To understand leadership necessary to consider personality of leader in relation to personality of follower and to characteristics of situation.

345. Cultural pluralism (in the U.S.) rather than melting pot assimilation.

350. Complex efforts - projects.

393. Organization is a dynamic system. Complex org. more like a modern weapons system than an old-fashioned fixed fortifications. Has 4 parts: Tasks, structure, tools, people.

445. Manager plays many roles all of which he should perform well to be successful: Leader, team member, organization politician, representative, corporate citizen, specialist, boss's helper, head of family.
20. Motivate subordinates.

45. Create appropriate environment in which people are willing to work hard for GM.

61. Motivate others with great skill in face-to-face situations.

70. Recognition most important reward but must be shared.

74. Treat people as equal without treating as the same.

77. Makes allowances for uniqueness of people.

191. Look for strength in others (and put up with weaknesses).

246. Different people have different needs.

275. Positive attitude toward feelings and opinions of personnel.

301. Succeed in motivating employees and satisfying superiors.

311. More autonomy.

314. Greater dependence on individual’s judgement.

315. Recognition of potential power of non-managers for goal achievement.

335. Manager sympathetic and understanding attitude towards subordinates.

391. Involve directly and ensure support of managers (part of the process of making strategic choices).

406. Tolerance of failure.

407. Allow people to pursue outside projects.

444. Share resulting rewards.

452. Effective participation in decisions on common problems.

456. Supportive, friendly and helpful.

(Continued)
457. Treat people in sensitive considerate way.

459. Shows confidence in the integrity, ability and motivations of subordinates.

460. Has high expectations as to employees' level of performance.

462. Coaches and assists employees.

473. Care for people in org.

474. Treating people decently.

475. Creating in all employees the awareness that their best efforts are essential.

476. Employees share in the rewards of company's success.

477. Personal visits to employees.

480. Tolerate failure.

481. Treat people as adults.

514. Makes sure employees -- at all levels -- develop pride.

515. Provide employees with right tools to do the jobs expected of them.

519. Encourages dissent.

523. Employees are unbridled, encouraged and supported.
18. Information sharing - primarily verbal.


65. Initiate communication at lower levels of management and percolate upward.

196. You and everyone with whom you work should know what is going on -- your priorities.

265. Better communication.

274. Good interpersonal communications.

312. Greater demand for information.

386. Open communications.

392. Free exchange of opinions in vigorous open debate.

401. Collaborate rather than compete.

414. Top executive more visible and accessible i.e. good communication with others.

425. Effective communications.

435. Open communication through joint consultation (to pave the way for later cooperation).

453. Good communications - flow of relevant info.

479. Intense communication.

525. Communication of company philosophy & goals (to know what is going on).

17. Resource allocator.

59. Move, fire, hire subordinates to develop own network.

96. Don't fire people - use elsewhere.

404. Long-term employment (of personnel).

437. Select key subordinates -- who share perceptions of each others' roles and share common goals & obj. though personalities may be different.

540. Purposely continues the change process with new faces and stimuli at the top.

541. Reinforce strategic goals through statements, decision patterns and personnel assignments.
25. Build reputation as expert.

35. Try to look and behave in ways others respect.

44. Carefully nurture professional reputations in eyes of others.

144. Look, sound, and act like high-potential people.

145. Acquire solid job and professional skills.

170. Articulate.

216. Communicator, persuader, consummate opportunist.
19. Develop peer relationships.

24. Develop true friendships with those on whom dependent.

31. Manage relationships with others.

47. Whole approach to job involves interacting with others.

54. 25% of time alone, only.

147. Develop good interpersonal skills.

197. Take charge of your relationships and your communications.

207. Develop greater attachment of everybody to the bottom line -- more agony and ecstasy.

296. Able to "get along w/ people".

446. Favorable attitudes toward all aspects of job (others, org., superiors, etc.)

447. High level of mutual confidence & trust.

451. High level of skill in personal interaction.

454. Highly effective social system for interaction and mutual influence.

486. Cultivates sources and keeps them no matter how high he climbs.
DEVELOPING PERSONNEL

97. Maximum use of potential - rotate, etc.

98. Develop employees.

104. Trainers & developers of human resources.

206. Educate by example.

294. Build educational programs & staff resources for developing skill & knowledge.

402. Job rotation to facilitate communality about people.

433. Job rotation.

434. Promotion from within.

521. Stretches people -- train them to become skilled in more than one area.
TEAM BUILDING

122. Strive to pull together.

127. Harmony & cooperation.

159. Works effectively as a group member.

160. Builds cooperative effort within the team he leads.

203. Build strong consensus to assure minimal correction over time.

208. Build support.

209. Blends strategic foresight w/ shrewd sense of timing & political acumen to build stable workable coalitions.

384. Teamwork.

448. Cooperative orientation toward the org & its objectives.

455. Superiors who have most favorable & cooperative attitudes in their work groups.

461. Develops subordinates into a working team with high group loyalty.
INFLUENCING

23. Obligation from others - creating power.


28. Use various behavior - develop all types of power.

29. Invest their power to secure high rate of return.

32. Persuasion - most important method of influence.

33. Establishing power over others.

37. Comfortable in using power to influence others.

43. Try to make others feel legitimately obliged to them.

60. Use personal influence -- asking or suggesting something i.e. Direct or indirect influence.

172. Persuasive.

249. Power -- basis of compliance.

430. Have need to manage, influence performance of others.

431. Have need for power - as appropriate to situation and people involved.
8. Work at unrelenting pace.

34. Forceful in areas of one's expertise.

55. Getting things done thru a large and diverse set of people despite having little direct control over most of them.

115. Driving will, energetic.

116. Committed, determined, pragmatic.

117. Forceful, disciplined, attentive.

119. Initiative, integrity.

143. Work harder and smarter than most people.

148. Possess energy and intelligence.

163. Confident, aggressive spirit.

164. Determination or motivation to succeed.

168. Mgrs. who give themselves up to org. rather than give of themselves -- reason for lack of valid info for dealing w/ important problems.

173. Compete vigorously for air time.

219. Able to articulate his vision in compelling way.

299. Persistent in analysis and self-discipline.

368. Striving to excel requires leaders -- not just controllers, market analysts and portfolio managers.

412. Power to make the shift (when change required).

413. Strong Leadership.

472. Implement visions and behave persistently.

482. Tough-minded respect for the individual.

484. Set and demand standards of excellence.

520. Aggressive.

522. Competent, hard-driving.

546. Initiative to think and act strategically -- slice thru routine and ritual.
VARYING BEHAVIOR

36. Selective in use of available behavior.

75. Human relationships versus secular efficences.

78. Chemistry of human relationships as well as Mechanics of human accomplishment.

179. Vary behavior.

221. Adept at all sorts of intervention by which he can nudge disorderly process in desired direction and to some degree control its course (not to impose abstract order on it).

244. Flexible, accept variety of interpersonal relations, patterns of authority and psychological contracts.

260. Learn to integrate doing, managing and learning.

271. Contingency approach to effective mgmt.

284. Mgr able to behave appropriately in light of perception.

285. Has flexibility to direct if direction is needed, or provide freedom if called for.

288. Flexible.

289. Choose the strategy that is appropriate for particular situation and managerial style.

291. Effective management behavior & action depends on specifics in each situation.

319. Style of an effective manager in army, church, civil service, & industry may all be different.

320. Style depends on the situation.

429. No best way to manage all situations. Natural style and practices consistent with our personality.

439. Vary behavior, adapt style to the situation

466. Wide range of action devices - mgmt. systems, org fluidity, & experiments. i.e. A bias for action.

518. Flexible.
83. Insights within easy reach to our thinking.

166. Insight can start chain reactions throughout org.

180. Use cues - form a lens thru which one views others -- and to which their worth as people will be judged.

181. Weighting of cues -- amounts to statements of probability.

182. Cues used to build probability model about others.

287. Insightful.

358. Analytical detachment vs insight from "hands on" experience into the subleties and complexities of strategic decisions.

443. Awareness of others.

498. Sees relationships which no one else has seen.

524. Getting inside the employees.
56. Job requires a complex & subtle approach to planning, org, etc.

79. Subtle ways of dealing with others.
   (example - let situation remain ambiguous - avoid premature conclusion)

81. Subtleties of the communication process.

82. Nuances in interpersonal communication.

86. Widening and narrowing dialogue to correspond to subordinate sensitivity as opposed to get the cards on the table -- brute integrity, clear the air, High noon shoot 'em out, macho confrontation.

174. Stronger the win-lose dynamics the more carefully they measure and plan their statements.
51. Less systematic, more informal.
52. Less reflective, more reactive.
53. Less well organized, more frivolous.
63. React in opportunistic way to flow of events around them.
175. Emphasize novelty.
176. Few predetermined roles.
218. Disorderly, non-rational.
1. Has strategic data bank in his mind.

2. Information - locked inside brain - we call it Intuition or Judgement.

57. Conscious (analytical) and unconscious (intuitive) decisions largely internal to their minds.

80. Intuition.

113. Trust in instinct.

371. Intuitive perception and more reliance on sense data.
SENSITIVITY

64. Sensitive to problems.

87. Sensitive to "face". We regard it as weakness.

120. Conflict without conflicting.

128. Sensitivity -- rooted in reality to know what is happening.

137. Awareness of the persons with whom you deal (Executive insensitivity or toughness can prevent you from relating to others).

138. Tuned into people and events in and out of the org.

151. The further you go up the greater the sensitivity you must have to what is going on -- at all levels of your org. i.e. Awareness - high level of.

161. Sensitivity in day-to-day behavior.

167. Sensitivity sessions and confrontation meetings part of larger program of company development.

183. Sensitivity to cues important.

198. Sensitive to all the nuances of the situation that surrounds him.

220. Has a range of sensitive responses to subtle feedback cues.

264. Sensitive human relations.

333. Situational sensitivity is a diagnostic skill.

334. Management at all levels must be sensitive to needs of subordinates.

341. To become sensitive to area needs (or vice-versa) structural org. changes needed.

352. Sensitive to national customs.

372. High sensitivity to context and relationships (the total system).

(Continued)

376. External perspective of exec. part of sensitivity to environmental demands, opportunities, trend & change i.e., a more advantageous relationship w/environment.

399. Sensitive to market needs as a balance to engineering excellence.

450. Sensitivity to others.

488. Sensitive to the power structure in the organization.

501. Accomplishes purposes without undermining the authority of mors.

536. Begin constructive movement without threatening major power centers.
SELF-AWARENESS

27. Sensitive to impressions their actions have on others.

129. Tune into yourself, test perceptions against realities.

130. More aware of oneself.

131. Finding out when and how one works best.

132. When not to make decisions.

133. What people & situations are upsetting.

134. What one needs to learn and relearn.

136. Know how you come across to others -- impact your behavior has.

169. Awareness of how your leadership style affects org.

195. Put your strengths to work -- what do you do well?

229. Growing person examines self.

230. Self concept - a filter to hear/see or not -- patterning of attitudes, habits, knowledge, drives, etc.

233. See self in relation to environment -- not in isolation.

267. Understanding of his own nature.

280. Accurately understands self.

295. Aware of own values and preferred momt styles.


328. Mgr needs style awareness.

329. Knowledge of impact on others.

336. Manager alert to own shortcomings.

370. Understanding of own cultural assumptions (cultural self-awareness) as well as understanding of others (cross-cultural awareness).

415. Self-understanding.

442. Self-awareness.
30. Maturity, self-control — Power orientation tempered by these.

90. Appropriate limitations of the ego (as a virtue) rather than assert and maintain control.

162. Naturally developed and unconsciously and consistently demonstrated human skill.

186. Stress responsibility.

231. Change in response to new insights and understandings.

234. Strong men in history have been themselves — overcome personal obstacles.

235. Self-concept constantly evolving.

236. Changes as he continuously realizes self. This is genuine growth.

237. How much do I value my life — has clear cut answer.

238. What do I want to do with my life — has clear cut answer.

239. What must I do to be myself — has clear cut answer.

240. Dedicated man: Personal goals, company goals, and job goals have coincidence.

269. Need mtrs who can continually grow and mature in life.

302. Manage themselves.

416. Blend of strength and humility.

432. Capacity for empathy — cope effectively with emotional reactions that inevitably occur when people work together.

517. Work on their own growth.
VALUES

76. Company character - shared sense of values - enforced by group norms i.e. Institutional way of doing things that is different from efficiency alone.

92. Significant meanings.

93. Shared values.

101. Strong belief system.

114. Interweaving human values.

199. Shaper of values.

205. Shape business values thru adhoc opportunities.

367. Look at ROI but only after they ask is it a good product.

381. Belief in creating own future (underlying ethic of strategically managed companies).

408. Sense of integrity - Honesty, openness, and fairness.

464. Shaping values and reinforcing through coaching and evangelism.

465. Manage the values of the org.
Mastering ‘dynamic complexity’, the key to managing change

There is no longer any doubt that management is becoming global in outlook and performance. Spearheading this trend is the high-technology multinational corporation relying on profits and market share in a fiercely competitive and rapidly changing environment.

The global reach of corporate management and its high-tech emphasis have been explored in many previous International Management articles. And the results of an IM survey of senior managers in 20 countries clearly echo these concerns. It showed that “keeping pace with new technologies” is seen as the biggest problem facing companies. Second biggest was “fluctuating exchange rates” and third “acquiring sufficient managerial talent”. And “marriages of convenience” between European hi-tech companies and those of the United States and Japan are driven by the new awareness that the high cost of R&D and fears of being left behind necessitate linkages between East and the West.

It is clear that whether from technological innovations, monetary fluctuations or a host of other problems, top managers with talent – the skills required to be successful on the job – are needed to cope effectively with them.

New research by this author into what it takes to be an effective multinational corporate executive helps point the way towards the managerial talent needed and the executive training required. This was based on a synthesis of research results from respected management academics and practitioners, principally found in the recent literature. It is probably the first such synthesis and uses only empirical research derived from the source: organization personnel at work, not theories, perceptions, or other well-intentioned notions.

What evolved from this new research was the identification of 37 categories of skills or management practices critical to the success of hi-tech executives. For simplicity of analysis, the categories are grouped into a tri-divisional model of managerial skills – Analytical, Social, and Emotional R (from Rosemary Stewart, Oxford Centre for Management Studies, 1982). What is different about the Brianas Model of Executive Effectiveness is not only the many skills categories describing the complexity of an executive’s job but also the identification of 10 such categories that fall into the new division called Emotional R (labelled Emotional Resilience by Burgoyne and Stuart in 1976).

With entrepreneurial spirit as a given, these 10 new categories (management practices or characteristics of behaviour) are identified as follows:

1. Flowing – allowing decisions to evolve through a continuous, incremental, political process.
2. Grasping – responding to the need of the moment by grasping opportunities.
3. Ambiguity/clarity – shifting between chaos and continuity; appearing imprecise yet resilient.
4. Adapting/changing – knowing when and where to change from one stance to the next.
5. Personal drive – persistent and determined in getting things done and demanding excellence.
6. Varying behaviour – behaviour relative to the situation; using all sorts of interventions.
7. Subtlety – complex and subtle approaches in dealing with nuances of interpersonal processes.
8. Reacting – accepting disorderly processes and reacting in an opportunistic way to the flow of events.
9. Self-maturity – blending strength and humility in being oneself and changing as needed.
10. Values – maintaining a company’s character based on fairness, honesty, and significant meanings.

Weakness revealed
The 37 categories, including the above 10, were subsequently captured into a measurement instrument called the Executive Management Inventory (EMI). Surprisingly, preliminary results from seven U.S. executives in six different hi-tech multinational corporations showed Emotional R to be the least characteristic of their behaviour or management practices. In other words, they were weak in the ebbs and flows, the contrasts between the clear and the ambiguous, the subtle, reacting to opportunities, and organizational values of essence – all of which our new research shows are critical in order to adapt to and keep pace with a changing, technologically-oriented, global world.

The analytical division was the one in which the executives were strongest. This division includes intuitional, strategic, and diagnostic categories considered rational as well as those more intuitive.

What is interesting yet disturbing about the research is the wide divergence in the evidence of what it takes to be effective and what comprises the actual skills of a manager.

Filling a gap
Despite such divergencies we saw threads of consistency. The results of the synthesis discussed herein provide the “convergence” needed, a critical filling of the gap in the literature. This synthesis of research findings on the characteristics of successful senior hi-tech managers and the preliminary results from the measurement of these characteristics point up the dynamic complexity that is so typical of today’s global-oriented management scene. To be effective in such an environment requires both human resilience and intuitive insight.

This does not mean we throw away our hard-core, more rationally oriented analytical skills or our human-oriented social skills. But knowing when to “zig” instead of “zag”, “seeing in and through situations”, and knowing when to “grasp at opportunities” and “adapt to changing circumstances” is becoming increasingly important for the technologically oriented executive in international management. It is a managerial talent that needs to be trained for, that needs to be nurtured through personal awareness, and patiently developed on the job through experience.

Attachment D
Mr. James Brianas  
Senior Training Manager  
Allied Aerospace/Bendix  
P.O. Box 8822  
Jeddah, Saudi Arabia

Dear Mr. Brianas:

I was pleased to receive a copy of your revised edition of the Executive Management Inventory. This edition has exceeded the expectations I had of the first.

As you know, I have been in the educational field for several years. My doctorate was earned through the University of Michigan’s Survey Research Center. I consider this school to be on the cutting-edge, a leader in survey research methods and procedures. As a student and proponent of the Center’s research methodologies I have no hesitation in providing you with my own objective evaluation of your survey instrument.

Your approach in attempting to pool the collective conscience of those engaged in research on successful management is unique. The instrument, I believe, reflects this. One criticism I had of the first edition was that the questions or statements were not succinct. You have remedied this problem. The new instrument is more precise yet still captures the complex nature of the executive. Your built-in checks to assure consistency of response are important. Any returned questionnaires that do not meet this criteria should be disregarded.

You have not chosen an easy task. The various theories, concepts, and opinions in management attest to this. But your instrument as you described it is based on research results, not arm-chair theorizing, and results principally of the last ten years. It has high content as well as face validity. I believe it fairly and accurately represents its intended purpose.

The instrument would be a valuable diagnostic tool not only for your research with Loughborough University but also for organizations generally. I would be very interested in your final results and your continuing progress.

Sincerely,

Stephen N. Twining, Ph.D.  
Superintendent
管理職・経営調査表

この調査表はリサーチワークの為につくられたもので、管理職の経営実務に関する情報を得る事を目的とするもので、各調査から得たデータは、研究対象である管理職群の合成像をつくるべく集められました。個人のデータが独自に利用されたり名前が公表されたりする事は決してありませんし、その意図もありません。

観察からの解答は他の管理職の方々のものと一緒
に、管理職・経営分野の知識体系の一部となり、現代管理経営法の水平を高め、より一層の理解を深める事を貢献する事でしょう。

編集者
ジェームス G. ブライアナス
(JAMES G. BRIANAS)

改訂版

Copyright © 1986, James G. Brianas. Printed in cooperation with the Department of Management Studies University of Technology Loughborough, England LE11 3TU
この“管理職経営調査表”は管理職である貴方がどのように経営実践を行っているかについての報告を求めるもので、単なる計算のための評定出るよう企画されています。次にいわれる3条の内容を有する管理職の能力が述べられています。貴方自身がそれらの記述とどれ程似ているかという点を評定して下さい。“誤り”という解答は一つもありません。一番良い解答とし、貴方がご自身の管理法を反映していると正直に感じられるもので、

調査表は三つの部門に分れており、パートⅠは基礎的に、研究調査の情報で統計資料に役立てるもので、パートⅡは管理職である貴方が各項目にステレオタイプの特質内容をどう使っているか、10段階に分けたスケールを用いて表わして頂くもので、パートⅢは概要並びに管理職としての貴方の御意見を述べて頂くもので、

提供されたデータに完全に極秘扱いと致します。御記名は一切して下さい。正直かつ客観的な解答をお願い申します。調査の所要時間は25分位で、

注：Executive Managementとは中間管理職レベル以上も含みます。

PARTⅠ．結果を有意義な表に作成したいと思うが、下記の質問にお答え下さい。
1. a. 貴社の国籍
b. 業種
c. 子供時代を過ごした国

2. a. 最終学歴および学位
b. 専攻学部

3. 企業で受けた管理職経験の年限（年）、大学で受けた正規の管理経験教育の年限（年）、合計（年）。

4. 貴方が重役になられてからの勤務年限（年）、重役以外の管理職になってからの勤務年限（年）、合計（年）。

5. 初めて管理職（SUPERVISOR, MANAGER 等）になる前の「見習い」管理職としての年限（年）。

6. この国での勤務年限（年）、その他外国勤務年限（年）、海外勤務合計（年）。

7. 現在の会社とこれ迄に働いたものの合計会社と合わせて（社）。

8. 現在の貴方の職位

PART Ⅱ. これが調査の主要部分で、下記に管理職業務実績の代表的なもののが記述されている。

次に説明要領をかぶえめて、後の各項目ステートメントにか答え下さい。
1. 各項目を注意してお読み下さり。
2. のから(10の段階に分けたスケールを使いて量の特徴に該当するものを選んで下さい。
3. 下記の10段階のスケールの内から1つの番号を選んで各項目の後にある□に記入して下さい。

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4. その他の内容が量の特性に完全に一致しない場合は、“1”の番号を、もし完全に一致した場合は、“10”の番号を、それ以外の場合は10の内該当する番号を人で記入して下さい。

例：
私は当地における我々の代表であり、年に数回スピーチなどをして大都市内のコミュニティ実行委員をつめている。

この番号“8”は内宅が量の特徴と非常に一致していることを示すものである。

5. それに各項目内容に解答して下さい。

6. こうありがたいこと、この方から受け入れ易い、などという観点からどうか、実にあるか、以下量の特徴をもって解答して下さい。
1. 私は合理的な決定方法をとる。即ち、重要な事項の決定時には、効果的に決定した態度で、迅速な\n    言論はしない。
2. 私は自社の会社を全体的に考え、その後、統合的なパフォーマンス、\n    その相互に関連づける部分の複雑さなどを考慮する。
3. 私は常に、当社のキャプテン、並びに、より多くの活動を対応するために、常に環境に\n    さまざまな力を持つ、機会を見守る心を持っています。
4. 私は、社内における新しいアイデアにおいて、更新を求める心を持ち、機会を観察する心を持っています。
5. 私は、社内製品、マーケットの動向、政府の法規制など、\n    としながら、社内製品やサービスに対するインパクト（影響）\n    等を含め、常に説明している。
6. 私は、経済の成功や政治の適応の1日の決定が\n    もたらす長期の展望を認識している。
7. 私は、ワーキングパートナーを対応的な集団的な管理方法に反対しないものであるが、\n    忌み中宏は、参加を促せ、決議に最も低い職位も含めて行う。
8. 私は、競争力が旺盛で、行動的であり、常に、速く、\n    但し、リスクを伴う経済的な長期的、競争的な投資も積極的に行う。
9. 私は私の組織が自律した一種の小企業体であることに
願い、みんなが自由独立的に競争して、企業精神、零国
を創り立てて行く。

10. 私は技術的にすぐれた製品をつくり、それにハービスを提供
し、新技術を導入して、技術を基礎としたマーケットでの競争
者に重点を置いている。

11. 私は自分の仕事について、その本質、必要、制約、又
その仕事が与える機会と選択自体がどうか等々を分析し
研究し、

12. 私は重大な問題点を探り、方法を考え出し、よのうに決定
に伴うリスクについて検討する。

13. 私は自分の組織に何を貢献できるか、成果、生産性、
外向的ゴールや目標などに焦点を据える。

14. 私は自分の組織の特異性、長所、強み、成功のどの領
域に焦点を合せ、組織に最大のかつ長期的なイン
パクトを与える新しいいくつかの重要なゴールをめざしてコンセプ
タスを築き上げる。

15. 私は自分の組織に明確な目標を強制するのではなく、
細々、厳然とした無秩序な情報の断片をつなぎ合せ、
一般的な戦略に的をあおって組織をつくり、引張
っている。
16. 私は独創的な柔軟性のある起業プロセスを促進し、短期的にリサーチを短期的に長期計画に合わせ活かせる実践へと結びつける。

17. 私は競争相手よりすぐれた思考か、運営の計を有し、型にはまって考えた枠を越えて戦略上の糸口を見つける。

18. 私は組織の内外に仕事はなれた他人の経験を足を踏み、情報を交換し、協力的な関係を築いていく。

19. 私は変化を喜び、革新、新たな事柄をした情報も積極的に探り、感情をつかむべく理解を異にせん。

20. 私は提案にも尊重し、数多くの負担をし、常に動かわり、綿密に見回し、又不意に姿を見わしめねとしす。

21. 私は面談、電話での他の情報収集の手段も大切にして、ホットな情報の流れがストップしないよう、イーメールバックをすすめ、その後の仕事の中直りにまで対応できる。

22. 私はいつも顧客の身近な所にいて、能率に質のよいサービス、製品への信頼性、それから生じる節約などを提供出来るよう心がけている。

23. 私は仕事と人とがうまく合むように組織を構成し、オープンシステム、柔軟性のある組織を構造。
24. 私は職場に於ける人の動く理解を理解しようとする方針を講じ、中心人物、中心グループ関係を把握し、口には出ないが、背後にあらゆる意味を求めて知り、努力する。

25. 私は、上役、同僚、部下、組織、仕事の需要といった状況、環境要素を考察し、時々ふわふわのリーダーシップをとる。

26. 私は人の組織力、行動の際のヒトや手がかりと実際の行動間の正確な関係、行動論に基づい理解力を持つことをしている。

27. 私は問題点、選択肢のも、感覚的に思い込んだ事柄などに、照明をあて、それらを再生して、論理的に試みたが、新しい像を創り出す。

28. 私は重大な決定は時間とかず慎んで行う。合理的に決断してはなく、段階ごとに進めていく。

29. 私は絶えず努力し、始終の区別のつかない行動において政治的プロセスを通じて新しいコンセンサスを創る。人々の心から私の見解に近づいてくるようにしてみる。

30. 私は早計に目標を最終成果に達するわりに、テストを上げて人々の反応を見て、プロンプターにも匙をやくとしながら、状況の流れに沿って徐々に境界を限界範囲を変えていく。

31. 私は強固な決断に基づいて管理し、人々の共感、謙の心は交えながら、自分の主張を通し、異なる主張、環境に沿じて、説を変える方法が必要でも必要とは思わない。
32. 私は時間の重要性に応じて問題から問題へと、機会をさがし最大につかむよう飛ばす。

33. 私は定期的に無秩序な組織内の向を移動し、明瞭さを不視聴双方の価値を認識し、これを運営する。

34. 私は事態が不確で多様性に富み、潜在的に関連する多様な情報にもかかわらず、何をすべきかとどうし、しばしばりっかんで十分に見えても、すぐに見極めることが可能である。

35. 私は組織の目標と人間の最も基本的な心理CSニーズを満足させるような目標を協力で、社員と会社の両方にとっての最上利点を計るようしている。

36. 私はあらゆる工業的な枠組みに対するなか、企業全体としての観点、創造性を思いつくこと、それらを駆使し、組織全体にとっての最大の利益を得るよう専心する。

37. 私は状況に合わせて適応し、いつでも、次の一連のに対応を与えるように機敏に、情勢の変化に応じて新たに論理的なつながりをつくりつつある。

38. 私は組織のため、文化のためを含めたトータルなシステムを用いて、組織と管理行動の変革に重大な教育CS、技術CS、経済CS、人CS要素を変えていく。

39. 私は職場の行動は、期待の組織内の管理システム、外部からの影響力などの多様性に基づいて、新たな組織が複雑なシステムの結果であると考える。
40. 私はマネージャー（管理職）として多面的な役割を果たすことになる。
リーダーであり、チームの一員であり、政治家であり、かつ代表者である
といった状況。部下のモーティベイトと状況の性質に応じて、その
リーダーシップのとり方は異なる。

41. 私は人の長所を見出し、短所を耐え忍ぶ。失敗を許し、
意見見解の相違を促進し、人の持続性を認め

42. 私は社員の感情や意見を肯定的に利用し、
彼等に信頼の念を植えさせて大事にする。

43. 私は社員には大いに期待できている。彼等がベタムスを書き
書きで期待し、行生まれのような環境や動機づくを育てる。

44. 私は社員が適正な仕事を行なうには適正な道具を用意し、
指導し、彼等が自己達成に必要な愛と能力を認め

45. 私はコミュニケーションが最も低い管理職レベルで行われ
られるよう提案。私の優先順位を認めさせて、活発でオープン
な言論を自由に聴かせてもらいたい。

46. 私はどう見ても見ろように自分を開放し、いつでも役に立つ
ような姿勢を保って、言葉だけでなく、他のコミュニケーション
を深めようと励まし、会社の方針や目標を自由に討論

47. 私はトップになると主導役は自分で採用・任命を行い、
組織の人事活動を行う。成果を強化していく。
48. 私は人の尊敬を受ける以外、類似や行動を含めて、フォスナルな評価を測っている。

49. 私は組織の中で尊敬を高める地位についても私の信頼に関与するとの間の友情を育て、彼等とその他の人々を相互に影響させ合う。

50. 私は私の勤務時間の大半を組織人事の他に費やし、対人関係を管理し、相互作用や信頼関係の社交的システムを築き上げる。

51. 私は仕事のローテーションや内部からの昇進の上昇、訓練を範囲としての教育方法を通じて、私自身、個人の内に管理者の養成や評定を行う。

52. 私は強力なコンセンサスと安定した協力のかつらされた共同体を築き、組織とその目標に向けて、支持・援助を惜しまない。

53. 私は高度なグループの経験に、調和、私が引いているチームのワークと協調性を育て、協力の態度などで発展させる。

54. 私は人が自分に対して正当な義務感をもたせることに努力し、私の権力と、これを得た私の方の影響力を使うことに満足していられる。

55. 私は他の人を動かしたり、説得したりするのに、直接的、間接的に示す行動をとし、自分の地位を固めてからに他の人の行為を積極的に管理したり動かしたりする。
56. 私は日々のルーティーンワークや決定期事などもすすしくとことし、自前の声がよく聞かれるおじに奮戦し、問題点を分析したり、または自己鍛錬を強めて忍耐強く、決然と物事をやるする。

57. 私は強くなりた特性を信じている。企業に自分自身を投げ打つ、強制的な手段も作戦上必要である事と表明し、断固とした行動をとる。

58. 私は優秀である事の基準を設定し、それをばら、それに到達する能力があり、積極的で、よく動き、人に対しては強い尊敬の念をもっている。

59. 私は無秩序なプロセスと望ましく向ってゆくのをあらゆる手段を用いるが、強制したり、無理に管理したりするのではなく、ヒントやアイデアを与えてカイテル

60. 私は状況の特殊事情に対応した管理実践をし。自分の個性に合せて自分のスタイルを一貫させているが、状況にしたって行動を変え適合する。

61. 私は決まりを失敗が我慢出来ない。人や会社に対する支持的な態度をとるべきで、反論などすら持てない。

62. 私は他人を洞察するのにいたるまでを耳や目を利用して通して対人関係の観点、人の行動体系もあら程度把握していこうが想る。
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19. 私は自分にとどまらず、理解されているが、リーダーとしての周り方からの組織に影響を及ぼしているが、又、他人に与えられた印象などについて認識している。

20. 私は現実に対する自分の判断の妥当性をテストし、自己自身の性格や価値を正しくつかみ、欠点に対して常に適応していける。

21. 私は自分がいつも、どのように最善の仕事が出来まるか、何をしで決めていないか、他人がどんな時、どんな状況下で混乱するか、そこで何が起こべきかなどと見極め、検討する。

22. 私は自分を主張して管理するより、他人を理解しようと努め、他人と謙虚な態度を養われ、新しい洞察を自己開発で自分を変えた。

23. 私は自分の人生の価値、何かし、どうあるべきかなどについて、明確な答えを持っており、仮人、会社そのもので仕事のそれぞれの目標の中に一貫性を持た。

24. 私は会社の性格をもつものは、価値を共有することによって発展するものであり、実体だけで決まるものではなく、トップマネジメントによって具体化され、管理され、強化されるものだと考え。

25. 私は、私達の会社自らの将来を創造し、企業価値を形成していく事を大切なものと考えるが、一方では重要な意味には照らして正直である事、オープンである事、公平である事を忘れはなさげに努める。
PART Ⅲ．下記の三つの簡単な質問に答え下さい。

1．次の項目を貴方にとって重要だからと思われる順序にランクづけして下さい。各項目の左に①から⑥の番号をつけて記入して下さい。もし全部が等しく重要と思われても番号をつけで下さい。

生産性
誠実さ
企業利益
品質
人材
革新（イノベーション）
顧客へのサービス

Ⅱ． 10から10のスケールで貴社のこの国への実益・実効性の度合を表わして下さい。実効の度合が最小の時を1として、最大を10として表わして下さい。（）では、国際的に見た場合にどの位ですか。（）

Ⅲ．管理職者としての貴方の仕事に関すコメントを御自由にお書き下さい。（問題点や指摘事項、又現在の管理職につけねに役立ったと思われる背景や経験など。）
CONSULATE GENERAL OF THE
UNITED STATES OF AMERICA
P.O. Box 149
Jeddah 21411, Saudi Arabia

15 February 1986

Dear General Manager/Company Executive:

All of us involved in business and commercial activities know how important good management practices are to our companies. A colleague and friend from America is performing some research on management practices. He is doing this as part of his doctoral degree with the University of Technology in Loughborough, England.

The researcher is Mr. James Brianas, an educator and specialist in management. Please help him by completing the questionnaire enclosed and returning it to him in the stamped, self-addressed white envelope. Do not provide your name nor the name of your company.

The research is very broad and covers managers from many countries. Mr. Brianas has personally contacted and discussed the research not only with me but also other Consuls and Commercial Officers including Mr. Victor Eason (Britain), Sten Adlersson (Sweden), Artur Brunner (Germany), Seung Ryul Yoon (Korea), and Masafumi Yamamoto (Japan). All are supportive of this effort.

The information you are asked to provide is very important so please take about one-half hour or less now to fill it out. If you would like a copy of the final results Mr. Brianas would be pleased to send it to you. He can be contacted at Box 8822 Jeddah or 671-7717 extension 344.

Thank you for your help.

Sincerely,

Russell Y. Smith
Chief of the Commercial Section
U.S. Consulate General
Jeddah

Enclosures
Attachment H

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495


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