STRATEGIC MANAGEMENT

A New View of Business Policy and Planning

EDITED BY

Dan E. Schendel
Krannert Graduate School of Management
Purdue University

Charles W. Hofer
Visiting Associate Professor
Graduate School of Business
Columbia University

Little, Brown and Company
BOSTON • TORONTO

To research workers in Strategic Management: past, present, and future

Based on a conference held at the University of Pittsburgh
arranged under the auspices of the Business Policy and Planning Division
of the Academy of Management.

Library of Congress Catalog Card No. 78-73465

First Printing

Published simultaneously in Canada
by Little, Brown & Company (Canada) Limited

Printed in the United States of America

Credits

Exhibit 3.6 Adapted from portrayal of General Electric's "Strategic Business Planning Grid" ("Corporate Planning: . . . ." 1975) and Michael G. Allen's presentation "Strategic Problems Facing Today's Corporate Planner" at the Academy of Management, August 1976.

Exhibit 3.7 From Derek Channon, "Strategic Planning Portfolio Models: Practical Progress and Problems in Practice" (Draft, 1976).

Exhibit 3.10 In Derek Channon and R. M. Jalland, *Multinational Strategic Planning*. New York: Macmillan, 1978. Taken from J. Smith's unpublished thesis, Manchester School of Business.

Exhibit 5.3 Reproduced by permission from *Strategy Implementation: The Role of Structure and Process* by Jay R. Galbraith and Daniel A. Nathanson. Copyright © 1978, West Publishing Company. All rights reserved.

Exhibit 5.5 Reproduced by permission from *Strategy Implementation: The Role of Structure and Process* by Jay R. Galbraith and Daniel A. Nathanson. Copyright © 1978, West Publishing Company. All rights reserved.

(continued to page 537)

(continued from page iv)

Exhibit 5.6 Adapted from Jay Galbraith, "Matrix Organization Designs," *Business Horizons*, February 1971, by permission of the author and *Business Horizons.*

Exhibit 5.7 Reproduced by permission from *Strategy Implementation: The Role of Structure and Process* by Jay R. Galbraith and Daniel A. Nathanson. Copyright © 1978, West Publishing Company. All rights reserved.

Exhibit 5.8 Bruce R. Scott. "Stages of Corporate Development — Part 1." Boston, Mass.: Intercollegiate Case Clearing House, #9–371–294, 1971.

Exhibit 5.9 (top) From Lawrence Franko, *The European Multinationals*, p. 203, © 1976. Reprinted by permission of the author and Greylock Publishers.

Exhibit 5.9 (bottom) Figure 2–3 from *Managing the Multinational Enterprise: Organization of the Firm and Ownership of the Subsidiaries* by John M. Stopford and Louis T. Wells, Jr., © 1972 by Basic Books, Inc., Publishers, New York.

Exhibit 5.10 Reproduced by permission from *Strategy Implementation: The Role of Structure and Process* by Jay R. Galbraith and Daniel A. Nathanson. Copyright © 1978, West Publishing Company. All rights reserved.

Exhibit 5.11 Reproduced by permission from *Strategy Implementation: The Role of Structure and Process* by Jay R. Galbraith and Daniel A. Nathanson. Copyright © 1978, West Publishing Company. All rights reserved.

Exhibit 5.12 Reproduced by permission from *Strategy Implementation: The Role of Structure and Process* by Jay R. Galbraith and Daniel A. Nathanson. Copyright © 1978, West Publishing Company. All rights reserved.

Exhibit 5.14 Adapted from John B. Miner, *Studies in Management Education* (1965) and *Motivation to Manage* (1977).

Exhibit 7.4 From David Harvey, *Explanations in Geography*, © David Harvey 1969. Reprinted by permission of Edward Arnold (Publishers) Ltd.

Exhibit 7.11 Adapted from Henry Mintzberg, "Policy as a Field of Management Theory," *Academy of Management Review*, January 1977, p. 96, by permission of the author and the publisher.

Exhibit 7.13 From Warren Torgerson, *Theory and Methods of Scaling* (1958), p. 3. Reprinted by permission of John Wiley & Sons, Inc.

Exhibit 7.14 From Warren Torgerson, *Theory and Methods of Scaling* (1958), p. 5. Reprinted by permission of John Wiley & Sons, Inc.

Exhibit 7.15 From Robert B. Duncan, "Characteristics of Organizational Environments and Perceived Environmental Uncertainty," *Administrative Science Quarterly*, Vol. 17, No. 3 (September 1972), p. 315. Reprinted by permission.

Exhibit 7.17 Thomas J. Bouchard, Jr., "Field Research Methods: Interviewing, Questionnaires, Participant Observation, Systematic Observation, Unobtrusive Measures" in Marvin D. Dunnette (ed.), *Handbook of Industrial and Organizational Psychology*, Table 1, p. 371. © 1976 Rand McNally College Publishing Company. Reprinted by permission.

Exhibit 7.18 Duncan, Robert; Cooke, Robert; Zaltman, Gerald; Mohrman, Allan; and Mohrman, Sue. "Assessment of a Structural/Task Approach to Organizational Development in Schools." Unpublished manuscript. Graduate School of Management, Northwestern University, 1977.

Exhibit 7.19 Fig. 19, "Outline of the Analysis" from *The Nature of Managerial Work* by Henry Mintzberg. Copyright © 1973 by Henry Mintzberg. Used by permission of Harper & Row, Publishers, Inc.

Exhibit 7.20 From Joseph McGrath, "Toward a 'Theory of Method' for Research on Organizations" in Cooper, Leavitt, and Shelly (eds.), *New Perspectives in Organizational Research,* (1964) p. 555. Reprinted by permission of John Wiley & Sons, Inc.

Exhibit 7.22 Paul E. Green, Donald S. Tull, *Research for Marketing Decisions,* 3rd edition, © 1975, pp. 325, 335, 340. Reprinted by permission of Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Exhibit 7.25 Paul E. Green and Yoram Wind, "New Ways to Measure Consumers' Judgments," *Harvard Business Review,* July–August 1975, copyright © 1975 by the President and Fellows of Harvard College; all rights reserved.

Exhibit 8.1 From Arch Dooley and Wickham Skinner, "Casing CaseMethod Methods," *Academy of Management Review,* April 1977. Reprinted by permission of the authors and the publisher.

Exhibit 8.2 From C. W. Hofer, "Needed the New Business Administration," *The Singapore Manager,* December 1969. Reprinted by permission.

PREFACE

Business Policy has been a required course of instruction in business schools for well over half a century. It has a standing that equals any other course as a prerequisite of the graduate degree in business. Its role in management curricula has been to *integrate* knowledge gained in the so-called functional and tool areas of instruction that, along with business policy, comprise the core curriculum. Conventional wisdom has it that integration takes place simply by exposing the student to the problems of several functions and/or tools at one time, typically through the medium of a complex case, with no further substance required to understand the role of the top manager in a business enterprise.

Recent history of business organizations, especially since World War II, shows that two very significant changes have occurred to elevate the integration problem to one of much greater importance and much more significance than it ever has held before. First, as has been well argued by authors such as Alvin Toffler in *Future Shock*, an enormous, almost calamitous change has taken place in the rate at which technological, social, political, and economic events occur. Under such massive changes, mankind's institutions have been forced to change at unprecedented rates. Business institutions have been no exception.

A second significant change has been the alterations that have occurred in the organizational or structural forms of businesses. Over the past thirty years there has been tremendous growth in the size of firms, as they have expanded into multiple product lines and businesses and even into multinational and multicultural markets. These changes in size and complexity have been accompanied by changes in the administrative structure and processes by which such firms are managed.

These two factors — the increasing rate of environmental change and the increasing size and complexity of organizational structure and processes — have led to important, far-reaching changes in business management practice. Chandler was among the first to recognize the tendency of businesses, and perhaps all organizations, to change under environmental conditions that themselves had changed. Particularly noteworthy is the split that has occurred between "operating" and what has come to be called "strategic" management. Operating management deals with the ongoing conduct of the firm's affairs, with insuring that the day-to-day work of the organization is as efficient as possible. This has been the traditional work of the manager, but with increasingly complex and rapidly changing environments has come the need to change the very direction and nature of the firm. Given ever larger organizations, the twin tasks of efficiently running the firm and of deciding the direction in which it should head proved too much to combine in single administrative positions and in single individuals. Consequently, new organizational forms, new divisions of managerial labor, and new managerial methods were developed which split the directional and character choices from the tasks of insuring operating efficiency.

However, this split between strategic and operating management tasks has not led to the creation of separate positions for strategic managers and operating managers. Rather, the manifestation of these two changes has been the evolution and proliferation of general management positions, which carry responsibilities for both operating and strategic management tasks. Typical of such changes have been the creation of corporate executive offices as well as the creation of corporate, group, division, business, and project general management positions.

At all organizational levels such general managers become involved in both business and corporate strategy formulation, two key tasks of the strategic management process. It is one of the major responsibilities of strategy to insure the integration of functions and businesses across organizational levels and across time. Functional integration takes place at relatively low levels in an organization compared with where that integration once took place, not only because business firms are so much larger today, but also because of a major philosophical shift in managerial practice from cost-based to profit-based control systems.

Underlying this split in management tasks has been the development of the concept of strategy, and more recently, the development of the strategic management process. These two constructs are useful in integrating the firm at three levels: (1) within each functional area of a given business (e.g., marketing strategy); (2) at the business level in integrating various functional areas; and (3) at the corporate level of multi-industry firms in integrating their various businesses.

In management education, the concepts of strategy and strategic management also have emerged as major intellectual platforms of the business policy course because they provide a substantive methodology for integrating the functional and analytical tools learned by the student. Unfortunately, these concepts go well beyond the content of most traditional policy courses. Nevertheless, during the last decade, and especially in the last five years, substantial progress has been made in theory building, research, and teaching in the business policy/strategic management area. Because of this progress, much of which is documented in this book, it can be truly said that the policy area is developing as an academic discipline. To date, this development, which promises to give new direction to the manner in which functional and business integration is taught, researched, and practiced, has gone unrecognized by most academia outside the area.

It was this complex of changes that led to this volume of collected papers and to the conference at which the ideas contained herein were first discussed. In the early 1970s, the first widely attended meetings took place among teachers and researchers of business policy who gathered to talk about their mutual interests and problems in teaching and researching the subject.[1] Subsequent meetings indicated an awareness, although at times a limited one, of the changes that were taking place in management practice and of the significant need to make others in business schools aware of the major upheaval that was occurring in the concepts underlying the field. To those working in the policy field, it was clear that these changes needed to be recognized in the design of policy courses, in research directions in policy, and in the decisions of deans and faculty involving the share of resources devoted to policy. While the American Assembly of Collegiate Schools of Business (AACSB) had long recognized through its accreditation Standard E that a course integrating the functional fields was necessary and that such a course should deal with major uncertainties facing management, it never had been able to achieve consensus regarding the nature and content of that course. Therefore, in recognition of this difficulty and the lack of acceptance of policy as a separate academic field among other business school faculties, some of the leading policy scholars in the early 1970s authored a statement of research needs and priorities in the field as a first step in making others aware of what was needed and to some degree what might be possible.

This early attempt, while useful as a first step, did not provide a definition of the business policy/strategic management area or what it was and where it could and should be going in terms of both teaching and research concepts. This problem was accentuated by the following circumstances: (1) there were no journals exclusively devoted to business policy/strategic management research; (2) there existed no collected body of scholarly works that the student of business policy/strategic management could be pointed toward; (3) there were no concentrated cadres of academics that could be singled out for such students; and (4) there was no independent professional society devoted to the area. Hence, the notion of a conference where leading authorities would gather and present their ideas of what and where business policy/strategic management was and where it was going seemed a useful first step in letting others know what the state of the art in the field really was.

The broad objectives established for the conference were: (1) to define the dimensions and boundaries of this emerging field; (2) to identify opportunities that exist for research in the field; and (3) to help both students and practitioners better understand this new approach to organizational integration. This volume is devoted to aiding that understanding.

[1] Meetings did take place at Harvard University and the University of Manchester, in England, during the 1960s in which selected academics, primarily Harvard Business School professors and D.B.A. students and graduates from Harvard, exchanged their teaching experience and, to a lesser extent, their research ideas.

The conference itself was organized by the editors of this book and was held at the University of Pittsburgh in May 1977. To achieve the above objectives, a set of fourteen research papers was commissioned to: (1) describe and define the field of strategic management by discussing major research findings in the area; (2) critically examine the research methodologies and data sources presently in use in policy and planning research; and (3) suggest directions that seemed particularly fruitful for future research.

In partitioning the field, the editors attempted to identify all the major subtopics in the field which were conceptually distinguishable and on which a reasonable amount of research had accumulated. Our initial list included over twenty such topics. Because of the time constraints imposed by a three-day conference, it was necessary to reduce our list to fourteen topics which could be covered in greater depth. The final choice was our own, and inevitably some important topics, such as social responsibility and boards of directors, were eliminated. In making this reduction, a principal criterion was whether sufficient empirical research had been done on the topic to warrant giving it major attention at the present time. Clearly, our own knowledge of existing research (or lack thereof) influenced these selections.

For each of the fourteen areas included, a leading authority on that topic was invited to prepare a paper describing the topic area in terms of the research that had been done and the most promising directions for future research. For each such major topic area paper, two discussants then were invited to prepare remarks for the conference that would complement the author's observations and, where appropriate, critique the content of the topic paper. Moderators for each area were carefully selected for their knowledge of the area and were asked to insure that the ninety-minute period devoted to their topic involved author, discussants, and audience in an exchange of views. In total, there were fifty-six scholars actively involved in the conference presentations.

In addition to the fourteen topic areas, two separate panels were invited to comment on: (1) the teaching implications of the material being presented and discussed; and (2) the practitioner views and implications of the conference. The latter panel was selected from personnel involved primarily in industrial corporate-planning practice. The full complement of participants is listed, along with the three-day program, in Appendixes 1 and 2.

In addition to the invited authors, discussants, moderators, and panelists, ten other participants were invited from industry, and the remaining places were made available on a first-come, first-served basis to members of the Division of Business Policy and Planning of the Academy of Management.

In all, there were nearly one hundred participants and attendees at the conference, representing more than forty schools, various consulting organizations active in strategic management and planning, and industry practitioners from some of the leading industrial corporations using frontier concepts in strategic management.

All sessions were tape-recorded for the benefit of the authors of the papers and for the later compilation of this volume. While this volume cannot be regarded as a proceedings of the conference, it is fair to say that it represents and extends the substance of the conference. Further, particular efforts have been made to capture the essential conclusions of the intensive discussions that were held over the three days of the meeting.

All of the papers in this volume have been rewritten, most substantially so, since their discussion at the conference in Pittsburgh. Each author has responded to the ideas presented at the conference and has had available for those revisions both the recorded tapes of the conversation surrounding his specific paper and the editors' extensive review comments, which sought to develop ideas the authors did not cover sufficiently as well as to make this an integrated volume rather than just a loose collection of papers. Where further comment seemed necessary to expand each of the papers, we have included such remarks in our introductions to the sections in which the papers appear and we are hopeful that they explain to the reader how each set of papers fits together to form an integrated whole. We have also provided editorial linking comments to connect the various papers and explain their relationships more fully.

Based on our paradigm of the field, the volume is divided into ten sets of papers. This guiding paradigm is developed in the Introduction to the book and presents, we believe, a more complete concept of the field of business policy and planning than has previously been assembled. It is only in the light of this paradigm that the full measure of each paper and our editorial comment can be evaluated and appreciated.

The strategic management paradigm not only represents a new way of viewing the policy and planning field that links the developing substance of the field, but it also can be used as a guide for the direction in which research and teaching in policy and planning is headed. In addition, it can be and is used in management practice to help design the new strategies and organization forms that will be needed to cope with the massive environmental changes business will face in the remainder of this century. Thus, the paradigm deserves study because of its significance to management education and practice and not just because it integrates the papers in this book.

In concluding this preface, we need to acknowledge the efforts of the authors whose work appears in this book. We have not always presented the easiest specifications or deadlines within which to work. To these authors must go special thanks for their patience, tolerance, and willingness to share their experience and expertise. To the participants at the conference who made substantial contributions to the discussions and the subsequent development of everyone else's thought must also go our gratitude, for the conference results exceeded our highest expectations. A note of appreciation must also go to those who provided the funds and material goods that made the conference and this overall effort feasible. In a very real

sense, the conference would not have been possible without the support of the Strategic Planning Institute; A. T. Kearney, Inc.; the University of Pittsburgh; and the Division of Business Policy and Planning of the Academy of Management. It was under the auspices of the Division of Business Policy and Planning, with the support of the Academy, that this project had its beginnings.

Our gratitude must also be extended to several individuals who were especially helpful in making the conference a success. Among many, Professor John Grant, who handled the University of Pittsburgh arrangements, was especially successful in providing an ambience in which a fruitful interchange could take place. In addition, Dr. Sidney Schoeffler of the Strategic Planning Institute; Merritt Davoust of A. T. Kearney, Inc.; and Dean H. J. Zoffer of the University of Pittsburgh were helpful in providing their personal and organizational support for this effort.

Whether this volume fulfills the high hopes we have for it should be judged primarily by the influence it has over future thought and practice in the Strategic Management area, as we believe the field will one day be called. If it has the impact we hope for, it will only be due to the efforts of the many different people and organizations who had sufficient faith to devote their time and resources to it. If it fails, it will be due to our failure to convey to others the new directions in which strategic management practice is taking us. The errors and oversights remain with us. All our efforts have been directed at minimizing them and emphasizing the bright future that lies ahead for students of the Strategic Management field.

Finally, a very special note of thanks is owed to Mary Lou Schendel for her patient help with the typing and with the myriad administrative tasks of bringing together into an integrated manuscript a widely diverse set of materials. It would have been impossible to meet our schedules without her support.

Dan Schendel Charles W. Hofer

CONTENTS

INTRODUCTION 1

Dan Schendel *Charles W. Hofer*

The Value of New Paradigms, 1. Business Policy as a Field, 5. Policy Formulation: The Prestrategy Paradigm, 7. The Initial Strategy Paradigm, 8. The Strategic Management Paradigm, 11. The Concept of Strategic Management, 14. The Structure of the Book, 18. References, 22.

SECTION 1 STRATEGY AND STRATEGIC MANAGEMENT 23

THE CHANGING SHAPE OF THE STRATEGIC PROBLEM 30
H. Igor Ansoff

Patterns in Complexity, 35. Evolution of the Strategic Problem, 40. Implications for Research, 43.

COMMENTARY 44
William H. Newman

Generalizing the Approach, 44. Selecting Key Thrusts for a Strategy, 45. The Political Reach of Strategy, 46. Oversimplified History, 47.

COMMENTARY 47
William R. Dill

Section 1 References, 51.

SECTION 2 ORGANIZATIONAL GOALS AND GOAL FORMULATION 53

Mintzberg's Goal Formulation Model, 55. A Critique of Mintzberg's Goal Formulation Model, 56.

ORGANIZATIONAL POWER AND GOALS: A SKELETAL THEORY 64
Henry Mintzberg

Introduction: The Evolution of Goal Theory, 64. The External Coalition, 65. The Internal Coalition, 69. Organizational Power Configurations, 74. Conclusion: The Need to Research Power, 80.

COMMENTARY 80
Max D. Richards

Introduction, 80. The General Research Needs, 81. The Mintzberg Paper, 81. Goal Dominance and Relevance, 81. Policy Research and Goals, 82. Organizational Behavior Research on Goals, 83. Needs and Problems in Goal Research, 83. Conclusion, 84.

COMMENTARY 85
Edwin A. Murray, Jr.

Introduction, 85. Prerequisites for Theory and Research on Goals, 85. The Nature of Goals: A Theoretical Dichotomy, 85. The Nature of Goal Formulation Processes: Two Views, 86. Mintzberg's Theory: A Critique, 87. Researching Mintzberg's Model, 88. Conclusion, 90.

Section 2 References, 90.

SECTION 3 STRATEGY FORMULATION 93

The Strategy Concept and Strategy Formulation Processes: Some Different Perspectives, 97.

STRATEGY FORMULATION:
ANALYTICAL AND NORMATIVE MODELS 104
John H. Grant and William R. King

Basic Definitions, 104. A Framework for Analysis, 105. Dual Level Models, 106. Product/Market Level Models, 113. Corporate-Level Models, 116. Conclusions, 119. Future Research Opportunities, 119.

COMMENTARY 122
Derek F. Channon

Introduction, 122. The Impact of Environmental Change and Corporate Evolution, 123. The Changing Pattern of Strategic Decision Making Systems, 123. The Use of Corporate Portfolio Models, 126. Practical Problems with Portfolio Planning Models, 129. Questions for Future Research, 133.

ENVIRONMENTAL ANALYSIS AND FORECASTING 134
James M. Utterback

What Problems Are Created for the Firm by Changes in Its Environment? 134. What Can Be Known about Changes in the Environment, and How Can Such Knowledge about Change as an Aid in Strategy Formulation and Planning Be Acquired? 135. What Methods Have Been Used to Forecast Environmental Changes? 136. Are Particular Methods of Analysis and Forecasting Better Suited for Some Types of Environments Than Others? 138. How Should the Firm Integrate Environmental Assessments into Its Strategic Planning Process? 141. What Topics Are Suggested for Further Research in This Area? 143.

COMMENTARY 144
Harold E. Klein

Introduction, 144. The Lack of Attention Given to Environmental Analysis in the Past, 145. The Role of Environmental Analysis and Forecasting in the Strategic Planning Process, 145. The Selection of Appropriate Forecasting Approaches for Environmental Assessment, 147. Contingency Theories for Selecting Environmental Forecasting Approaches, 147. The Structuring of Relevant Environmental Forecasting Models, 148. The Environmental Assessment Process, 150. Some Concluding Observations, 150.

STRATEGY FORMULATION: A SOCIAL AND POLITICAL PROCESS 152
Joseph L. Bower and Yves Doz

Positional and Managerial Views of Strategy, 153. Strategic Management, 157. The Process School of Research, 157. Conceptual Building Blocks, 160. Current Works and Challenges for Future Research, 164.

COMMENTARY 166
Ian C. MacMillan

Introduction, 166. Interorganizational Strategy, 167. Strategic Anticipation, 170. Conclusion, 172.

COMMENTARY 172
John Child

The Strategic Importance of External Social and Political Relations, 173. Managing External Relations — Concepts and Research, 175. Concluding Questions and Remarks, 179.

Section 3 References, 180.

SECTION 4 STRATEGY EVALUATION 189

Types of Strategy Evaluation Approaches, 190. Observations on Rumelt's and Kirchhoff's Papers, 193. Additional Areas for Research on Strategy Evaluation, 195.

EVALUATION OF STRATEGY: THEORY AND MODELS 196
Richard P. Rumelt

The Strategy Concept, 196. Strategy Evaluation Criteria, 199. Rivalry and Asymmetry: The Most General Context, 202. Classical Evaluation Approaches, 203. Life Cycle Models, 204. Empirically Based Frame and Tactical Models, 206. Strategic Groups Models, 208. The BCG Experience Effect, 209. Summary and Suggested Directions for Further Research, 210.

COMMENTARY 212
Bruce A. Kirchhoff

Strategy Definition, 213. Evaluation Criteria, 213. Literature Review of Evaluation Research, 213. A Broader Context, 214. Summary, 215.

Section 4 References, 216.

SECTION 5 STRATEGY IMPLEMENTATION 218

Formal Planning Systems: A Link between Formulation and Implementation, 220. Strategy Implementation: The Role of Structure and Process, 222.

FORMAL PLANNING SYSTEMS: THEIR ROLE IN STRATEGY FORMULATION AND IMPLEMENTATION 226
Peter Lorange

Introduction, 226. Methods for Classifying Research on Formal Planning Systems: An Overview, 226. The Use and Benefits of Formal Planning Systems, 228. Making Formal Planning Systems Work, 231. The Design of Formal Planning Systems: Some Contingency Views, 235. Some Potential Directions for Research on Formal Planning Systems, 238. Some Caveats for Doing Research on Planning Systems, 240. Summary and Conclusions, 241.

COMMENTARY 241
Dale J. Hekhuis

Trend Toward Formal Planning Systems, 242. Overview of a Formal Planning System, 242. Some Suggested Areas for Research, 243. Conclusions, 245.

COMMENTARY 245
Harold W. Henry

Introduction, 245. Functions of a Formal Planning System, 245. Framework for Research on Formal Planning Systems, 246. Summary and Conclusions, 248.

THE ROLE OF ORGANIZATIONAL STRUCTURE AND PROCESS IN STRATEGY IMPLEMENTATION 249
Jay R. Galbraith and Daniel A. Nathanson

Strategy and Structure Conceptual Extensions, 251. Strategy and Organization Structure, 253. Other Systems and Processes, 261. Summary, 283.

COMMENTARY 284
Leonard Wrigley

Introduction, 284. Similarities in Thinking about Organizational Structure, 284. The Influence of Chandler, 285. Differences among Researchers, 287. Some Uniquenesses of Chandler, 287. Conclusion, 288.

COMMENTARY 289
John B. Miner

The Lorsch and Morse Research, 290. The Strategy-Structure Research, 291. The Lawrence-Lorsch-Allen Research, 292. An Explanation of Structural Advantages, 292. Structure-People Fit, 293. Conclusions, 294.

Section 5 References, 297.

SECTION 6 STRATEGIC MANAGEMENT AND ORGANIZATION TYPES 303

General Observations, 304. Strategic Management: New Ventures and Small Business, 309. Strategic Management: The Multibusiness Firm, 310. Strategic Management: Not-for-Profit Organizations, 314. Summary, 315.

STRATEGIC MANAGEMENT: NEW VENTURES AND SMALL BUSINESS 316
Arnold C. Cooper

Types of Literature, 317. Strategic Management in the Start-up Stage, 318. Strategic Management in the Early Growth Stage, 321. Strategic Management in the Later Growth Stage, 323. Strategic Management in Intracorporate Ventures, 325. Opportunities for Future Research, 326.

COMMENTARY 327
Jeffrey C. Susbauer

The Need for a Data Base, 328. A Small Firm Typology, 328. Internal New Ventures, 331. Summary and Conclusions, 331.

COMMENTARY 332
Karl H. Vesper

Introduction, 332. Limitations of the Cooper and Susbauer Schemes, 332. Some Other Classification Systems, 333. Problems and Potentials in Researching Entrepreneurship, 337. Summary and Conclusions, 338.

STRATEGIC MANAGEMENT:
THE MULTI-BUSINESS CORPORATION 339
Norman Berg and Robert A. Pitts

Introduction, 339. Problem Areas and Research Streams, 339. Relating the Streams, 346.

COMMENTARY 348
Richard G. Brandenburg

Information Requirements, 348. Which Strategies Are Most Important? 349. The Process of Planning, 350. Conclusion, 352.

STRATEGIC MANAGEMENT:
NOT-FOR-PROFIT ORGANIZATIONS 353
Max S. Wortman, Jr.

Structure of Strategic Management in Not-for-Profit Organizations, 353. Public Organizations, 355. Urban Organizations, 358. Environmental Organizations, 363. Third Sector Organizations, 365. Institutional Organizations, 365. Conclusions, 372.

Section 6 References, 373.

SECTION 7 THEORY BUILDING AND THEORY TESTING IN STRATEGIC MANAGEMENT 382

Theory Building and Theory Testing: A Conceptual Overview, 384. Observations on the Papers, 390. Some Concluding Observations, 394.

COMMENTARY 394
J-C. Spender

Introduction, 394. Theories That Apply to Strategic Management, 395. The Scientific Method, 395. The Structure of Theory, 396. Theory-Testing, 398. Theory-Building, 399. Combining Theory-Building and Theory-Testing, 400. Theory-Building and Theory-Testing in the Strategic Management Area, 401. Broadening the Range of Ideas, 402. Appealing to Managers for Ideas, 403. Conclusion, 404.

CONTINGENCY THEORIES OF STRATEGY AND STRATEGIC MANAGEMENT 405
George A. Steiner

Introduction, 405. Major Thrusts in the Development of Contingency Theory for Strategies, 406. Some Characteristics of the State-of-the-Art Contingency Theories of Strategic Management, 413. Research Opportunities and Methodologies, 414. Concluding Comment, 416.

COMMENTARY 417
Frank T. Paine

Introduction, 417. Previous Organization Theory, Contingency Theories, and What's Needed to Tie Them Together, 417. The Overall Contingency Framework, 417. Profiling the Firm's Environmental Uncertainty, 418. Appropriate Contingency Strategies and Capabilities, 418. Assessing the Firm's Current Position, 420. The Need for Strategic Change, 421. Implementing Strategic Change, 421. Summary and Conclusion, 422.

QUALITATIVE RESEARCH METHODS IN STRATEGIC MANAGEMENT 424
Robert B. Duncan

Introduction, 424. Qualitative vs. Quantitative Research Methods, 424. Current Policy Research Questions, 425. Qualitative Methods and Policy Research, 432. Summary, 446.

QUANTITATIVE RESEARCH METHODS IN STRATEGIC MANAGEMENT 448
Kenneth J. Hatten

Introduction, 448. Strategy: A Theory for Policy Research, 449. Quantitative Research: Question, Data, Method, 449. How Are We Approaching Policy Research? 452. Suggestions for Future Research: Partitioned Associative Data, 454. Suggestions for Future Research: Non-partitioned Data, 460. The Essential Dilemma, 466.

COMMENTARY 467
William Naumes

Introduction, 467. Some Observations on the Duncan and Hatten Papers, 467. Some Additional Observations on Strategic Management Research, 468. Conclusions, 471.

Section 7 References, 472.

SECTION 8 TEACHING IMPLICATIONS OF POLICY AND PLANNING RESEARCH 479

Evolution of the Strategic Management Area, 479. Teaching Implications of the Strategic Management Paradigm, 482.

THE TEACHING IMPLICATIONS OF THE RESEARCH IN POLICY AND PLANNING: AN OVERVIEW 484
Israel Unterman

Introduction, 484. New Directions, 484. Implications for Curriculum Development in the Policy Area, 485. Impact on Teaching Objectives, 488. Implications for Pedagogical Methods and Teacher Training, 489. Conclusion, 492.

POLICY AND PLANNING RESEARCH: TEACHING IMPLICATIONS 493
W. Harvey Hegarty

The Teaching Implications of Ansoff's Paper, 493. The Teaching Implications of Mintzberg's Paper, 494. The Teaching Implications of Grant's and King's Paper, 494. The Teaching Implications of Utterback's Paper, 495. The Teaching Implications of Bower's and Doz's Paper, 495. The Teaching Implications of Rumelt's Paper, 496. The Teaching Implications of Lorange's Paper, 496. The Teaching Implications of Galbraith's and Nathanson's Paper, 497. The Teaching Implications of Cooper's Paper, 497. The Teaching Implications of Berg's and Pitts' Paper, 498. The Teaching Implications of Wortman's Paper, 498. The Teaching Implications of Steiner's Paper, 499. The Teaching Implications of Duncan's Paper, 500. The Teaching Implications of Hatten's Paper, 500. Conclusion, 500.

Section 8 References, 501.

SECTION 9 PRACTITIONERS' VIEWS: POLICY AND PLANNING RESEARCH 504

Link Between Academics and Practitioners, 504. Observations of Practitioner Panel, 506.

PRACTITIONERS' VIEWS OF POLICY AND PLANNING RESEARCH 508
Coordinated by Ram Charan

Ronald O. Aines
International Harvester Company, 508.
Benjamin C. Ball, Jr.
Gulf Oil Corporation, 510.
Rudolf W. Knoepfel
The Solvay American Corporation, 511.
Roderic C. Lancey
G. D. Searle & Company, 513.

SECTION 10 RESEARCH NEEDS AND ISSUES IN STRATEGIC MANAGEMENT 515

Strategy Concept, 516. Strategic Management Process, 517. Boards of Directors: The External-Internal Interface, 518. General Management Roles in the Strategic Management Process, 518. Goal Formulation and Goal Structures, 519. Social Responsibility, 520. Strategy Formulation, 520. Environmental Analysis, 521. Strategy Evaluation, 522. Strategy Content and Performance Results, 522. Formal Planning Systems, 523. Strategy Implementation, 524. Strategic Control, 525. Entrepreneurship and New Ventures, 526. Multibusiness/Multicultural Firms, 526. Strategic Management in the Not-for-Profit Organization, 527. Public Policy and Strategic Management, 528. Research Methods in Strategic Management, 529. In Closing, 530.

Appendix 1 — Attendees, 531.

Appendix 2 — Program Schedule, 534.

INTRODUCTION

DAN SCHENDEL
Purdue University

CHARLES W. HOFER
Columbia University

This book surveys existing research and suggests fruitful directions for further research on the central responsibilities of the firm's leadership. One of the major conclusions that emerges from this survey and its analysis is that a new concept of the general manager's role and responsibilities is developing, a concept we shall call *strategic management*. This book will not only explore the research and theoretical implications of this concept but will also indicate the managerial implications of the concept and the ways that well-managed firms are beginning to use it today. While this work ties to the field more commonly known as Business Policy, the book will indicate why a new view of policy, and its practitioner's counterpart, planning, is not only useful but necessary to further progress in an important aspect of managerial practice, that of top-level management work.

THE VALUE OF NEW PARADIGMS

New concepts or paradigms are important to scientific progress. Kuhn (1970) uses Newton's paradigm of light to show that it was the first "nearly uniformly accepted paradigm for physical optics." Prior to Newton's development, everyone working in optics felt forced to build the field anew from its foundations. This was no longer true in optics after Newton.

Thus, the arrival of the first universally acceptable paradigm is a significant event in any field. Kuhn continues, "History suggests that the road to a firm research consensus is extraordinarily arduous." One reason why, according to Kuhn (1970: 15), is:

> . . . In the absence of a paradigm . . . all of the facts that could possibly pertain to the development of a given science are likely to seem equally relevant. As a result, early fact-gathering is a far more nearly random activity than the one that subsequent scientific development makes familiar. Furthermore, in the absence of a reason for seeking some particular

> form of more recondite information, early fact-gathering is usually restricted to the wealth of data that lie ready to hand.

This observation seems to characterize very well the history of the policy field. Policy research has consisted mostly of gathering readily available facts, which are usually organized into case studies that are used for comparative research or teaching. Kuhn (1970: 16) suggests why this sort of fact collecting has not been more productive in science:

> But though this sort of fact-collecting has been essential to the origin of many significant sciences, anyone who examines, for example, Pliny's encyclopedic writings or the Baconian natural histories of the seventeenth century will discover that it produces a morass. One somehow hesitates to call the literature that results scientific.

Kuhn's studies of scientific development lead him to conclude that the evidence is overwhelming that such general, uncorrelated fact gathering ends only when an initial, widely accepted paradigm enters the field. Such initial paradigms are never complete, but they always better explain observable events and facts than any existing concepts about the field. The value of paradigms is that they lead to progress and efficiency in the further development of a field. Again we quote Kuhn (1970: 19):

> When the individual scientist can take a paradigm for granted, he need no longer, in his major works, attempt to build his field anew, starting from first principles and justifying the use of each concept introduced.

Today, the policy field is in need of a new paradigm that can end the continual and pointless redefinition of concepts used in both practice and teaching. We believe such a paradigm is at hand, and this book is devoted to developing a better and wider understanding of it.

New is a relative term, of course, and it depends upon your viewpoint. The new paradigm we propose for the policy field is that of "Strategic Management," and it rests squarely on the concept of strategy. Neither of these concepts is new in the sense of being unknown to others, for such terminology has been in use for ten to fifteen years, and the notions represented in these concepts have been utilized in some firms for much longer than that. Nevertheless, for most practitioners, most policy (and management) teachers, and most policy (and management) researchers, the concepts or paradigms of strategy and strategic management offered here are new.

In any field, new paradigms offer an entirely new series of questions, and specific research can be directed toward seeking answers to such questions. Science, art, and politics are replete with examples of new concepts and paradigms that have led to new ways to interpret observed phenomena and ultimately to theories useful in making predictions about these phenomena. Moreover, without such new concepts, progress is not possible and, however comfortable the status quo, it is never a true and long-term friend, for it stifles change and restricts progress.

Sam Walter Foss illustrated the consequences of the blind acceptance of the status quo, and implicitly the value of new paradigms, in the following work:

THE CALF-PATH

One day, through the primeval wood,
A calf walked home, as good calves should;
But made a trail all bent askew,
A crooked trail as all calves do.

Since then two hundred years have fled,
And, I infer, the calf is dead.
But still he left behind his trail,
And thereby hangs my moral tale.

The trail was taken up next day
By a lone dog that passed that way;
And then a wise bell-wether sheep
Pursued the trail o'er vale and steep,
And drew the flock behind him, too,
As good bell-wethers always do.

And from that day, o'er hill and glade,
Through those old woods a path was made;
And many men wound in and out,
And dodged, and turned, and bent about
And uttered words of righteous wrath
Because 'twas such a crooked path.
But still they followed — do not laugh —
The first migrations of that calf,
And through this winding wood-way stalked,
Because he wobbled when he walked.

This forest path became a lane,
That bent, and turned, and turned again;
This crooked lane became a road,
Where many a poor horse with his load
Toiled on beneath the burning sun,
And traveled some three miles in one.
And thus a century and a half
They trod the footsteps of that calf.

The years passed on in swiftness fleet,
The road became a village street;

And this, before men were aware,
A city's crowded thoroughfare;
And soon the central street was this
Of a renowned metropolis;
And men two centuries and a half
Trod in the footsteps of that calf.

Each day a hundred thousand rout
Followed the zigzag calf about;
And o'er his crooked journey went
The traffic of a continent.
A hundred thousand men were led
By one calf near three centuries dead.
They followed still his crooked way,
And lost one hundred years a day;
For thus such reverence is lent
To well-established precedent.

A moral lesson this might teach,
Were I ordained and called to preach;
For men are prone to go it blind
Along the calf-paths of the mind,
And work away from sun to sun
To do what other men have done.
They follow in the beaten track,
And out and in, and forth and back,
And still their devious course pursue,
To keep the path that others do.

But how the wise old wood-gods laugh,
Who saw the first primeval calf!
Ah! many things this tale might teach —
But I am not ordained to preach.

SAM WALTER FOSS

Our purpose in this book is to start some new and straighter calf paths for the field of business policy/strategic management and perhaps along the way kill a sacred cow or two that once started crooked calf paths of their own.

To do this we begin by: (1) defining the field of business policy; (2) tracing its evolution through two basic paradigms that have characterized its history; and (3) presenting a new paradigm for business policy and a new name for it. This introduction then closes with an overview of the remainder of the book and a description of how the strategy and strategic management paradigms have been used to put the volume together.

BUSINESS POLICY AS A FIELD

Schendel and Hatten (1972) observed that "Business Policy is generally thought of as a course, not a field of study or a broader discipline." Unlike the so-called functional areas, which the policy course was originally designed to integrate, policy was not considered to be a field of study with substance of its own. Somehow, the integration of the marketing, financial, production, and other functional fields of management was to be accomplished simply by considering these topics simultaneously. In the Ford Foundation–sponsored study of business schools and their curriculum in the late 1950s, Gordon and Howell (1959: 206) perpetuated this view by stating:

> The capstone of the core curriculum should be a course in "business policy" which will give the students an opportunity to pull together what they have learned in the separate business fields and utilize this knowledge in the analysis of complex business problems.
>
> Without the responsibility of having to transmit some specific body of knowledge, the business policy course can concentrate on integrating what has already been acquired and on developing further the student's skill in using that knowledge. The course can range over the entire curriculum and beyond.

Why a single course simultaneously considering complex business problems in several different functional areas would provide the student "an opportunity to pull together what they have learned" is not so obvious as the statement implies. Could integration really be accomplished without some substantive concept or paradigm for doing it? Without going "beyond" the content of the various functional fields? As important as these questions are, at least as important is the presumption, often fatal when followed in practice, that all there is to managing the total enterprise is the task of coordinating the various functional fields and that this coordination will somehow lead to appropriate choices about the future of the firm. The economic junkyard is filled with managers and firms that thought that way. Inherent in this view of total enterprise management is the idea that the firm can be managed through the collected wisdom of various functional area experts, and all top management must do is pick and choose from what options are brought before them.

Gordon and Howell can be forgiven for such a view, for their calf paths are those of economic theory, where entrepreneurship is accorded mystical properties in enterprise formation, and management technology is accorded no value except to be included in the *ceteris paribus* conditions typical of these theories. But for more serious students of management practice, especially at the general management level, the oversight is not so easily ignored, for it reveals a serious shortcoming in curriculum design and management training, not to mention research priorities and research problems undertaken.

An examination of the evolution of the business firm serves to show that a model that fails to place entrepreneurial choice at the center of the managerial universe is one that is incapable of providing a mechanism for renewing the firm beyond its originally intended purpose.

Any successful business begins with a "key idea" for: (1) supplying a product or service, (2) that will satisfy a consumer need, (3) and in so doing will lead to an excess of revenue over costs, (4) thereby supplying the originator of the idea with an incentive (profit) to continue to provide the supply. This is easily said but very hard to do successfully. If a firm is successful it tends to grow and typically will add other product/market matches[1] that are profitable, reinforcing growth, and so on. But such growth requires, among other things, functional specialization of managerial labor if it is to be maintained.

The "key idea," that product of the entrepreneurial mind, is the central concept that is to be noted. Without it, there is no business, and indeed this same argument can easily be generalized to any type of purposive organization. This entrepreneurial choice is at the heart of the concept of strategy, and it is good strategy that insures the formation, renewal, and survival of the total enterprise, that in turn leads to an integration of the functional areas of the business and not the other way around.

Nonetheless, it is only very recently that strategy has been explicitly recognized as the central concept to business success and thus something to be managed. The reason its importance was not recognized earlier is simple. It stems from the ways most businesses are created. As we have noted, they are created by an entrepreneur with a key idea, that is, a new strategy for a business. Usually, the entrepreneur does not explicitly write out this key idea. Rather, it is kept in the entrepreneur's head where it is used to guide day-to-day decisions. Such day-to-day activities usually demand vast amounts of time and effort, while the strategy/key idea often requires little change for many years. In short, management of strategy is so fundamental and has required such little change that its very importance was overlooked or taken for granted, and therefore not recognized as the force leading and directing the efforts of the various functional areas toward a common end.

So, while there was a recognition that some integration of functional fields was necessary to achieve successful performance, the mechanism (concepts) for achieving such integration tended to be overlooked until recent times. However, since the end of World War II, major changes have occurred in the environment and nature of businesses that have required an explicit identification and understanding of the concept of strategy and its management.

The first of these changes is a significant increase in the rate of change of the environment in which businesses must compete. Moreover, the

[1] By product/market matches we mean the joint choice made by a firm of the product to produce and the market(s) in which it will offer the product. Such matches are in fact businesses, and they may or may not be profitable choices.

environment is much more interdependent than it has ever been before, leading to further complexities in the management of the firm. Thus, the birth and death of key ideas, that is of good strategies, must be expected to occur with much greater frequency than it has in the past under these new, dynamic, and interdependent environmental conditions.

The second major force motivating the recognition and use of strategy has been the massive growth in the size and complexity of business organizations themselves. Rumelt (1974) has shown that the majority of *Fortune* 500 firms has shifted from a single-product-line (single key idea) form of organization in 1949 to a multi-industry (multiple key ideas), or even multinational form of organization in 1970. Thus, the problem of integrating different functional areas in a firm such as General Electric now occurs at least four to five levels below the president's office. But there are other integration problems as well. The different businesses in such complex enterprises must also be integrated effectively, as must different cultures in the multinational enterprise, and all of these factors together must be integrated across time. Such integration has required an elaboration of the basic concept of strategy that is at the core of the policy and planning field today.

To better understand the field in its present state, however, it is necessary to examine the two paradigms that have characterized the field over the years and to describe a third, which we have used as the structure for the papers in the field and which we believe is the new paradigm around which the field will develop in the future.

POLICY FORMULATION: THE PRESTRATEGY PARADIGM

Until the early 1960s, the basic paradigm of the business policy area was the one still used in most firms and policy courses today, that of policy formulation. Policy formulation is also the paradigm from which the course and field takes its name, "Business Policy." To understand how this paradigm developed, it is necessary to review the typical evolution of a business in more detail.

As noted earlier, most firms usually offered only one class of products which they sold to one set of customers in a restricted geographic territory. In such circumstances, it was not difficult for the entrepreneur to coordinate all the functional activities of the firm in an informal fashion. However, as such firms added or modified their products and added new markets by serving new groups of customers and/or new geographic territories, it was necessary to provide formal procedures for integrating the various activities of the firm, both within different functional areas as well as across them. Thus, the marketing department needed to have the same concept of the firm's product and its markets as did the production or research departments. Such integration was achieved through the establishment of "policies" that each of the functional areas used in making their day-to-day decisions. In most circumstances, a set of such policies was usually adequate to perform the integration or coordination, since most or all of the products and markets of the firm were closely related and the role of change in the firm's environment was slow.

In both management practice and education, such policymaking came to be considered the principal task of top management. Such policies were made as the need for them became evident. Little attention was paid to anticipating any threats to the current business and its future. All growth was to come from the existing business. "Business Policy" was thus taught from a functional perspective, usually with complex cases that simply recounted the "problems" each functional area was encountering and explored the "policies" necessary to integrate them. As has been stated, this is still a widely used paradigm in many policy courses today, even though it is now a well-worn calf path two generations old.

While this paradigm failed to penetrate to the core of the business, the key idea (strategy) was so seldom threatened that it was seldom worth reexamining, although the perceptive manager was usually able to see that not all failures were the result of inefficient operations; many failures had to do with basic faults in the business' strategy which needed to be changed but were not. With the increasing size and complexity of organizations and the increasing types and magnitudes of environmental changes they faced in the 1950s and early 1960s, however, the policy formulation paradigm proved increasingly unable to deal with the key challenges facing the firm. The "policy paradigm" was simply not rich enough to cope with such massive environmental and organizational changes. Better policies were just not the answer, unless the policies were to sell the business, or to enter a new business. The answer lay instead in rethinking the core concepts of the business and the way it related to its environment, that is, in reformulating its strategy.

THE INITIAL STRATEGY PARADIGM

Recognition of these needs probably came earlier in business firms than it did in academe. One reason for this is that the business policy area had no research tradition. A second, and perhaps more important reason, was at the time there were very few scholars in the policy area throughout the country, and most of these were older faculty who had done their research while younger and in other fields and who had little training in the methods that have since proved useful for policy research. Industry, by contrast, was struggling for its very life with the problems we have noted, as Chandler's (1962) research shows. His research also marked the beginning of interest in the concept of strategy in academe from a teaching and research perspective.

Chandler (1962: 16) defined strategy as:

> . . . the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals.

This definition of strategy emphasizes *both* formation of goals and objectives (ends) and of action plans and resource commitments (means) utilized to achieve these ends. Also implicit in Chandler's definition of strategy is the search for the key idea, rather than the key idea itself; that is, Chandler really talked more about the *process* for formulating strategy than he did about the *content* of the strategy itself. Also, missing from Chandler's definition is the notion that strategy describes the essential linkage between the firm and its environment. In addition, Chandler's dictum that structure follows strategy turns out to be not the whole truth (see Galbraith and Nathanson, Section 5), for in fact structure also precedes and limits certain strategies in ongoing firms. Nevertheless, Chandler contributed the basic concept of strategy, at least to academe, and from his seminal work has sprung much of the research reported and discussed in this volume.

At about the same time that Chandler was developing his ideas, two other writers were working along similar lines. Both were much more concerned with managerial practice and education than was Chandler, who was a business historian. Ansoff (1965) and Andrews (Learned, Christensen, Andrews, and Guth, 1965)[2] offered other views of the concept of strategy. For Ansoff, strategy was discussed in terms of components, of which there were four: (1) product/market scope, (2) growth vector, (3) competitive advantage, and (4) synergy. Ansoff did not include goals and their determination in his definition. He did, however, distinguish between strategy as a statement and strategy formulation as a process.

Andrews (Learned, Christensen, Andrews, and Guth, 1965: 17) defined strategy as:

> . . . the pattern of objectives, purposes, or goals and major policies and plans for achieving these goals, stated in such a way as to define what business the company is in or is to be in and the kind of company it is or is to be.

This concept was broader than that of either Ansoff or Chandler, as is revealed by this statement (Learned, Christensen, Andrews, and Guth, 1965: 21):

> The ability to identify the four components of strategy — (1) market opportunity, (2) corporate competences and resources, (3) personal values and aspirations, and (4) acknowledged obligations to segments of society other than the stockholders — is nothing compared to the art of reconciling their implications in a final choice of purpose.

[2] Andrews's ideas were first presented in the text *Business Policy: Text and Cases,* (Homewood, Ill.: Richard D. Irwin, 1965) which he coauthored with Edmund Learned, C. Roland Christensen, and William D. Guth.

Unlike Ansoff, Andrews included goals and policies and plans in his concept of strategy, but like Ansoff he distinguished between strategy content and strategy formulation as a process. Both Andrews and Ansoff were also more concerned with economic opportunities and threats, and their internal managerial implications than was Chandler. Andrews further recognized an environment that was more than just an economic one, and he recognized that internal social and behavioral factors influenced the choice of goals and strategy and their use in the firm. It was in these latter areas that his concept was broader than that of his two contemporaries.

These initial strategy paradigms were incomplete on several counts. First, they did not distinguish between corporate-level and business-level strategy. Thus, the initial strategy model was not capable of differentiating between what has come to be called the portfolio question of what businesses to be in (corporate strategy) and the question of how to compete effectively in a given business (business strategy).

Second, the relationship between policies as a means of integrating functional areas and strategy as a means not only of integrating functional areas, but of integrating the firm with its environment across several organizational levels was not made clear. Later evolution of the concept has shown how strategy can integrate greater organizational complexity amid greater environmental turbulence.

Third, the major differences between Chandler's and Andrews's broad definitions of strategy (strategy includes both means and ends) and Ansoff's narrow definition of strategy (strategy excludes ends) was never explicitly addressed or resolved.

The process of managing strategy was not particularly well developed either. Andrews did make a distinction between strategy formulation and strategy implementation, an important contribution, but neither he, Ansoff, nor Chandler discussed in any detail the problem of managing the strategy formulation and implementation processes.

Nevertheless, over the ten-year period from 1965 to 1975 the concept of strategy came into wide use. Textbooks that once were entitled "Business Policy" or some variant thereof now contained the term "strategy" somewhere in their titles. Other writers offered different definitions of strategy, but none made the insightful forward leap that broadened the initial strategy paradigm offered by Chandler, Ansoff, and Andrews.[3]

Throughout this period, major attention of academics was given to strategy formulation, much less to strategy implementation, almost none to the basic tasks involved in managing strategy, and none to the strategic management tasks of general management work. However, practitioners with the practical problems of directing and managing organizations spent far more time and effort on strategy implementation issues than on the actual work of strategy formulation.

[3] Hofer and Schendel (1978) offer a historical development and content comparison of the strategy concept spanning this period.

In summary, the initial strategy paradigm was incomplete, in terms of: (1) the nature and clarity of the strategy concept itself; (2) the tasks associated with managing and implementing strategy; and (3) the strategic roles of the general manager. Nevertheless, evidence was accumulating that "strategic planning" paid off, but most companies did not know how to make it work for them. What was needed was a better paradigm of top-management work that would not only complete the initial strategy paradigm but also prove useful in dealing with the two major forces pressing on today's complex businesses identified earlier. What was needed was the development of the strategic management paradigm, a subject to which we now turn our attention.

THE STRATEGIC MANAGEMENT PARADIGM

Strategic management is a process that deals with the entrepreneurial work of the organization, with organizational renewal and growth, and more particularly, with developing and utilizing the strategy which is to guide the organization's operations. Before examining the tasks which make up the strategic management process, we must first clarify the nature and meaning of the strategy concept itself.

The Concept of Strategy

Based on a study of the different definitions and concepts of strategy proposed by leading authors in the field, Hofer and Schendel (1978) have developed a composite definition of strategy built around four components: (1) scope, which may be defined in terms of product/market matches and geographic territories; (2) resource deployments and distinctive competences; (3) competitive advantage; and (4) synergy; and three organizational levels: (1) corporate, (2) business, and (3) functional. While this definition excludes goals and objectives, it recognizes that the achievement of objectives is the aim of strategy and that the combination of objectives, strategy, and policies form a "grand design" or master strategy for the firm. The relationships between the different levels of strategy and the type of "integration" that each deals with is indicated in Exhibit 1.

Exhibit 1 Different Levels of Strategy

Strategy level	Integrates
1. Enterprise	1. Total organization/Society
2. Corporate	2. Businesses/Portfolio
3. Business	3. Functions/Business
4. Functional	4. Subfunctional/Function

Enterprise Strategy

Enterprise strategy, as used by Ansoff, encompasses a set of sub-strategies including: a product/market/technology strategy; a capability strategy; a resource strategy; a flexible-response strategy; a limited-growth strategy; a societal strategy; and a legitimacy strategy. Except for the latter two, all of the other sub-strategies are subsumed as components of corporate, business, and functional area strategies. While we have adopted Ansoff's strategy, we have limited its focus to social-legitimacy concerns, which are not explicitly addressed by other levels of strategy.

The increasing interrelationships of governmental units and business enterprises over questions of legitimacy are forcing business firms to reexamine their role in society and to consider whether they can be insular in their decisions and actions. Enterprise strategy attempts to integrate the firm with its broader noncontrollable environment, not in terms of product/market matches in a narrower economic sense, but in the sense of the overall role that business, as one of society's important institutions, should play in the everyday affairs of society. Questions of the governance and function of the firm, and the manner in which it will be allowed to exist, are being raised today, forcing a reexamination of both enterprise strategy and the overall mission of the firm. However, strategy at each of the other three organizational levels must be adapted to their relevant environments. We believe that such broader legitimacy considerations have always been a part of the strategy formulation process. More explicit attention will have to be given to this aspect of strategy in the future, as Ansoff suggests, just as it has been necessary to separate corporate and business strategy considerations from the problems of functional area integration, over the past two decades.

Corporate Strategy

Corporate strategy addresses the question, "What business(es) should we be in?" It also focuses on the ways that the different businesses a firm chooses to compete in should be integrated into an effective portfolio. During the early 1960s, the principal focus in practice was on the first question, as many organizations added new businesses until they became truly multimission in character. More recently, however, the principal focus in practice has been on the second question as such multimission firms have tried to rationalize the portfolios they developed. In the future both questions will be addressed equally and with more rigor than in the past.

The environment considered in corporate strategy must include not only economic considerations but also the sociopolitical and cultural considerations that Ansoff mentions in connection with enterprise strategy. The focus here is usually on how these factors will influence the future prospects of an industry rather than on the institutional legitimacy of the business organization in society.

Business Strategy

Business strategy deals with the question, "How should a firm compete in a given business?" That is, how should it position itself among its rivals in order to reach its goals? Alternately, how can it allocate its resources to achieve a competitive advantage over its rivals? Clearly, many alternatives are available, and while it is possible to suggest business strategies that work under certain conditions, current research has identified few universals that apply to all circumstances. In addition to answering the question of how to compete, business strategy has the job of integrating the various functional areas that comprise a business, much as functional area policies were once thought to do. In practice, the second task of business strategy (integrating functional area policies) received the major focus during the 1960s, while the first (how to compete) assumed greater importance during the 1970s. And, as at the corporate level, both questions will need to be addressed more rigorously in the future.

Functional Area Strategy

Functional area strategies also address two issues. First, they are intended to integrate the various subfunctional activities in the firm. Second, they are designed to relate the various functional area policies with changes in the functional area environments. For example, in marketing strategy an advertising program is coordinated with personal selling, pricing, packaging, and other marketing decision variables to develop a marketing program that is not only internally consistent but that is also consistent with the other functional areas of the business and with the perceptions and responses of the market to advertising.

The Hierarchy of Strategy

Obviously, there is a hierarchical relationship among these strategy levels, just as there is among objectives and environments. As one moves from enterprise strategy to corporate strategy to business strategy to functional strategy, one not only moves down the organizational hierarchy, one moves downward in terms of constraints. Thus, each level of strategy constrains every other level, particularly those below it, in a fashion similar to the hierarchy of objectives noted by Granger (1964). Given this broad overview of the concept of strategy, it is now appropriate to turn to an examination of the various components of the concept of strategic management.

THE CONCEPT OF STRATEGIC MANAGEMENT

There are six major tasks that comprise the strategic management process: (1) goal formation; (2) environmental analysis; (3) strategy formulation; (4) strategy evaluation; (5) strategy implementation; and (6) strategic control. These are shown in Exhibit 2, where the interrelationships of these tasks are indicated. Responsibilities for the process of strategic management, as well as those processes of operating management, are typically shared by all managers rather than being divided by level or function. Thus, no manager is responsible solely for strategic management tasks, and, except at the very lowest levels of operating management, no manager is without some responsibilities in the strategic management process.

Organizational Goal Formulation

The "first" [4] task in the strategic management process is the formulation of a set of goals for the organization. Goal formulation is a complex process that rests on a coalition based on the relative power of the stakeholders of the organization. This process may be rational in an economic sense; it may involve political processes; it may occur independently of other tasks; or it may be an integral part of other tasks, such as strategy formulation. Goal structures that are put to use in managing organizations invariably involve the use of power in some way, a point which Mintzberg uses in his paper later in this book to identify and classify different types of goal formulation processes found in practice.

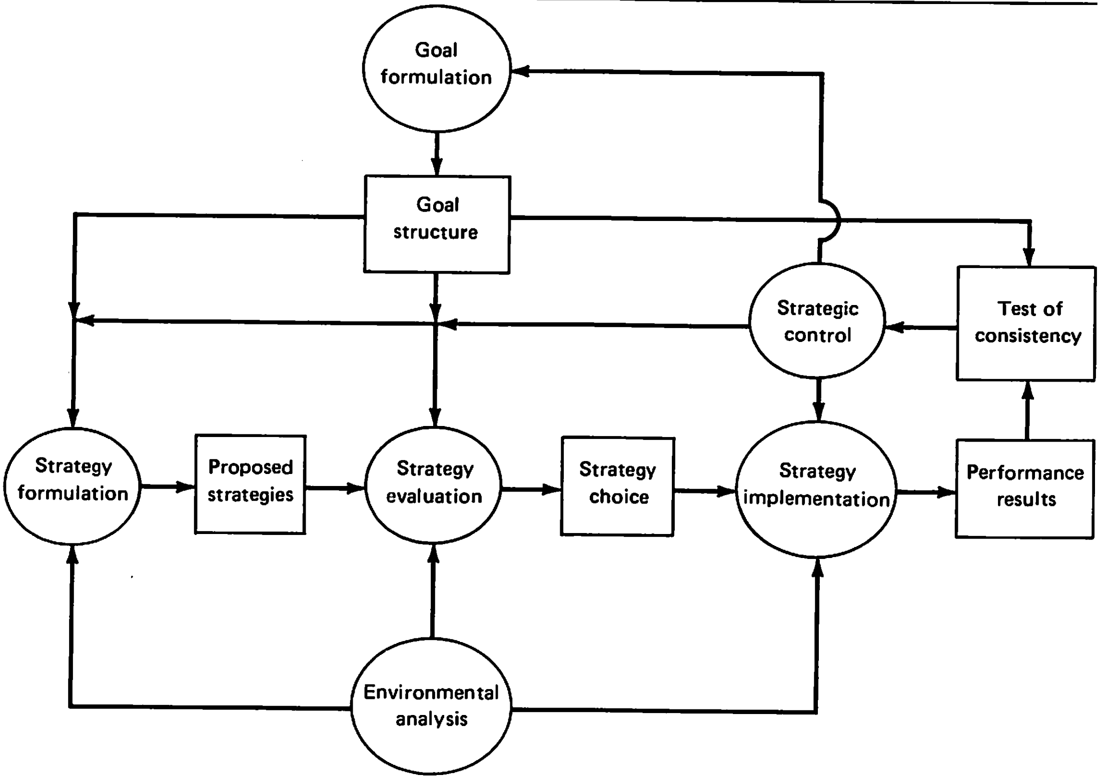
The priorities that specific goals are given, and the goal structure ultimately adopted and used in the strategic management process, are influenced by three factors: (1) the power and personal goals of stakeholders; (2) the condition of the organization (e.g., a failing business will have to give priority to economic survival); and (3) the type of organization involved (e.g., a business firm differs greatly in purpose from religious or charitable organizations). The priorities given goals will determine both how goal conflicts will be resolved and the nature of the goal hierarchy that will be used in formulating, evaluating, and implementing strategy.

Environmental Analysis

The environment in which an organization exists includes all those factors that influence goals, strategy, and structure and which the firm does not directly control. The environmental factors relevant to each strategy level vary, with each lower level constrained by the one above it.

[4] It is convenient to order these tasks sequentially. In practice, they are interactive, recycle and repeat themselves and do not move forward in sequence as neatly as described here.

Exhibit 2 An Overview of the Strategic Management Process



Because an organization cannot control [5] its environment it must make forecasts, not choices, about the environmental conditions it expects to encounter in the future. Such forecasts, really assumptions about the future, are so important that we are highlighting environmental analysis here as a separate strategic management task, even though many would consider it as a part of the strategy formulation task. (We include Utterback's paper and Klein's commentary on environmental analysis, in Section 3 which is devoted to strategy formulation.)

A major problem in environmental analysis, besides the difficulty of accurately forecasting future values of particular variables, is knowing what factors to examine in the first place. Stated differently, it may be a more serious error to overlook a factor than to forecast it inaccurately. Moreover, the magnitude of this problem is increasing as the rate of environmental change increases. Thus, while the purpose of environmental analysis and forecasting is to provide needed input to both the strategy formulation and evaluation tasks, the number and magnitude of major

[5] Even though an organization may not be able to control its environment, this does not mean it cannot influence it. This point will be explored more fully in the commentaries of MacMillan and Child in Section 3.

environmental discontinuities may require major changes in the basic content of strategies themselves. Further, an increasing proportion of an organization's resources may have to be devoted to providing the flexibility and breadth of skills necessary to survive environmental shocks, a point Ansoff explores more fully in Section 1.

Strategy Formulation

The strategy formulation task has received more attention than any of the other tasks in the strategic management process. A number of models of the strategy formulation process have been developed over the past fifteen years. These can be broken into two types: (1) those that separate the goal and strategy formulation tasks (Ansoff, 1965; Cannon, 1968; McNichols, 1972; Paine and Naumes, 1974; Glueck, 1976; Hofer and Schendel, 1978); and (2) those that combine them (LCAG, 1965; Katz, 1970; Neuman and Logan, 1971; Uyterhoeven et al., 1973). We favor the separation of goal and strategy formulation processes because it is clear that these processes are, in fact, separate in a number of organizations and because personal values and social mores are almost always much more influential in goal formulation than in strategy formulation.

At the same time, the behavioral and social systems theories of Lindblom (1959), Cyert and March (1963), and Thompson (1967), among others, have given rise to a debate over whether strategy formulation is a rational-deductive process, or whether it is a process that rests in power and coalition formation. A merger of these two alternative views appears possible and is one of the major challenges for future research. Hofer and Schendel (1978) suggest how this might be accomplished by developing an iterative process that proceeds analytically and considers personal and social values.

Strategy Evaluation

There are two basic questions to be asked in the strategy evaluation task. First, has the existing strategy been any good? Second, will the existing/proposed strategy be any good in the future? The first question is important to answer because it indicates whether the existing strategy needs to be changed. Also, it can provide valuable information about the direction in which the strategy should be changed. The second question seeks to determine whether the existing or proposed strategy will lead to accomplishment of the firm's objectives in the future given the changes that are anticipated in the firm's environment, its resources, or even its goals and objectives.

Evaluation of the existing strategy requires these steps: (1) an identification of the existing strategy in terms of its components, including its underlying goal structure and environmental assumptions; (2) a comparison of results achieved against those established; (3) a comparison of environmental assumptions made by the strategy with the changes expected based on an analysis and forecast of the future environment; and (4) a determination of whether the strategy appears capable of meeting its goals in light of the existing and expected environment. If that determination is negative, then a new strategy will be required. This evaluation task is compounded by the difficulties of separating the effects of operating inefficiencies from the effects of strategic problems.

The evaluation of the future worth of an existing or proposed strategy can be done using one or more of the following five approaches: (1) an assessment of whether the objectives the strategy is designed to achieve are internally consistent and whether the strategy is consistent with those objectives; (2) an evaluation of the quality of the analysis and organizational processes used to develop the strategy; (3) an evaluation of the content of the strategy; (4) an assessment of the ability of the organization to implement the strategy; and (5) an evaluation of the early performance results under the strategy.

In terms of the strategic management process, the task of strategy evaluation both precedes and follows the strategy formulation task. Thus, while some would include this task as part of the formulation task, its importance, its difficulty, and its relationship to strategic control all suggest that it should be considered as a separate task.

Strategy Implementation

Strategy implementation is different from the previous tasks in the strategic management process in several important respects. First, implementation is essentially an administrative task, while goal setting, environmental analysis, strategy formulation, and strategy evaluation can be accomplished analytically and independently of the organization, although that usually is not the best way to do them.

Second, even if the previous four tasks were accomplished in a technical, rational-deductive manner, and were done independently of behavioral and social systems considerations, the implementation task is inherently behavioral in nature. It is this fact that has led a number of researchers to believe that strategy formulation cannot be a rational-deductive process, some because their research does not reveal the earlier tasks being performed at all, and others because they believe that personal goals will always take precedence over organizational goals, even in economically oriented business firms. The reconciliation of social/political processes used in implementation with analytical/rational processes used in strategy formulation and evaluation represents another major research challenge for the strategic management area.

Finally, while implementation has traditionally been viewed as the last step in the strategic management process, and even though Chandler's research suggests that structure follows strategy, in ongoing organizations administrative structure and processes (more broadly conceived than the simple organization hierarchy)[6] also influence strategy. In fact, a case can be made that structure and processes should be considered a component of strategy in order to force attention to the implementation problem.

Strategic Control

The "last" task in the strategic management process is that of strategic control. Strategic control focuses on the dual questions of whether: (1) the strategy is being implemented as planned; and (2) the results produced by the strategy are those intended. The basic criteria used to answer these questions are derived from: (1) the strategy and action plans developed to implement strategy; and (2) the performance results that strategy is expected to produce. If a deviation occurs, then feedback takes place and the strategic management process recycles, as indicated in Exhibit 2.

Strategic control is just emerging conceptually as an important task in the strategic management process. Like other important areas, such as social responsibility, separate consideration was not given to strategic control in terms of an invited paper. Yet there are a number of questions worthy of further investigation and new conceptual thinking concerning strategic control. For example, what criteria should the firm use to assess whether the strategy in use is the one that is intended to be used? Katz (1970) raised this question when he distinguished between an organization's "strategic posture" and its strategy. If performance results do not match established objectives, what part of the variance is attributable to the strategy, and what part to inefficiency or poor execution by operating management? These and other questions remain before us and will make the strategic control task an exciting one for future research.

THE STRUCTURE OF THE BOOK

It was the strategic management paradigm described above that guided our partitioning of the field and led to fourteen invited papers which we have grouped into ten sets or sections of related papers. The sections and authors are shown in Exhibit 3, together with the discussants for each paper.

Section 1 reviews the evolution of the strategic problem and the cor-

[6] The terms "structure" and "process" are used here to encompass: (1) the pattern of hierarchical and lateral linkages among decision-making positions in the organization and the information flows associated with these patterns; (2) the informal organizational and interpersonal relationships that exist within the organization; (3) the various organizational systems and processes such as planning, resource allocation, measurement and evaluation, reward, etc. that influence managerial and employee task behavior; (4) the organizational philosophies, management style, and other behavioral functions that together establish the climate and culture of the organization; and (5) the control systems employed by the organization to ensure that desired results are achieved.

Exhibit 3 Topics and Authors Contained in the Book

Section topic	Authors	Commentary
1. Strategy and strategic management	Ansoff	Newman Dill
2. Organizational goals and goal formulation	Mintzberg	Richards Murray
3. Strategy formulation	Grant/King Utterback Bower/Doz	Channon Klein MacMillan Child
4. Strategy evaluation	Rumelt	Kirchhoff
5. Strategy implementation	Lorange Galbraith/Nathanson	Hekhuis Henry Wrigley Miner
6. Strategic management and organization types	Cooper Berg/Pitts Wortman	Susbauer Vesper Brandenburg Spender
7. Theory building and theory testing in strategic management	Steiner Duncan Hatten	Paine Naumes
8. Teaching implications of policy and planning research	Unterman Hegarty	
9. Practitioners' views: policy and planning research	Charan	Aines/Ball Knoepfel/Lancey
10. Research needs and issues in strategic management	Schendel/Hofer	

responding paradigms of strategy and strategic management. It then goes on to suggest some ways that the strategic management paradigm may have to change in the future. The topic paper is authored by H. Igor Ansoff and is discussed by William Newman and William Dill, each of whom have been important contributors to the evolution of the concepts presented in this book.

Section 2 deals with the problem of goals, the ends that strategies are intended to achieve. We have identified goal formulation and goal structures as a separate topic to indicate both their importance and the distinction between goals and strategy, a distinction that is not always made in the literature to date. Henry Mintzberg, in the topic paper, presents a provocative view of the role of power in goal formation. Max Richards and Edwin Murray complement Mintzberg's paper by examining more carefully the goal structure notion and the ways it might be researched.

Strategy formulation is taken up in the third set of papers. First, various analytical, rational-deductive approaches to strategy formulation are taken up in John Grant's and William King's topic paper with commentary by Derek Channon. Then, environmental analysis and forecasting is examined by James Utterback, in his invited paper, as one aspect of the strategy formulation process. Harold Klein offers a commentary that focuses primarily on the problems of incorporating environmental analyses and forecasts into the strategy formulation process. Joseph Bower and Yves Doz then take up some of the internal political and social system aspects of strategy formulation. Ian MacMillan and John Child conclude the section with a discussion of the use of political models in strategic anticipation (a variety of environmental forecasting) and interorganizational strategies.

The fourth set of papers deals with strategy evaluation. Richard Rumelt authors the topic paper in Section 4 and provides a thorough analysis of both contextual and context free models in strategy evaluation. Bruce Kirchhoff then discusses several other types of strategy evaluation approaches and provides a general critique of Rumelt's paper.

Strategy implementation is taken up in the fifth set of papers. Peter Lorange explores the area of formal planning systems and discusses usage of such systems in both strategy formulation and strategy implementation. His observations are elaborated by Dale Hekhuis and Harold Henry. Jay Galbraith and Daniel Nathanson then discuss the structural and process aspects of strategy implementation, with particular attention to research on the relationship of strategy and structure from Chandler's seminal work onward. Leonard Wrigley's and John Miner's papers elaborate and critique Galbraith's and Nathanson's observations in several interesting ways.

The sixth set of papers deals with strategic management in three important organizational typologies. First, Arnold Cooper examines the unique aspects of the strategic management tasks in small businesses where the pure entrepreneurial character of strategic management is perhaps seen best. Jeffrey Susbauer and Karl Vesper offer two interesting supplements to Cooper's views. Next, Norman Berg and Robert Pitts discuss the unique problems of strategic management in the multimission or multiple business organization. Richard Brandenburg extends their observations with a practitioner's view of strategic management in such organizations. Finally, Max Wortman explores the unusual challenge of strategic management in not-for-profit organizations.

Having explored the content and direction of the evolving field of strategic management, our attention turns from the shape of these ideas to their implications for research, teaching, and management practice.

First, Section 7 deals with theory building and theory testing in the strategic management field. This section begins with J-C. Spender's commentary on the philosophy behind theory building and theory testing in strategic management research. Next, George Steiner's paper discusses various contingency views of goal formulation, strategy formulation, strategy content, strategy evaluation, organizational design, leadership, and so on. In particular, Steiner explores four broad streams of contingency theories that have evolved to date and suggests some ways these streams may develop in the future. Frank Paine then shows how the various contingency theories based on behavioral traditions that are identified in Steiner's paper might be combined into a single contingency theory of strategic management. Then, Robert Duncan takes up the subject of qualitative research methodologies such as field research methods as they apply to strategic management research. Next, Kenneth Hatten considers quantitative data analysis tools useful in strategic management research. Finally, William Naumes discusses both the Duncan and the Hatten papers and adds perspective through his development of simulation and gaming approaches.

Section 8 deals with the teaching implications of the previous papers. First, Israel Unterman notes that it is clear that the field of strategic management is indeed a discipline with a substantial content of its own. He then explores the implications of this fact for policy curricula, for the traditional policy course, and for the training of policy faculty. W. Harvey Hegarty then examines various ways that the ideas contained in each of the topic papers might be built into the traditional policy course.

The ninth set of papers examines the implications of the research reviewed in the book for industry practice. Here Ram Charan draws together the views of the industry spokesman in attendance at the conference. In particular, Ronald Aines, Benjamin Ball, Rudolf Knoepfel, and Roderic Lancey offer their comments on the conference papers and discussions from the viewpoint of management practice, which includes the perspectives of both corporate planners and a chief executive officer.

The final section summarizes what we believe are the research implications of the various papers and commentaries and suggests future research needs, opportunities, and priorities for the field. A unique aspect of this discussion is that it is based in part on a Delphi study of the conference participants' thoughts done after their attendance at the conference.

In each section that follows, we provide: an introduction to each section that gives our views as to why the topic(s) was selected; what we believe the highlights of each paper to be; what we believe the discussants have had to say; and finally, to provide our own comments and opinions about significant issues developed in each section. From time to time, we have included appropriate comments on the implications of the papers and commentary for teaching, practice, and research, although for the most part such comments are reserved for later sections of the book specifically devoted to such implications. Above all, understand these comments are our opinions, not all of which the reader or the authors will hold in the same regard we do.

After the comments we make, the topic papers and the commentary papers follow. Hopefully, our remarks will help the reader more quickly isolate the key issues in each paper and otherwise aid the reader in understanding the issues and their significance to strategic management.

The references for each paper are listed at the end of each section, not at the end of each paper, as might be more customary. This was done to avoid unnecessary duplication of individual citations.

References

Ansoff, H. Igor. *Corporate Strategy: An Analytic Approach to Business Policy for Growth and Expansion.* New York: McGraw-Hill, 1965.

Cannon, J. Thomas. *Business Strategy and Policy.* New York: Harcourt, Brace and World, 1968.

Chandler, Alfred D. *Strategy and Structure: Chapters in the History of the American Industrial Enterprise.* Cambridge, Mass.: M.I.T. Press, 1962.

Cyert, Richard M. and James G. March. *A Behavioral Theory of the Firm.* Englewood Cliffs, N.J.: Prentice-Hall, 1963.

Glueck, William F. *Business Policy: Strategy Formation and Management Action.* New York: McGraw-Hill, 1976.

Gordon, Robert A. and James E. Howell. *Higher Education for Business.* New York: Columbia University Press, 1959.

Granger, Charles H. "The Hierarchy of Objectives." *Harvard Business Review,* May–June 1964.

Hofer, Charles W. and Dan E. Schendel. *Strategy Formulation: Analytical Concepts.* St. Paul: West Publishing Co., 1978.

Katz, Robert L. *Cases and Concepts in Corporate Strategy.* Englewood Cliffs, N.J.: Prentice-Hall, 1970.

Kuhn, Thomas S. *The Structure of Scientific Revolutions.* Chicago: University of Chicago Press, 1970.

Learned, Edmund P., C. Roland Christensen, Kenneth R. Andrews and William D. Guth. *Business Policy: Text and Cases.* Homewood, Ill.: Richard D. Irwin, 1965.

Lindblom, Charles E. "The Science of 'Muddling Through.'" *Public Administration Review,* Spring 1959.

McNichols, Thomas J. *Policy Making and Executive Action: Cases on Business Policy.* New York: McGraw-Hill, 1972.

Newman, William H. and James P. Logan. *Strategy, Policy, and Central Management.* Cincinnati, Ohio: South-Western, 1971.

Paine, Frank T. and William Naumes. *Strategy and Policy Formation: An Integrative Approach.* Philadelphia: Saunders, 1974.

Rumelt, Richard P. *Strategy, Structure, and Economic Performance.* Boston: Graduate School of Business Administration, Harvard University, 1974.

Schendel, Dan E. and Kenneth J. Hatten. "Business Policy or Strategic Management: A Broader View for an Emerging Discipline." *Academy of Management Proceedings,* August 1972.

Thompson, James D. *Organizations in Action.* New York: McGraw-Hill, 1967.

Uyterhoeven, Hugo, Robert Ackerman and John Rosenblum. *Strategy and Organization.* Homewood, Ill.: Richard D. Irwin, 1973.

10

RESEARCH NEEDS AND ISSUES IN STRATEGIC MANAGEMENT

Dan Schendel
Purdue University

Charles W. Hofer
Columbia University

Careful review of the previous nine sections and our Introduction to this volume suggests many areas in which research needs and opportunities exist to modify, broaden, and test the strategic management paradigm. In this section, we will summarize, elaborate upon, and add to the research needs and opportunities that have already been identified and developed in the various papers. Many of these ideas are based on a modified, two-round Delphi study we undertook. The panel for the study was composed of the paper authors, discussants, and panel moderators, some fifty-six scholars in all, who attended the conference. The panel members were asked to provide their thoughts as they had developed during the summer immediately following the May 1977 conference. Hence, the observations that follow are based on: (1) the strategic management paradigm; (2) the papers and commentary in this volume; (3) the conference discussions, (4) the results of the Delphi study; and (5) our own experiences and biases.

In developing this section, we decided to follow the sequence of topics contained in the text, with the exception that we have added back topics such as Board of Directors and Social Responsibility that we were unable to include in the conference because of time constraints. In each area, our interest is not in casting up specific hypotheses, nor suggesting particular research methods and approaches that could be used in the given topic area, but rather, it is in pointing the way toward additional work that appears needed and would make useful contributions to the field. These views are offered both as a summary of the book and as a guide to those who want a better perspective on research in the field, or who are in search of ideas and issues that they might research themselves.

Research issues, needs and opportunities are offered in the following areas:

1. Strategy Concept
2. Strategic Management Process
3. Boards of Directors: The External-Internal Interface
4. General Management Roles in Strategic Management
5. Goal Formulation and Goal Structures
6. Social Responsibility
7. Strategy Formulation
8. Environmental Analysis
9. Strategy Evaluation
10. Strategy Content
11. Formal Planning Systems
12. Strategy Implementation
13. Strategic Control
14. Entrepreneurship and New Ventures
15. Multibusiness/Multicultural Firms
16. Strategic Management in Not-for-Profit Organizations
17. Public Policy and Strategic Management
18. Research Methods in Strategic Management

Clearly, there is room for overlap among these topics, as a review of the text will show. Our comments under each topic should not, therefore, be regarded as solely applicable to that area alone, even though such overlaps will not always be addressed explicitly. Nor can we elaborate each issue, idea, or comment so that the reader will be able to translate it directly into a research proposal. Our intention is to suggest and provoke further thought and ideas for others.

Under each topic, we will begin by briefly discussing what we include in that topic. While not everyone will agree with our classification system, we will at least make clearer what we believe the major content of each topic to be. Finally, the reader should note that these brief statements are not exhaustive descriptions of each topic area.

STRATEGY CONCEPT

Strategy is the key concept underlying the new direction of the strategic management field. The purpose of strategy is to provide directional cues to the organization that permit it to achieve its objectives, while responding to the opportunities and threats in its environment. Our strategy definition thus excludes goals, the processes by which goals are formulated, and the processes by which strategy itself is formulated.

Some issues relevant to the strategy construct are:

1. A definition of the strategy construct acceptable and usable by all is needed. In particular, a definition is needed that will lend itself to measurement, comparison among firms, and which can be related to goals and ob-

jectives, as well as to performance results. Above all, careless, imprecise use of this term should be avoided.

2. A distinction has been made in this text and elsewhere between corporate, business, and functional area strategies. All three levels seem to have the same overall purpose and components. However, the relationship between levels needs to be better understood.

3. Functional area strategies bear much more investigation and use than they normally receive in research or teaching. Such strategies should be regarded as necessary linkages between business strategy and the guidance that operating management requires for its day-to-day work.

4. The concept of strategy needs to be further tested empirically to provide more evidence that strategies differ among firms and that better strategies make a difference in performance results. Some support exists for this position, but more is needed.

5. The frequency with which an organization can significantly change its strategy is something we know little about. Can an organization afford frequent, and substantial changes in strategy? What happens to structure, processes, and behavior when strategy changes significantly?

STRATEGIC MANAGEMENT PROCESS

Our view of the strategic management process was developed in the Introduction to the book, and was depicted in Exhibit 2. That process includes more tasks than the traditional dual concerns of strategy formulation and implementation. As such, the process represents a new organizing paradigm for the field, and, we believe, breaks the field into component parts in such a way that research can proceed in each part without having to encompass the field's complexity, and yet in a way that permits the research to be effectively integrated back into the total strategic management process.

Issues that deserve further attention include:

1. The process proposed here bears critical examination and possible further development as to the tasks it includes and that appear separable, operational, and researchable.

2. The strategic management paradigm should be tested by using it as a taxonomy for research on a cross section of firms of all types (new ventures, medium-sized businesses, multi-industry firms, multinational firms, etc.) to identify how each organizes and performs the different tasks of the overall process.

3. The process should be examined and tested in terms of its value to not-for-profit organizations (churches, hospitals, government agencies, schools, etc.). Tests should also be made to see if the nature of the process is independent of organization type. Such tests might also be done on organizations in different cultures to learn how different societal values affect the process.

BOARDS OF DIRECTORS: THE EXTERNAL-INTERNAL INTERFACE

In Section 2 some interesting hypotheses about the role of external environmental influences on internal organizational actions were developed. The board has been the traditional mechanism in businesses, and these days in third-sector, quasi-public/private organizations as well, for providing an intersection of external and internal influences. Some interesting research issues and opportunities in this area include:

1. A better understanding of the processes by which external environmental influences affect internal organizational decisions, including strategic decisions, is needed. For example, Mintzberg hypothesizes that: "Influencers have power in the external coalition to the extent that they are *concentrated* and to the extent that the organization is *dependent upon them.*" Is this true? He also speculates on the mechanisms by which the external coalition affects internal choice. Is he correct? If so, which of the mechanisms is most important?
2. In large, well-established, publicly held corporations, are boards captives of management until some crisis emerges that requires them to challenge managerial leadership? If so, is this bad? If true, what could be done to establish the board's independence when crises are not present?
3. Can board practices and roles as developed in businesses be used as models for the design of external governance mechanisms for not-for-profit organizations, and for third-sector organizations?
4. If boards are not considered suitably responsive to their environment and that of the firm, can this be corrected through changes in board structure and how it operates? If not, what other mechanisms for change exist?
5. What is the board's role in goal formulation? In strategy formulation? In the other tasks in the strategic management process?

GENERAL MANAGEMENT ROLES IN THE STRATEGIC MANAGEMENT PROCESS

General managers have responsibilities in both strategic and operating management. A number of interesting issues and questions can be developed regarding the roles and behavior of general managers in the strategic management process, including:

1. How do (should) general managers allocate their efforts between strategic and operations management duties? What represents a full load of activity? How can performance measures be devised that adequately recognize responsibilities of general managers in each of these areas, and adequately balance short-term operating results and longer-term strategic results? What reward mechanisms are needed to balance long- and short-term considerations?

2. What is the impact of managerial style on strategic decisions?
3. Better descriptions of executive work and behavior at the uppermost levels of organizations are needed. There has been interesting work done here, but the sample size has been quite small and has not included *Fortune* 500 type firms. Much more needs to be done.
4. How do top executives form perceptions of their environments?
5. What will be the impact of increasing professionalism on the part of upper-level executives with respect to formal planning systems? Will such better trained managers take on more of the planning functions themselves, thereby reducing the need for staff help?

GOAL FORMULATION AND GOAL STRUCTURES

Organizations form and are maintained in order to achieve purpose. Such purposes or missions presumably give rise to goals, and these in turn to a hierarchy of objectives. It has been well established that personal goals can conflict within an organization, requiring some conflict resolution process for their settlement. There are a variety of goal formulation processes that can be proposed, some based on power and bargaining, some on competition and economic survival, and still others on a combination of these approaches. But whether the process is a rational/deductive one or a social/political one, goal structures do arise and are used to manage the affairs of organizations.

Some research issues and needs in this area include:

1. Most behavioral research that has been done on the usage of goals in organizations has been done at relatively low organizational levels. Research is needed at middle and upper levels of organizations to better understand the role of goals in top management behavior.
2. The influence of goal structures on the strategy formulation process needs further study at all levels of the organization, especially to identify whether and how goals and objectives are modified during the search for feasible strategies. In other words, what interrelationships exist between strategy formulation and goal formulation processes?
3. In business firms, growth versus profitability are advanced as two competing objectives. What is the trade-off between them and how is it made? Over what time horizon? What other common trade-offs are made? How do such trade-offs relate to life-cycle considerations?
4. The goal formulation models resting on power as developed in Section 2 should be considered as the basis for further study of goal formulation processes and goal content, especially because they are applicable at the highest organizational levels.
5. The role of goal structure in strategy evaluation and strategic control needs to be further developed. How are goals and objectives used to develop standards or criteria useful in evaluation and control?

6. How are goals and objectives factored within an organization to provide a hierarchy of consistent and usable targets for directing and evaluating organizational and managerial effort? Is this a process that begins at the top, bottom, or proceeds through the organization hierarchy in some other way? Is the concept of an interrelated, hierarchy of goals and objectives useful, and can one be developed in an organization? Do they occur naturally?

SOCIAL RESPONSIBILITY

Socially responsible firms are said to participate in many cost-incurring activities that are not required by competitive, legal, or regulatory requirements. Some issues in the social responsibility area that are relevant include:

1. Does being socially responsible mean the incurrence of costs not required by law and competitive factors? Does social responsibility have a role in management practice? Does it have a basis in economic theory? In formulating strategy should firms incur costs that go beyond a direct association with the basic goods and services they are providing?
2. How do (should) social concerns influence goals and strategy formation?
3. What are the trends in terms of the business/society/government interface? What mechanisms are needed to forecast, analyze, and otherwise prepare strategic managers for changes in this area?
4. Can (should) firms affect public sector decision-making? If so, how?
5. What will be the specific impact of "industrial democracy" on the firm? Should U.S. firms take a more active position on such trends?
6. What will be the impact of the increasing growth of government-owned business operations on privately owned firms? This is of particular relevance in international competition, where many barriers to competition exist in many foreign markets.

STRATEGY FORMULATION

Strategy formulation involves: (1) the identification of strategic issues and problems which suggest that strategy needs to be reformulated; (2) the creative process of generating alternative strategies; and (3) the identification and evaluation of the consequences of each alternative were it to be chosen. It is the creative aspect of problem-solving — defining the problem, and proposing and evaluating the consequences of solutions — that is at the heart of strategy formulation.

The issues that bear further investigation in this area include:

1. What events do (should) trigger the strategy formulation process? In

a reactive system this may be a more meaningful question than in an adaptive, cyclically repeating strategy formulation process.

2. Who decides and how do they decide that strategy needs to be changed? How do they determine the direction and nature of the changes needed? What processes and information are used to make such decisions?

3. An exhaustive description of strategy formulation processes has yet to be devised. Better descriptive work is necessary to try to create a taxonomy of such processes. In particular, the process types need to be studied and classified in terms of contingent variables such as organization size, rate of environmental change, competitive situation, effectiveness, etc. It may be possible to develop an evolutionary model of the strategy formulation process (and the strategic management process) in terms of one or more of these contingent variables.

4. How do entrepreneurs form the initial idea or strategy for forming a business? Is it related to the personal characteristics of entrepreneurs, or to other situational factors, or both?

5. If there exists a hierarchy of strategy, which seems to be the case, does (should) there exist alternative strategy formulation processes suited to each strategy and organizational level? If so, how do (should) these processes interrelate?

6. Who should be involved in strategy formulation? What kind of organizational relationships should exist and what types of organizational assignments need to be made to accomplish the strategy formulation task? How does this vary by organization type?

7. What is the role of analytical models in strategy formulation? What needs exist for better or different analytical models at the various levels at which strategy formulation must take place?

8. How do structural factors influence strategy formulation, that is, does strategy sometimes follow structure? What are the mechanisms by which this occurs?

ENVIRONMENTAL ANALYSIS

An organization's environment is composed of those noncontrollable variables that influence its strategy at each of the three strategy levels. Relevant environmental variables can be classified as technological; economic, including suppliers and competitive factors; social/cultural, including demographic factors; and political/legal in the broadest sense of those terms. Because these variables are noncontrollable, they must be forecast and assumptions made about them, and the organization's strategy adapted to them. Issues worth further investigation in this area are:

1. Perhaps the greatest need in this topic area is for better models of competitive market structures and the influence of such market structures

on strategy. Much better understanding of the influence of competition on strategies is also needed.

2. The effects of different rates of environmental change on strategy formulation should be further studied, because higher rates of change introduce greater uncertainty. For instance, does uncertainty cause substantial changes in the manner in which strategy is formulated? In the content of strategy?

3. What needs exist for better environmental forecasting methods, especially with respect to noneconomic environmental factors such as social/cultural and political/legal trends? Methodologies capable of analyzing and forecasting the interrelationships of large numbers of increasingly interdependent environmental variables are also required.

STRATEGY EVALUATION

Strategy evaluation deals with both the decision to reevaluate *existing* strategy to determine whether it should be changed, and with the evaluation of *proposed* strategies to help decide which should be chosen for implementation. The separation of this area from strategy formulation gives rise to a series of questions, including these:

1. What models can be used to evaluate strategy content? Of what value are firm (vs. industry) specific models of strategy developed from existing experience and data using mathematical statistics? (Are such mathematical models useful in other tasks in the strategic management process, e.g., strategy formulation?)

2. What is the relationship of strategy evaluation to the subsequent task of strategic control? These two processes are different, especially in their respective purposes, yet they both rely on goals and objectives for criteria development. What are the similarities and differences in the two tasks?

STRATEGY CONTENT AND PERFORMANCE RESULTS

Both theoretical arguments and recent empirical studies seem to indicate that good strategies produce superior results. Because of this, much attention has been given to developing various contingency theories of strategy content.

For a given set of environmental circumstances, such theories specify the types of strategies the firm should follow either: (1) to survive, or (2) to become a leader in the market. Most of the contingency theories developed from the business policy case tradition are of the former type. The findings of the PIMS program are the primary examples of the latter type. Few of these propositions about good strategy content have been tested empirically with data different from that used to develop them. Such evaluation is usually based on an assessment of the performance results, usually measured by profitability criteria, that the strategy produces. Research issues in the area of strategy content include these:

1. Strategy content studies depend upon developing an empirically measurable definition of strategy, which appears will have to be done in terms of components and variables within each component. Are there other ways of defining strategy? Which ways seem most useful for the enhancement of strategic management research?
2. How can the relative influence of strategic versus operating factors be separated in determining successful performance results? In other words, how can performance be attributed to doing the right things (effectiveness) versus doing things right (efficiency)?
3. How can success be measured in terms of performance results? If organizational objectives are to be used, how can multiple objectives be measured in composite and used? How can multiple criterion functions be established?
4. How valid are comparative, cross-sectional studies of strategy content, given that strategies are designed to create statistically nonhomogeneous groups of firms? Is there any purpose served by combining firms across industries into samples for study? What are the benefits and limitations of this approach?
5. Different strategies are required for different environmental circumstances. What do we know about, for example, capital management under inflationary conditions, high growth rate economies, public intervention? About other sets of conditions?
6. What can be learned about strategy content by studying samples of firms with unique performance results, for example, either no- or slow-growth rates, or exceptionally high growth rates?
7. There is a host of contingency strategies being offered as general solutions to strategic problems. For example, experience curve advocates argue that increasing experience leads to constantly decreasing constant dollar per unit costs. Competitive pressure requires that prices be constantly lowered if market share is to be maintained. Is it necessary to maintain market share leadership to be profitable and viable?
8. Are effective strategies transferable across cultures? If so, are there any limits to such transfers? If not, what causes the differences?

FORMAL PLANNING SYSTEMS

Formal planning systems include strategic planning systems. The latter are the manifestation of the strategic management process in most business firms. Traditionally, the purpose of strategic planning systems has been to provide the organizational context necessary for the formulation of strategy. In order to be effective, such systems require the support of top management. When such support is withdrawn, these systems are usually either disbanded or combined into the existing operations planning systems (including budgeting and control systems). In the latter cases, or where strategic planning systems have never been developed, the formal planning system is used more in implementation than formulation of strategy. Its function in such cases is to factor overall corporate goals and objectives into their subunit counterparts and to help develop operating plans for the achievement of these objectives. In the best strategic planning practice today, formulating, evaluating, implementing, and controlling strategy are all tasks performed by the formal planning system.

In this area, these issues bear further investigation:

1. It appears increasingly likely that a contingency approach needs to be taken to formal planning system design. What are the variables upon which such designs should be contingent? What is the nature of the contingency relationships themselves?
2. What roles should staff and line managers play in the formal planning system? What inputs should each have in the strategic management process?
3. How can the effectiveness of different formal planning system designs be evaluated in practice?

STRATEGY IMPLEMENTATION

Strategy implementation is better understood than most of the other tasks in the strategic management process. Implementation is an administrative task that uses the tools of structure, process, and behavior to achieve its ends. Its scope goes well beyond reporting relationships, delegation of authority, and information flow, to include such organizational systems and processes as resource allocations, measurement and evaluation, rewards and sanctions, management control, and personnel selection and development, and such behavioral considerations as leadership style, the acquisition and use of power, and interpersonal behavior. Some of the interesting questions and issues worth further attention include:

1. The strategy-structure-performance linkage deserves additional study. A series of studies has now been done, most of which corroborate the hypothesis in the opinion of the researchers involved. However, as Miner notes, their contentions are not always backed by the statistical data they have gathered. Is Miner correct when he argues that a structure/people fit is more important?
2. The stages of growth model needs to be broadened at both ends of the spectrum of organizational evolution. The start-up stage for small business could be a useful "stage" of development to study, even though it may be a transitory one. At the other end of the spectrum there may be

further organizational stages beyond the multidivisional business stage. What will be the nature of the next stages?

3. What structural, process, and behavioral problems occur under conditions of high growth rate strategies? Under no- and slow-growth rate strategies? What problems are created for using and changing strategy under such extreme conditions?

4. What influence do different organization structures have on resource allocation decisions made, not by capital markets, but by internal management decisions? (Theory would suggest that these allocations are not efficient in the sense of the efficient capital market hypothesis, although Williamson argues otherwise. Yet many such decisions have been removed from the capital market. What is at work in this seeming paradox?)

5. Better and more complete definitions of structure are required. Better means multivariate definitions, which can be measured and operationalized for use with statistical analysis techniques.

6. The role of measurement, evaluation, and reward systems as mediating variables capable of reconciling personal/organizational goals and short- versus long-range goals needs to be better understood, at all levels of complex organizations. In particular, the methods used to measure and compensate profit center and SBU general managers in multi-industry firms require attention.

7. The linkage between strategic and operating plans, and between strategic and operations management, needs further examination as to how it can be made. How can the implementation task be accomplished to most effectively link strategic and operating tasks?

8. How does the relative importance of structure, process, and behavior as tools for influencing task behavior change according to the stage of evolution of the organization?

STRATEGIC CONTROL

The essence of strategic control is to insure that the strategy selected is in fact being used, and if used, that it is producing the performance results that it was intended to achieve. Strategic control differs from financial controls and the budgetary controls used in operating management in terms of the scope and time horizon of its concerns. It is less interested in efficiency in an input/output sense than it is in assuring the proper direction and rate of progress of the organization toward its strategic goals and objectives.

These issues concerning strategic control seem worthy of attention:

1. The relationship of strategic control to strategy evaluation, the organization's goal structure, and to operational controls such as budgeting, needs to be further developed. The mechanisms for integrating the strategic control function into the organization's formal planning system also need to be studied.

2. What types of indices should be used to assess whether the strategy

selected is the strategy in use? What types of indices should be used to assess whether the strategy in use is producing the desired results? What tolerance limits should be established for each type of index? What time lags are reasonable? Will these factors vary with the degree of environmental uncertainty? With other factors?

ENTREPRENEURSHIP AND NEW VENTURES

All new firms, and perhaps all new organizations, owe their birth to the activities of entrepreneurs who undertake the risks and supply the ideas and strategy necessary to start them. New ventures are numerous. Relatively few survive, however, and even fewer grow into large organizations. Nevertheless, the birth process is necessary; and survival, regardless of size, requires a renewal of the key ideas on which the organization is built. In this overlooked field, these issues seem important:

1. What changes are demanded of the firm's entrepreneur/manager(s) as it grows in size and complexity, i.e., as it evolves through "stages of growth?" Can these changes be made by its founders, or must new generations of managers take over to move the firm to new stages of evolution?
2. How do entrepreneurs learn of noninstitutional sources of venture capital? What communications links exist in this area and how can these be expanded to geographic areas where the rates of new venture formation are low? What is role of capital versus new ideas and new strategies in enterprise formation? Which is more important?
3. What is the role of incubator organizations in starting new firms, especially new firms that are not in high technology industries? What are the sources of entrepreneurs?
4. Rates of new venture formation and the nature of entrepreneurship may differ by geographic region. Why are some geographic areas more prolific in spawning new ventures and entrepreneurs? If any causal factors are discovered (how can they be discovered?), can they be translated from one productive area to another? How?
5. How does entrepreneurship arise in large organizations and how can large firms retain the new ventures that they spawn? How can it be encouraged in such organizations? What are the strategic problems in managing new ventures within large organizations?

MULTIBUSINESS/MULTICULTURAL FIRMS

Large-scale, diversified firms are an organization form that has come into prominence during the last thirty years. The continuing growth of such organizations and their importance to the economy give rise to some very interesting questions that have not been satisfactorily investigated or answered, including these:

1. Why have diversified firms arisen generally? There are rational reasons to explain vertical and horizontal diversification, but the reasons for conglomerate diversification are less clear. Is the development of the latter due to synergies in capital formation, synergies in managerial skills, or is the need for power among top-level managers a better explanation? Why cannot financial institutions supply capital needs to individual businesses as cheaply as corporate-level agglomerations of businesses and managers can?
2. How are corporate-level strategies formed, and do such strategies integrate and provide guidance to business-level strategy? What is the content of corporate-level strategy, and in particular, are some corporate strategies better than others? Much more study on strategy content at the corporate level is needed.
3. What are the implications for structural design in transferring capital out of one stagnant or shrinking business and into a growing business? What behavior problems do such actions produce for the members of the harvested business? What are the public policy issues in allowing such capital reallocation? What public policies have encouraged such transfers?
4. What managerial problems are created by having businesses in the same corporation with different types of organization structures? How do such mixed-mode structures arise, and can they be managed as well as businesses with similar structures?
5. What are the problems in strategic control across organization level — as between corporate, business, and functional area strategies within the multibusiness firm?
6. What are the problems in multicultural environmental analysis? How can diverse inputs be made into a total environmental analysis useful in formulating corporate strategy?
7. What are the special problems in transferring manufacturing, marketing, and other technologies across geographic territories and different cultures?
8. Apparently there are differences in performance results, strategies, and other matters associated with internal diversification versus diversification through acquisition. What can be learned from replicating the early studies indicative of these differences? Is there a difference in profitability results between internal diversifiers and acquisitive diversifiers?
9. Are there corollaries to multibusiness, multicultural organizations in nonbusiness organizations? If so, what can be learned from comparative studies of such business and nonbusiness organization forms?

STRATEGIC MANAGEMENT IN THE NOT-FOR-PROFIT ORGANIZATION

Over the past decade or so, the highest growth rates in organization formation and development have been in not-for-profit organizations, particularly in U.S. federal agencies and other government organizations.

These organizations seem to have a short-term outlook, owed perhaps to their political nature, itself dependent upon the relatively short time period between elections. Overall, the United States has more than half of its work force engaged in service organizations, and while many of these are business firms, many more are not. A major consideration in the management of not-for-profit organizations is the primarily noneconomic character of their purposes and missions, and the impact this has on their goal and strategy formulation and implementation processes. While all of the ideas developed in this volume have some application in nonbusiness organizations, these issues seem particularly interesting:

1. Comparative studies of the strategic management process within for-profit and not-for-profit organizations would be most useful at this stage of development of the strategic management paradigm. Such research studies could proceed by breaking the process into the tasks outlined in this volume. Of particular importance to such comparative studies would be a focus on the differences in the basis of revenue generation and the influence of these differences on the strategy formulation process and the choice of strategic directions. Similar attention placed on the differences in implementation and control processes would also be of interest.
2. Businesses are concerned primarily with economic survival (and growth), while not-for-profit organizations seem to be concerned primarily with political survival (and growth). What are the implications of this fact for goal formulation and subsequent strategy development?
3. The planning horizons of nonprofit organizations seem abnormally short. Why? How can (should) they be lengthened?
4. Does the political nature of many not-for-profit organizations mean that rational, analytical processes cannot be employed in managing them? To what degree will the philosophy and techniques of the strategic management process transfer from for-profit to not-for-profit organizations?
5. Are there corollaries to the multi-business, multi-cultural organizational form among non-business organizations? If so, what can be learned from comparative studies of such business and non-business organizational forms?

PUBLIC POLICY AND STRATEGIC MANAGEMENT

Public policy issues abound in all of management, but they are of particular significance to the strategic management process because of its centrality and importance to the very essence of the organization. Some of the more interesting and important public policy issues that impact on strategic management are:

1. Regulatory policy rests on a model of market structure and competition that tends to run counter to the basic premise of strategy (i.e., that competitive advantage makes a difference and is the sine qua non of a good

strategy) and to the findings of recent strategic management research. The motivation for regulation rests on: (1) conventional economic theory, which assumes, among other things, perfectly competitive markets, no price differences among firms, and that the long-run average cost curve must rise within a relevant range; and (2) empirical studies of market structure done by economists in the field of industrial organization, most of which have used cross-sectional research designs and sector- or industry-level (rather than product/market segment level) data to relate firm profitability with factors such as industry concentration, advertising expenditures, and so on. Both these theoretical assumptions and empirical results are challenged by recent strategic management research, which shows that strategic groups of firms do exist within industries and that the inferences that one might draw from aggregated industry data are often quite different and sometimes even the direct opposite of those reached by studying the strategic group. Clearly, there needs to be a reconciliation made between empirical reality and economic theory, with appropriate changes in public policy. How can strategic management researchers help make this happen?

2. Do the disclosure rules that public companies must observe make public companies strategically weaker than their private counterparts, who do not have to publicly report their results? For example, because of these disclosure rules and the pressure of the stock market, there may be a short-term bias in public companies that favor greater, rather than lesser, current earnings. Does the efficient capital market hypothesis really take into account strategic issues and the necessity for trade-off of short-term earnings for long-term growth? Theoretically, it does, but as a practical matter does the market really have the necessary insight and technical information to do so? If not, what does this imply for the strategic management of our major publicly owned companies?

3. It has been traditional in the United States for corporate managers to remain aloof from political processes that affect them. Can they remain aloof under changing conditions that continue to make considerable inroads into their prerogatives? If not, what are the most effective mechanisms, from the viewpoint of both society and the firm, for corporate managers to become involved in such political processes?

RESEARCH METHODS IN STRATEGIC MANAGEMENT

Every field has unique requirements for the research methods it must use to study the problems peculiar to it. Strategic management is an exceptionally complex field because it requires so many different facets of the organization to be considered simultaneously and wholistically to have meaning. Needed are additional research methods that can cope with such complexity, and because the field is so young, it further requires research on the very methods it needs to use. Some important issues in this area include:

1. An understanding of the philosophy of science and the power of scientific method must be developed and appreciated by researchers in the field. There is a need for empiricism that goes beyond mere subjective description and interpretation. The field needs to accept and develop more rigorous research methodologies to continue its advancement. In particular, training of young researchers must be given careful attention.
2. Many variables of interest in the field are nominally and ordinally scaled. Much more work needs to be placed in using (and developing) methods capable of handling such measures more rigorously.
3. There is a need to create methodologies for testing the validity of what Rumelt calls "frame models" that go beyond the conventional wisdom offered by microeconomic theory and micro-organization theory. Trade-offs between tractability and mindless rigor and dogma will be necessary in this respect.
4. The field needs to go beyond profit measures as criteria for evaluating overall organizational performance. Such measures will also need to be adjusted for risk and must recognize differences in accounting policy. Multiple criterion measures capable of reflecting complex goal structures are needed. Research methods capable of handling multiple goals and objectives are also needed.
5. While useful starts have been made in developing quantitative strategic models, more attention is needed to insure that such models are based on strategically homogeneous sets of data, and that they recognize the emerging concept of a strategic group of firms. Especially required in such modeling efforts is much more attention to interactive affects of the various classes of variables contained in the model. Moreover, these classes of variables need to be expanded to simultaneously include strategic, operating, internal structure, and market structure variables.
6. Attempts need to be made to test the efficacy of the strategy and strategic management constructs wholistically. Tests are required that do not depend on organization type.

IN CLOSING

The topics above, and the research needs and issues developed under each one, considered collectively tell us a great deal about the state-of-the-art in the field of strategic management. One of the major purposes of the conference and this book was to define the field, to develop the state-of-the-art in it, and to suggest where the future research needs and opportunities lie. Our purpose has been well served. Now to the reader must go this challenge: Go out and make this material obsolete so some future set of authors and editors can do all of this again and help further establish the field of strategic management as a significant area of inquiry in managerial practice for all types of organizations.

Appendix 1 — Attendees

Business Policy and Planning Research:
The State-of-the-Art

May 25–27, 1977

Pittsburgh, Pennsylvania

Ronald O. Aines
International Harvester Company
Peter Alley
York University
Benjamin C. Ball, Jr.
Gulf Oil Corporation
Henry H. Beam
Western Michigan University
Norman A. Berg
Harvard University
Joseph L. Bower
Harvard University
Edward H. Bowman
Ohio State University
Louis K. Bragaw, Jr.
U.S. Coast Guard Academy
Richard G. Brandenburg
The Carborundum Company
Dorothy E. Brawley
Georgia State University
Elmer Burack
Illinois Institute of Technology
Derek Channon
University of Manchester
Ram Charan
Boston University
John Child
Kent State University
H. Kurt Christensen
Strategic Planning Institute
Patrick Conley
Boston Consulting Group
Arnold C. Cooper
Purdue University
Merrit J. Davoust
A. T. Kearney, Inc.
William Dill
New York University
Samuel I. Doctors
University of Pittsburgh
John Doutt
Kent State University
Yves L. Doz
Harvard University
Robert Duncan
Northwestern University
George Farris
York University
Carl Fink
ATCOR, Inc.
Jay Galbraith
The Wharton School
John H. Grant
University of Pittsburgh
Edmund R. Gray
Louisiana State University
Patricia Haggerty
Koppers Company, Inc.
Richard G. Hamermesh
Harvard University
Kenneth J. Hatten
Harvard University
Kichiro Hayaski
McMaster University
W. Harvey Hegarty
Indiana University
Dale Hekhuis
General Electric Company
Harold Henry
University of Tennessee
Charles W. Hofer
Stanford University
George Jacobs
Western Carolina University
Earl G. Johnson
Loyola University

William R. King
University of Pittsburgh
Raymond M. Kinnunen
Northeastern University
Bruce A. Kirchhoff
University of Nebraska at Omaha
Charles R. Klasson
University of Iowa
Harold E. Klein
Temple University
Walter H. Klein
Boston College
Roberta E. Klemm
The Wharton School
Rudolf W. Knoepfel
The Solvay American Corporation
Roderic C. Lancey
G. D. Searle and Company
Santa LaRocca
Harvard University
Robert T. Lenz
Indiana University
James P. Logan
University of Arizona
Peter Lorange
Massachusetts Institute of Technology
John F. Lubin
The Wharton School
Michael McCaskey
Harvard University
Ian MacMillan
Columbia University
Renato Mazzolini
Columbia University
Arlyn J. Melcher
Kent State University
Richard D. Miller
Southern Methodist University
John B. Miner
Georgia State University
Henry Mintzberg
McGill University
Edwin A. Murray, Jr.
Northwestern University
Daniel Nathanson
The Wharton School
William Naumes
Temple University
William H. Newman
Columbia University
Frank Paine
University of Maryland
David J. Parker
MacMillan Bloedel Limited
G. Richard Patton
University of Pittsburgh
Robert Pavan
Temple University
Robert Pitts
Pennsylvania State University
Bernie C. Reimann
Cleveland State University
Max Richards
Pennsylvania State University
Richard Rumelt
University of California at Los Angeles
David Rutenburg
Carnegie-Mellon University
Charles B. Saunders
University of Kansas
Dan E. Schendel
Purdue University
Sidney Schoeffler
Strategic Planning Institute
Robert W. Sexty
Memorial University
J-C. Spender
Gresham College
William Starbuck
University of Wisconsin at Milwaukee
George Steiner
University of California at Los Angeles
Jeffrey Susbauer
Cleveland State University
Cedric L. Suzman
Georgia Institute of Technology
William H. Tomlinson
University of North Florida
Israel Unterman
San Diego State University
James M. Utterback
Massachusetts Institute of Technology
Karl H. Vesper
University of Washington
Mitsuo Wada
Keio University
John L. Ward
Loyola University
Charles B. Weinberg
Stanford University

James E. Weir
Saint Louis University
William T. Whitely
University of Kansas
William D. Wilsted
University of Colorado
Max S. Wortman, Jr.
University of Massachusetts
Leonard Wrigley
University of Western Ontario

Appendix 2 — Program Schedule

BUSINESS POLICY AND PLANNING RESEARCH:
THE STATE-OF-THE-ART

May 25–27, 1977

Pittsburgh, Pennsylvania

Wednesday, May 25

8:00–8:15 A.M.	Introduction to Conference	
	John Grant	
	Dan Schendel	
8:15–9:45 A.M.	"The Concept of Strategy and Strategic Management"	
	Author:	H. Igor Ansoff (presented by Dan Schendel)
	Moderator:	Charles W. Hofer
	Discussants:	William Dill
		William Newman
10:00–11:30 A.M.	"Goal Structures and Rationality"	
	Author:	Henry Mintzberg
	Moderator:	Cedric Suzman
	Discussants:	Max Richards
		Edwin A. Murray, Jr.
1:00–2:30 P.M.	"Strategy Formulation: Analytical and Normative Models"	
	Authors:	John Grant
		William King
	Moderator:	Charles Weinberg
	Discussants:	Derek Channon
		David Rutenburg
2:45–4:15 P.M.	"Strategy Formulation: Behavioral and Political Models"	
	Authors:	Joseph Bower
		Yves Doz
	Moderator:	Renato Mazzolini
	Discussants:	John Child
		Ian MacMillan
4:30–6:00 P.M.	"Environmental Analysis and Forecasting"	
	Author:	James Utterback
	Moderator:	Elmer Burack
	Discussants:	Samuel Doctors
		Harold Klein

Thursday, May 26

8:00–9:30 A.M.	"Strategy Evaluation"	
	Author:	Richard Rumelt
	Moderator:	Edward H. Bowman
	Discussants:	Bruce Kirchhoff
		Sidney Schoeffler
10:00–11:30 A.M.	"Contingency Theories of Strategy"	
	Author:	George Steiner
	Moderator:	Patrick Conley
	Discussants:	Frank Paine
		G. Richard Patton
1:00–2:30 P.M.	"Strategy Implementation: The Role of Formal Planning Systems"	
	Author:	Peter Lorange
	Moderator:	Charles Saunders
	Discussants:	Dale Hekhuis
		Harold Henry
2:45–4:15 P.M.	"Strategy Implementation: The Role of Organizational Structure and Processes"	
	Authors:	Jay Galbraith
		Daniel Nathanson
	Moderator:	Merrit J. Davoust
	Discussants:	John Miner
		Leonard Wrigley
4:30–6:00 P.M.	"Strategic Management: New Ventures and Small Businesses"	
	Author:	Arnold Cooper
	Moderator:	John Doutt
	Discussants:	Karl Vesper
		Jeffrey Susbauer

Friday, May 27

8:00–9:15 A.M.	"Strategic Management: Multimission Business"	
	Author:	Norman Berg
	Moderator:	Robert Pavan
	Discussants:	Richard Brandenburg
		Robert Pitts
9:30–10:45 A.M.	"Research Methods: Quantitative"	
	Author:	Kenneth Hatten
	Moderator:	Dan Schendel
	Discussants:	John Lubin
		William Naumes

10:45–12:00 P.M.	"Research Methods: Qualitative"	
	Author:	Robert Duncan
	Moderator:	Charles Hofer
	Discussants:	J-C. Spender
		William Starbuck
1:15–2:15 P.M.	"Strategic Management: Not-for-profit Organizations"	
	Author:	Max Wortman
	Moderator:	William Wilsted
2:15–3:30 P.M.	"Policy and Planning Research: Practitioners' Views"	
	Moderator:	Ram Charan
	Discussants:	Ronald Aines
		Ben Ball
		Rudolph Knoepfel
		Roderic Lancey
3:30–4:30 P.M.	"Policy and Planning Research: Teaching Implications"	
	Moderator:	Charles Klasson
	Discussants:	W. Harvey Hegarty
		Israel Unterman
4:30–5:00 P.M.	Concluding Remarks	
	Charles W. Hofer	
	Dan E. Schendel	