

THE EXECUTIVE CHALLENGE

Managing Change and Ambiguity

MICHAEL B. McCASKEY

Harvard University

Pitman

Boston · London · Melbourne · Toronto

Pitman Publishing Inc.
1020 Plain Street
Marshfield, Massachusetts 02050

Pitman Books Limited
128 Long Acre
London WC2E 9AN

Associated Companies
Pitman Publishing Pty Ltd., Melbourne
Pitman Publishing New Zealand Ltd., Wellington
Copp Clark Pitman, Toronto

© 1982 Michael B. McCaskey

Library of Congress Cataloging in Publication Data

McCaskey, Michael B.
The executive challenge.

Includes index.

1. Executive ability.	2. Management.
3. Organizational change.	I. Title.
HF5500.2.M43	658.4 06
ISBN 0-273-01846-9	82-628 AACR2

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronics, mechanical, photocopying, recording and/or otherwise without the prior written permission of the publishers.

Manufactured in the United States of America

Acknowledgments



Halfway through the research study that forms the basis for this book, I gave a preliminary report to a group of Harvard Business School faculty members. In the ensuing discussion, comments seemed to divide into two camps. One camp was excited by the bold scope of the research—attacking areas clearly at the heart of the general manager’s job but complicated, hard to measure, and perhaps intractable for the researcher’s art. The other (smaller) camp was angry. Even though the topic was how managers cope with ambiguity and change, they felt that all good research should begin with precise definitions of terms and a carefully programmed plan of attack. In deference to the subject matter, I was engaging in a more directional, more “learn and revise as you go” research mode.

The comments of both camps were helpful and stimulating, though one camp was easier to hear than the other. The polar responses of my colleagues helped me anticipate the likely reactions of readers to this book. Without abandoning my position—that a researcher is foolish to preprogram an attack on ill-defined problems—I have tried to make the going more comfortable and productive for the second camp. Where possible, I present clear definitions; where precise definitions would be premature and misleading, I offer approximations clearly labeled as such.

This book asks the reader to take an active role. Learning to manage change and ambiguity better requires more than just the transfer of concepts. The ideas, guidelines, and ways of thinking, if they are to be useful, must be evaluated by each reader and made one’s own. That is not an easy nor a simple process, and it cannot be accomplished without the reader’s active involvement with the material.

In that spirit, I often use “we” in the text to indicate that this is a journey of exploration and learning for both author and reader. I have written many of the passages as if I were talking with one of the

managers with whom I consult. For other passages, I wrote as if I were talking to a class of MBA students, trying to give them practical ways to think about ambiguity and change in the managerial world.

Footnotes appear for several reasons. The notes acknowledge intellectual debts and help to make connections for readers familiar with the literature being cited. The notes may also serve, along with the Bibliography at the end of the book, to identify further reading on a particular point or topic.

Three permissions to use previously published materials should be acknowledged. An earlier version of Chapter 4, the High Technology Research Project, was published in an article I wrote for *Organizational Dynamics*, Spring 1979. The case is reprinted by permission of the publisher, copyright 1979, by AMACOM, a division of American Management Associations. All rights reserved. The passage quoted in Chapter 8 from *My Years With General Motors* is copyrighted 1963 by Alfred P. Sloan, Jr. and is reprinted by permission of the Harold Matson Company, Inc. The maps of ancient Rome and the New World (Chapter 2) appear through the courtesy of the Research Libraries of the New York Public Library.

I have many people to thank for their help in writing this book. A crucial component of the research is studying managers grappling with change and ambiguity. The officers at BayBanks, especially William Crozier, the citizens and administrators who worked with the San Francisco school system, and the managers and scientists at the "J. Mirl Company" were generous in sharing their time and experience with me. Professor Howard Gruber provided constructive criticism on the Darwin chapter, and Professor James Brian Quinn kindly sent his case on the GM downsizing decision which improved our account in Appendix B. To these and several other managers who allowed me to study and question them about their efforts to master the executive challenge, I am most grateful.

For critical reviews of different chapters I am thankful to splendid colleagues such as John Kotter, Vijay Sathe, Robert Eccles, Robert Tannenbaum, Thomas Lifson, Richard Hammermesh, and Eliza Collins. For encouragement at different points along the way, my thanks go to Paul Lawrence, Raymond Corey, and especially Richard Rosenbloom, who was head of the Division of Research when the study was launched. I wish to thank the Division of Research, Dean John McArthur, and the Harvard Business School for providing time and funding to pursue this research.

I have been fortunate in having E. Mary Lou Balbaky as a research assistant to conduct interviews and to write the first draft of

the San Francisco and GM cases. Rita Perloff wrestled the word processor into submission in order to produce numerous drafts. Judy Uhl and Nancy Jackson lent their considerable editorial skills to improving the manuscript.

I would also like to thank my parents, Edward and Virginia McCaskey, for their love and support through the long years of my education, formal and otherwise, and my brothers and sisters who provided the earliest lessons in ambiguity and change. My dad read an earlier draft with the hope of guarding the English language from too obvious discord. His ear for the music of good language improved the text, even if there still remain constructions he would avoid and that I am willing to put up with.

Lastly, I thank my wife Nancy for tough-minded comments on the book and tenderhearted encouragement. She has enriched me and the book in ways beyond what words can say, and so it is to her that the book is dedicated.

Contents



	Acknowledgments	xi
1	Introduction	1
	DEFINING AMBIGUOUS SITUATIONS	4
	RESISTANCE TO AMBIGUITY	6
	A Case of Avoiding Ambiguity and Fundamental Change	6
	THE RESEARCH STUDY: QUESTIONS AND DESIGN	10
	ORGANIZATION OF THE BOOK	11
2	Mapping: Creating, Maintaining, and Relinquishing Conceptual Frameworks	14
	THE METAPHOR OF MAPPING	16
	HOW ARE MAPS CREATED AND MAINTAINED?	18
	MAPS AND AMBIGUITY: IMPOSING ORDER ON CHAOS	23
	HOLDING ON TO MAPS AND “LITTLE DYING”	26
	MAINTAINING ORDER BY DYNAMIC CONSERVATISM	28
	COMPARISON WITH SCIENTIFIC COMMUNITIES	30
	WHAT TO DO WHEN MAPS ARE WEAK	31

3	High Technology Research Project (VIS Case)	34
	1963-1972: BACKGROUND AND HISTORY	35
	JANUARY-JULY 1973: EXCITEMENT ABOUT PRACTICAL APPLICATIONS FOR THE RESEARCH	37
	AUGUST 1973: A PROJECT MANAGER APPOINTED	39
	SEPTEMBER-DECEMBER 1973: A NEW CUSTOMER AND A MEETING WITH TOP MANAGEMENT	42
	JANUARY-APRIL 1974: RESPONSES TO THE REDUCTION IN FUNDING	45
	OCTOBER 1974: THE PARTICIPANTS LOOK BACK	46
	BRIEF CHRONOLOGY OF EVENTS	48
4	Commentary on the High Technology Case	50
	MAJOR PROPOSITIONS ABOUT MAPPING	51
	IMPLICATIONS FOR MANAGING AMBIGUITY	58
	SUMMING UP	62
5	The Stress of Ambiguity	63
	HUMAN PERFORMANCE UNDER SEVERE STRESS	64
	STRESS RESPONSES ARE IDIOSYNCRATIC	65
	A MODEL OF THE EXCITEMENT/STRESS OF AMBIGUITY	67
6	Desegregating San Francisco's Schools	77
	THE SCHOOL DISTRICT IN 1970-1971	78
	THE JUDGE'S RULING	84
	A CORE GROUP FORMS	85

	PUBLIC MEETINGS ON THE PLANS	88
	BRIEF CHRONOLOGY	94
7	Commentary on the San Francisco Case	96
	REACTIONS OF THREE GROUPS	97
	USING THE STRESS MODEL	102
	TESTING SPECIFIC RESEARCH FINDINGS	104
	OTHER IMPORTANT FEATURES OF THE CASE	106
	LESSONS FROM THE SAN FRANCISCO CASE	108
8	The Creative Process	110
	CONDITIONS THAT FAVOR OR BLOCK CREATIVITY	111
	THE QUALITIES OF A CREATIVE PERSON	113
	THE CREATIVE PROCESS	116
9	The Evolution of Charles Darwin	125
	DARWIN'S EARLY YEARS	127
	THE VOYAGE OF THE BEAGLE	129
	FORMULATING THE THEORY OF EVOLUTION, 1837-1838	135
	DARWIN DELAYS PUBLISHING HIS THEORY	140
	DATES IN DARWIN'S FORMULATION OF THE THEORY OF EVOLUTION THROUGH NATURAL SELECTION	142
10	Commentary on the Darwin Case	144
	TESTING THE MODEL	146
	IMPLICATIONS	151

11	Conclusion	155
	WHAT MAKES THESE SITUATIONS SO TROUBLESOME?	155
	CORE GROUPS AND NETWORKS	160
	THE CONCEPT OF CONTROL	163
	RECAPITULATING THE BASIC ARGUMENT	166
	SKILLS AND VIRTUES IN MANAGING AMBIGUITY	171
	LEVERAGE POINTS FOR EMPLOYING THESE FUNDINGS	174
	CONTINUE YOUR LEARNING	175
	<i>Appendix A</i> The Electronic Banking Case	178
	<i>Appendix B</i> GM's Response to Change, 1956–1981	195
	Notes	212
	Bibliography	223
	Index	226

Chapter 1



Introduction

Managers today increasingly confront problems whose ambiguities seem to baffle all familiar methods of attack. Even when they rise to the occasion, and invent the new tools they need, the process can be an intensely stressful one. Here's how it might feel:

I'll be glad when this is over—if I survive! For two months now the pressure has been relentless, nothing but work on my mind around the clock. I used to leave office problems at the office. Now I'm coming home at erratic hours, and when home, I'm holed up with reports or on the telephone. The family resents my not being with them and they worry about my health.

Usually I fall asleep rather easily, but lately I find my mind races on—even though the switch has supposedly been turned off. Then, after falling asleep, I might wake up at four a.m. thinking of something else that could go wrong and needs to be checked. My wife's getting grumpy from having her sleep interrupted so frequently, not to mention the tension.

Last week scared the hell out of me. My brain muscle was tightened for too long, and it cramped. On my way to an important meeting I felt dizzy and started seeing double. My mind couldn't sort things out the way it usually does. If there is one thing I am *not*, it is addle-brained. I got scared that the whole thing was going to collapse, or that I would collapse physically. I wondered if I was going crazy.

The others are feeling the stress too. One colleague carries the smell of mounting disaster, hands perspiring, and voice coming out strange. Another treats the rapid shifts of fortune as a vast practical joke. Events

wear him down, but a night's sleep revives him. Perils only serve to breed a genial, desperado philosophy in him; momentous changes become part of the general joke.

When I am tired and discouraged, I feel unable to change things, or even seriously disturb the flow of events. We just don't have enough facts, don't understand the sensitivities. Yet if the project fails, they will be looking for someone to blame. In this lightning storm, I'm the one carrying a metal rod. Ambivalent and confused motives abound. What is going on here? My purpose must be to define direction, to inspire confidence even as the lightning cracks around us. I can't let people stay so scared that they refuse to come out of hiding. At times I feel weary and undecided myself, but mainly I'm optimistic that it will work out. I feel the adrenalin pumping. In spite of the dark moments, we are going to solve this thing.

The experience of trying to manage ambiguity is a common one. The monologue presented above, for instance, is based on a composite of my research, interviews with business executives, and reading in the novels of Tolstoy, Melville, and Joseph Heller.¹ These disparate sources yield a common picture of the process of coping with a poorly defined administrative situation. The problems are complex—signal and noise are confused, players have complicated and ambivalent roles, the pressure of work is pervasive. Supported by his own internal strengths, his work team, his family, and others, the successful manager feels he is making progress. Other colleagues, however, may be incapacitated by the stress of high-pressure, high-stakes change. Managing in these situations requires special skills.

Managers increasingly face poorly defined problems that are interdependent, complex, and changing. In such situations information is not as complete nor causal relationships as well understood as managers would like. For the most challenging situations, experts have cloudy crystal balls or strenuously argue contradictory positions. Yet, to be effective, a manager may have to act before the situation is entirely clear, while important elements of the problem can be interpreted in conflicting ways, and while convincing arguments are made for and against different alternatives. In short, a manager must act in the face of ambiguity.

Furthermore, the ambiguity of the manager's world is increasing. We live in an age when old value frameworks are doubted and established patterns for behaving are stretched beyond recognition. Peter Drucker identifies several reasons for the turbulence of our times:

- Rapid inflation distorts and misinforms a manager on how the enterprise is doing.

- The structure and dynamics of the population are changing erratically and unpredictably.
- New modes of economic integration are appearing as goods are produced transnationally, that is, as more goods have components produced in several countries.
- The labor force is fragmented into “labor forces,” each with its own needs, expectations, and performance characteristics.
- Business and other institutions are politicized, forcing top managers to spend more time on relations with external constituencies.²

To this list one might add sudden shifts in government regulation or deregulation and the destabilizing potential of new technology.

In response to this turbulence managers have been rethinking the way they design an organization to interact with its environment. Buffering out uncertainty in order to keep internal operations stable and continuous, used to be a rational strategy for organizations—but no longer. The ground itself is shifting and many organizations find themselves lying on a fault line. Managers need to build structures that will flex and bend with ground tremors rather than break. Building in flexibility means allowing more uncertainty inside the organization. Practitioners are experimenting with new organizational forms such as the matrix, project management, sharing the responsibilities of the president’s office, and dual lines of authority. The increased flexibility is not without its costs. For example, with the matrix form some managers work in its “hot spots,” reporting to two bosses and being charged with responsibilities that outstrip their formal authority. The matrix form is appreciated for its flexibility, efficient use of resources, and rapid response to environmental changes, but the matrix “chews up” people. Managers at the hot spots of the organization must endure considerably more ambiguity than managers in more traditional organizations. For members of the organization, these changes mean greater discomfort, less stability, more adventure, and more stress. While some enjoy the excitement, many experience vertigo and fear a loss of control.

These feelings of uncertainty stem from the increasing turbulence and the increasing complexity of organizational life. Researchers who have looked closely at organizational processes have characteristically been impressed by their complexity. Joseph Bower concluded his two-year study of resource allocation in a large multinational corporation by observing:

Perhaps the most striking aspect of the process of resource allocation, as described in this study, is the extent to which it is more complex than most managers seem to believe. It bears little resemblance to the simple portfolio management problem described in traditional financial theory. Moreover, the systems created to control the process sometimes appeared irrelevant to the task. They were based on the fallacious premise that top management made important choices in the finance committee when it approved capital investment proposals. In contrast we have found capital investment to be a process of study, bargaining, persuasion and choice spread over many levels of the organization and over long periods of time.³

How resources are allocated, then, is not determined solely at the top; and choices about which projects receive funding are not controlled in any simple, straightforward way. When change and ambiguity are added, the equations become even more complicated.

Given the interdependent problems, shifting values, turbulence, uncertainty, and complexity of a transitional age, managers must become more skillful in dealing with change. Organizations, people, business, and political environments are changing. First order changes, merely rearranging the same basic pieces, will not be sufficient. For the more complex and uncertain challenges they face today, managers must make second order changes, rethinking the patterns connecting the pieces.⁴ Such meta-level thinking is more fundamental and demanding, but it opens up correspondingly greater opportunities. Sociologist James Thompson observed that those who can successfully deal with major uncertainties become essential to the organization and gain influence and power.⁵ Organizational researcher Melville Dalton argues that the manager who can constructively deal with ambiguity shows the capacities most needed at the top.⁶ In short, the present turbulence has created both new dangers and new opportunities for managers.

DEFINING AMBIGUOUS SITUATIONS

Organizational researchers have pointed to several characteristics associated with ambiguous, changing situations. Table 1.1 presents a list of these characteristics. The categories overlap somewhat, and some characteristics might best be described as symptoms of others.

As a first approximation, we might define an ambiguous changing situation as one that exhibits many of the characteristics listed in

TABLE 1.1. Characteristics of Ambiguous, Changing Situations

Characteristic	Description and Comments
Nature of problem is itself in question	“What the problem is” is unclear and shifting. Managers have only vague, or competing, definitions of the problem. Often any one “problem” is intertwined with other messy problems.
Information (amount and reliability) is problematical	Because the definition of the problem is in doubt, collecting and categorizing information becomes a problem. The information flow threatens either to become overwhelming or to be seriously insufficient. Data may be incomplete and of dubious reliability.
Multiple, conflicting interpretations	For those data that do exist, players develop multiple, and sometimes conflicting, interpretations. The facts and their significance can be read several different ways.
Different value orientations, political/emotional clashes	Without objective criteria, players rely more upon personal and/or professional values to make sense of the situation. The clash of different values often politically and emotionally charges the situation.
Goals are unclear, or multiple and conflicting	Managers do not enjoy the guidance of clearly defined, coherent goals. Either the goals are vague, or they are clearly defined and contradictory.
Time, money, or attention are lacking	A difficult situation is made chaotic by severe shortages of one or more of these items.
Contradictions and paradoxes appear	Situation has seemingly inconsistent features, relationships, or demands.
Roles vague, responsibilities unclear	Players do not have a clearly defined set of activities they are expected to perform. On important issues, the locus of decisionmaking and other responsibilities is vague or in dispute.
Success measures are lacking	People are unsure what success in resolving the situation would mean and/or they have no way of assessing the degree to which they have been successful.
Poor understanding of cause-effect relationships	Players do not understand what causes what in the situation. Even if sure of the effects they desire, they are uncertain how to obtain them.
Symbols and metaphors used	In place of precise definitions or logical arguments, players use symbols or metaphors to express their points of view.
Participation in decisionmaking fluid ⁷	Who the key decision-makers and influence holders are changes as players enter and leave the decision arena.

Table 1.1. One aim of this book is to refine our diagnostic powers. In examining different administrative situations, therefore, we will consider which of the catalogued characteristics are most troublesome to managers. By the end of the book we will have a better sense of which features in particular make these situations difficult to manage.

RESISTANCE TO AMBIGUITY

Individuals respond in quite different ways to the appearance of ambiguity. Some managers seem able to tolerate high levels of ambiguity before eventually imposing order. Others seem to actually prefer ambiguity as a way of avoiding unpleasant facts. Still others demand order and control in one area (such as their work or career plans) and allow other areas to be murky (such as their personal feelings and relationships).

For many people, the experience of ambiguity arouses anxiety and the need for more control. To tolerate ambiguity seems to imply some sort of personal failure of understanding or skill. My argument, however, is that ambiguity is a rich, if frustrating, and inevitable part of life. We should not try to ignore, avoid, or rationalize what is fundamentally unclear. To manage the ambiguities of change, we must first allow them to exist. The greater danger is the temptation to deny ambiguity or impose clear meaning on ambiguous events. The experience of U.S. automakers over the last two decades illustrates this managerial pitfall all too clearly.

*A Case of Avoiding Ambiguity and Fundamental Change*⁸

In 1956 U.S. automobile manufacturers dominated the world auto market. The large Detroit companies had a clear view of their business and their customers, reinforced by decades of success. Prime tenets of this creed were that Americans wanted big, fancy cars; styling, including annual styling changes, was the premier selling feature; and small cars equaled small profits.

Then, during the recession of 1958, something unprecedented occurred. Small, imported cars grabbed 8% of new car sales in the United States. Two new domestic compacts, the Rambler and the Studebaker Lark, also sold well. Detroit executives saw these events through the lens of their beliefs. Their interpretation was that buyers

of imported cars were pro-foreign and wanted something unusual and different. Nevertheless, Ford, Chrysler, and General Motors brought out their first generation of compacts and scored an easy victory over the imports, who were hampered by weak distribution and service networks.

With the foreign “invasion” successfully turned back, Detroit executives reached an important choice point. Year by year they increased the size of their once small compacts. Later, in 1969, Henry Ford II commented on the strong tendency of American automakers to increase the size and the cost of their small cars. Ford admitted, “That’s the tendency in this business. It’s the same old thing we’ve been through so many times. You’d think we’d learn, but we never do.”⁹ As the American cars grew bigger, the sales of imports started growing again.

In the 1960s sales of domestic compacts were also hurt by the charges of Ralph Nader and others. For the first time Congress set safety standards and then air pollution standards for new cars. GM, the largest automobile manufacturer, sustained the most vigorous attacks. Eventually, the company brought in outsiders who broke the previous insularity of their board. Academic and energy experts sensitized executives to the long-term energy shortage and the company began to develop plans for gradually improving the fuel efficiency of their cars. Ford Motor Company, on the other hand, was a recognized leader in the manufacture of smaller cars (a title they were not altogether proud of), and therefore felt less vulnerable. At this time they were selling small, well-built cars in Europe, and could have brought this know-how back to the United States. Ford executives, however, sharply differentiated American from European buyers and saw two completely different markets.

The oil embargo hit suddenly in 1973. Gasoline was in short supply, and prices climbed steeply. Americans refused to buy large “gas guzzling” cars. Again Detroit executives were at a choice point.

Decisions had to be made that would cost billions of dollars and might affect the companies’ survival, yet executives lacked hard and reliable information. Significant ambiguity surrounded several crucial issues including:

- changing consumer tastes and fears
- a rapidly shifting economy with wide swings in consumer confidence and purchasing power
- the significance of increasing sales of foreign cars (fad or basic change?)

- government regulations that were obscure, shifting, complex, and expensive and involved unclear technologies and strict deadline pressures
- uncertainty about gasoline availability and the price levels to which consumers could adjust

The list could be expanded, but the essential point is that ambiguity and uncertainty cloaked many of the elements critical for decision-making. The chairman of GM, Richard Gerstenberg, admitted that “we don’t yet have a good fix on what people want.”¹⁰ Yet executives could not afford merely to continue the old policies. As Gerstenberg later recalled, “When the embargo came, I was aware that we had to do something drastic, and that we had to do it right away.”¹¹ (A more detailed description of these events can be found in Appendix B.)

The business press was harsh in its criticism of U.S. auto executives. After consumers refused to buy large cars, the press reported that automakers had lost touch with the consumer, were slow to react to the growing demand for fuel efficient cars, and underestimated foreign marketing prowess. But such criticism does not explain why things happened as they did, nor, more importantly, can it suggest how managers might avoid similar mistakes in the future.

With this in mind I began a research study to investigate what happens when managers are confronted with ambiguity, uncertainty, and fundamental change. The times have become turbulent not only for automakers but also for bankers, the telephone companies, health care institutions, and a whole range of enterprises that once operated in more or less predictable environments. In addition, managers of high technology companies and of fast growth companies have long had to cope with rapid change. The study aimed to investigate how managers deal with poorly defined situations and to discover how the challenges of change and ambiguity can be met more effectively.

THE RESEARCH STUDY: QUESTIONS AND DESIGN

The study took four years. My starting point was to differentiate the problem of managing poorly defined, ambiguous situations from that of managing well defined, clearly understood ones. It seemed to me that most textbook and classroom advice for managers was suited for well defined problems. Here was a different and an important class of problems which needed new thinking. Understanding this suggested