# BUSINESS POLICY AND STRATEGY: CONCEPTS AND READINGS

**REVISED EDITION** 

McCARTHY MINICHIELLO CURRAN

# **Revised Edition**

# BUSINESS POLICY AND STRATEGY Concepts and Readings

**DANIEL J. McCARTHY,** D.B.A. Professor of Management

**ROBERT J. MINICHIELLO,** D.B.A. Professor of Marketing

**JOSEPH R. CURRAN,** Ph.D. Professor of Accounting

All of Northeastern University



#### © RICHARD D. IRWIN, INC., 1975 and 1979

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

ISBN 0-256-02168-6 Library of Congress Catalog Card No. 78-70940

Printed in the United States of America

3 4 5 6 7 8 9 0 ML 6 5 4 3 2 1 0

## **PRFFACE**

Like its predecessor volume, this revised edition of *Business Policy and Strategy: Concepts and Readings* has been developed for business policy courses in undergraduate degree programs, in graduate degree programs, and in executive development programs for practicing managers. All such courses study the job of general managers or top executives of organizations. The skills required to perform well in such jobs, not only in business but also in nonbusiness organizations, are the concern of this book. Emphasis is placed upon the conceptual understanding and skill required of executives with policy and/or strategy responsibility.

When the first edition was originally conceived by the authors, it was envisioned as a presentation of basic concepts and their applications designed to supplement the traditional business policy course based upon the study and analysis of cases. Historically, most business policy books had been case books that contained little or no textual material. In the first edition, we had sought to reflect the development of a useful framework and an emerging body of knowledge by presenting the conceptual foundations of the field of business policy and enriching them with important readings in this field. It was anticipated that this material would assist the efforts of business policy case teachers.

In practice, however, the first edition was used at undergraduate, graduate, and executive development levels as part of a variety of pedagogical approaches. While many instructors did use the volume as a supplementary resource to the use of cases in a discussion format, many others used it as outside reading to support a lecture format. For some courses and seminars, the contents of the book were the principal subjects for classroom discussions. Others combined discussions of cases and the book's contents. Still others combined the book with business games or simulations.

With the subject of business policy having become a required course in the curriculum of practically all undergraduate and graduate programs in business, management, and administration (mandatory for schools accredited by the American Assembly of Collegiate Schools of Business) and with no basic agreement on the "best" way to conduct such courses, our intention in preparing this revised edition is to continue to meet effectively the needs of a variety of teaching formats.

Thus whatever the teaching approach employed, instructors will find that this volume develops in detail a framework for the formulation and implementation of strategy. Both the text and the readings examine and consider in depth the formulation and implementation phases of strategy. Furthermore the conceptual material is developed so as to be applicable to the study of policy and strategy in business and nonbusiness organizations. Numerous examples are drawn from both business and nonprofit settings and presented in the greatly expanded text sections.

The revised text portion incorporates current theoretical and conceptual developments in the evolving policy field and presents recent illustrations of their meaning and import. The revised readings portion incorporates widely respected, some "classic", articles from the first edition and more recent contributions to the literature that present refined approaches, interpretations, and applications. Recognizing the large number of instructors who have successfully used the book in a noncase format, this edition has eliminated from the first chapter the discussion of the case method approach.

However, the authors continue to personally hold the view that a most desirable overall approach, particularly at the graduate and executive development levels, is one that combines the use of the contents of this book with cases from either the Intercollegiate Case Clearing House or from a published case book. We believe that students can be trained only to a certain point by being told by author or lecturer. Executives are not just recipients of information. They have to analyze it and decide what to do about it. Cases, when used as more than just descriptions or examples of situations, confront students with administrative challenges to be analyzed and for which programs of action have to be developed. This diagnosis/prescription requirement is invaluable training for the top management aspirant. For it requires students to become involved in a most demanding mental exercise: the challenge of applying judgment and formulating workable decisions.

Instructors seeking background material on the case method are referred to Charles I. Gragg's classic article on the pedagogical philosophy of the case method, "Because Wisdom Can't Be Told," included in the first edition of this book. Also of interest is Arch R. Dooley and C. Wickham Skinner's "Casing Casemethod Methods," an analysis of the objectives and classroom styles of different type case instructors published in the Academy of Management Review, April, 1977.

In this revised edition, Chapter 1 introduces the student to business policy as a field of study, develops the concept of strategy, and describes the major elements of the strategic process. Chapter 2 concentrates on objectives and the major factors such as the personal values of decision makers that influence objective setting. Chapter 3 presents the elements of internal analysis, focusing in detail on the appraisal of an organization's strengths and weaknesses. Chapter 4 turns to the external environment, discussing the major forces that influence top management action and the process of appraising

these forces. Chapter 5 is an entirely new chapter that examines the increasingly important developments in the processes of environmental analyses and strategic planning. Chapter 6 demonstrates how the internal assessment, the external appraisal, and corporate and personal objectives and values interact in the formulation of corporate or organizational strategy. The final three chapters present the difficult task of implementing strategy. The three traditional management tasks of organizing, planning, and control are viewed as the key processes vital to the implementation of strategy within an organization.

It is the hope of the authors that this edition will provide both students and their instructors with a useful body of material that facilitates understanding and developing competence in the demanding, challenging, exciting, and essential field known as "policy."

February 1979

Daniel J. McCarthy Robert J. Minichiello Joseph R. Curran

## **CONTENTS**

# 1. Introduction to policy and organizational strategy

Policy and strategy as top management functions: Strategy management. An integrative function. Setting goals and objectives. Formulating major policies and plans. Providing and organizing the resources of the organization. Implementing and controlling. Problems, opportunities, and decisions. The conceptual point of view. The meaning of organizational and business strategy. Utility of strategy. The process of strategy management. Formulation of strategy and major elements within strategy: Strategic objectives. Product-market scopes as a major element within strategy. Allocation of resources, risk horizons, and time horizons. Implementation of strategy. Evaluation of strategy.

#### Readings

- 1. Policy as a field of management theory, Henry Mintzberg, 27
- 2. Shaping the master strategy of your firm, William H. Newman, 49

# 2. Objectives: Organizational and personal

Introduction. The need for objectives: Essential to strategic planning. Define the "reason for being" of an organization. The nature of objectives: Achieving—becoming—attaining. The personal dimension. Levels of objectives: Strategic to operating. Hierarchy of objectives. An illustration of the hierarchy: The computer industry. The personal dimension of objectives: Influence of personal values and needs on organizational objectives. Management by objectives. Social responsibility: A necessary objective. Balancing objectives: Needed in strategy formulation and implementation. A basis for evaluating management and strategy.

#### Readings

- 3. Personal values and corporate strategy, William D. Guth and Renato Tagiuri, 84
- 4. The social responsibility of business is to increase its profits, *Milton Friedman*, 99

# 3. Resource profile: Assessment of internal strengths and weaknesses 106

Objectives and results of comprehensive analysis. The role of internal analysis in evaluating and formulating strategy. The process of analysis in strategy man-

1

67

xii

agement. Internal areas to be analyzed. Analyzing management, departments, and functions: Management. Finance and accounting. Marketing. Production, manufacturing, and engineering. Research and development. Other areas. The human side of the enterprise. Top management viewed in strategic perspective.

#### Readings

- 5. How to evaluate a firm, Robert B. Buchele, 137
- 6. Defining corporate strengths and weaknesses, Howard H. Stevenson, 159

# 4. The search for opportunity: Assessment of the external environment

177

Introduction. The need for appraisal of the environment. The major environmental forces. Technological forces. Sociocultural and psychological forces. Legal-governmental forces. Economic and demographic forces. Industry structure and practices—competition. On appraising the environment.

#### Readings

- 7. Our society in 1985—business may not like it, William F. Martin and George Cabot Lodge, 210
- 8. Strategic responses to technological threats, Arnold C. Cooper and Dan Schendel, 226

## 5. Environmental analysis and the strategic planning process

238

No single method is best. Economic forecasting methods. Technological forecasting methods. Socio-political forecasting methods. Scenarios. Delphi technique and cross-impact analysis. Special analyses and sources of technical expertise. The strategic planning process: No single planning model. Multilevel line and staff involvement. A continuous process. Strategic management in General Electric.

#### Readings

- 9. Environmental scanning for corporate planning, Liam Fahey and William R. King, 253
- Formulating strategy in smaller companies, Frank F. Gilmore, 267

# 6. Strategy development and evaluation

283

The starting point: Current strategy. Identifying the present strategy: Areas for analysis in the identification process. Maytag Company. Evaluation criteria: Rationale for keeping or changing the current strategy: Values of managers and owners. Taking advantage of market opportunities. Taking advantage of organizational competence. Utilizing timing and risk. Combination of reasons. Summary evaluation: Past results: Present situation. Appropriateness for the future. Changing the strategy: Strategy formulation: Reasons for change. Balance be-

tween external and internal factors in strategy formulation. IBM: An illustration of changing strategy: Traditional IBM strategy. Environmental pressures and a "new industry." Current IBM computer industry strategy. IBM communications industry strategy. IBM strategy: A summary. Selecting alternative strategies: Survival strategy. Turnaround strategy. Opportunistic strategy. Market niche strategy: An example of specialization strategy. Market share strategy. Product portfolio or product life cycle strategy. Diversification strategy and conglomerate strategy. Retrenchment strategy. Mixed strategies.

#### Readings

- 11. How to evaluate corporate strategy, Seymour Tilles, 320
- 12. Impact of strategic planning on profit performance, Sidney Schoeffler, Robert D. Buzzell, and Donald F. Heany, 338

## 7. Organizational factors in implementing strategy

353

Introduction, Importance of implementation in strategy management: *Elements* of implementation: Securing, organizing, and directing the utilization of resources. Strategy management: Interrelated activities and the art of management. Organizational structure and strategy implementation: The environment and organizational structure. Other factors affecting structure: Related to strategy. Organizational behavior and strategy implementation. The process of organizing: A dilemma in implementing organizational strategy: Breaking down the task to be performed. Coordination toward the overall goal. Dilemmas and some examples. Dealing with dilemmas. Principles and situational analysis. Communications and information. Analyzing and changing organizations: A challenge in strategy implementation: Emphasis on the "going concern" in strategy management. Organization design: Structural aspects of change. Organization design: Behavioral aspects of change. Toward centralization or decentralization. Structure as a resource in strategy development. Organizational design for diversification strategy. Implementation interrelationships. Implementation and leadership.

#### Readings

- Strategy and structure ("some general propositions"), Alfred D. Chandler, Jr., 384
- 14. SBUs: Hot, new topic in the management of diversification, *William K. Hall*, 394

# 8. Implementing strategy: Planning and budgeting

408

Introduction. The management planning process: Objectives, strategic planning, and period planning. Plan implementation. The management budgeting function: The budgeting framework. Dynamic budgeting. Pitfalls of budgeting. Implementing strategy through the budgeting process: Planning element of the budget. Coordination element of the budget. Control element of the budget. Replanning element of the budget.

#### xiv Contents

#### Readings

- 15. The state of practice in planning systems, H. Igor Ansoff, 426
- 16. Using the systems analyst in preparing corporate financial models, *Daniel J. McCarthy* and *Charles A. Morrissey*, 449

# 9. Implementing strategy: Control and motivation

461

Introduction. Perspective on the budget and control: Relationship of control to strategy. Control, responsibility, and reporting. Control and exception reporting. Motivational considerations. Relationships among strategy, plans, control, and motivation: A case study: The Burnside division. Summary of the Burnside case analysis.

#### Readings

- 17. The domain of management control, Raymond M. Kinnunen and Robert H. Caplan III, 477
- 18. Motivation and coordination in management control systems, Charles T. Horngren 492

# CHAPTER 1

# INTRODUCTION TO POLICY AND ORGANIZATIONAL STRATEGY

# POLICY AND STRATEGY AS TOP MANAGEMENT FUNCTIONS

Strategy management
An integrative function
Setting goals and objectives
Formulating major policies and plans
Providing and organizing the resources of the
organization
Implementing and controlling
Problems, opportunities, and decisions
The conceptual point of view

THE MEANING OF ORGANIZATIONAL AND BUSINESS STRATEGY

UTILITY OF STRATEGY

THE PROCESS OF STRATEGY MANAGEMENT

FORMULATION OF STRATEGY AND MAJOR ELEMENTS WITHIN STRATEGY

Strategic objectives

Product-market scopes as a major element within strategy Allocation of resources, risk horizons, and time horizons

IMPLEMENTATION OF STRATEGY

**EVALUATION OF STRATEGY** 

**SUMMARY** 

**READINGS** 

A top management job is the aspiration of many: the student who struggles to learn; the graduate just launching a career; the young executive on the rise; and the experienced executive reaching for the top. Some will achieve the aspiration; many will not.

Luck, chance, personal influence, and bad judgment may place in top management positions some who are not qualified for such a challenge and

1

deprive others who may be very well qualified. Likewise, some of those apparently most qualified will fail, while others with less impressive credentials will act with great success.

Many who achieve a top management position will do so in the business world. But an increasing number will become top managers of other institutions: schools, hospitals, foundations, governments, and so forth. The skills needed to be an effective top executive in these fields are essentially the same as those needed in business. Thus, the concepts and approaches included in this book, developed primarily in a business setting, are recommended also to those who aspire to high managerial achievement in other areas.

The principal target of this book is the top management aspirant who is still a student in the formal sense. Thus, the book is designed essentially for the advanced student of business management. However, practitioners who have not experienced recent training in administration will find much that is useful in these pages. This first chapter will introduce some of the essential elements of the top manager's job that are concerned with strategy and policy considerations. A subsequent chapter will analyze each of these aspects of top management's work in depth. Further, the concept and framework of organizational and business strategy will be introduced.

#### POLICY AND STRATEGY AS TOP MANAGEMENT FUNCTIONS

Essentially, strategy considerations encompass deciding (a) what a company is to be; and (b) how it is to become what it is to be. In effect, strategy includes the goals and major policies of the organization. In recent years the concepts of policy and strategy have been utilized as a framework to explain many important facets of the job of top management. A news release about the executive program at Dartmouth College's Amos Tuck School of Business noted that "the program focused chiefly on the design and implementation of business policy, thereby providing participants with an appreciation of the manager's role in its broadest context." Referencing a major study of university executive programs, one paper presented at the 1976 Academy of Management Meetings noted that "of the curriculum areas most commonly taught in university programs, a survey of the 100 largest business firms revealed that the most important area was business policy." 3

<sup>1</sup>S. Tilles, "How to Evaluate Corporate Strategy," Harvard Business Review, July-August 1963, p. 112.

<sup>&</sup>lt;sup>2</sup>News release from the Amos Tuck School of Business Administration, Dartmouth College, Hanover, N.H., August 10, 1974.

<sup>&</sup>lt;sup>3</sup>W. H. Hegarty, "Contextual and Pedagogical Differences in Teaching Business Policy among Academicians," paper presented at the National Academy of Management Meetings, August 1976.

## Strategy management

The idea of strategy has developed into a useful vehicle by which to analyze critical elements of the job of top managers. The concept of strategy management is considered to incorporate various activities including the identification of strategy; the determination or formulation of strategy; the implementation of strategy; the evaluation of strategy. Thus these tasks encompass a vital portion of the job of top management and are not to be interpreted simply as strategic planning or long-range planning synonyms. However, top management personnel are typically most concerned with identifying and formulating strategy and with planning for and initiating its implementation. Usually, the actual implementation process is carried out by all members of the organization. Top management and lower levels in varying degrees are vitally involved in the continuous evaluation of the chosen strategy. The specific approach to strategic tasks and the particular involvement of top management, however, does differ depending upon the size of the organization.4 Some larger companies have developed the staff position, director of strategy, to aid line management in this key area. A recent Wall Street Journal ad noted such an opportunity at Hillenbrand Industries. It stated in part, "The Director of Strategy will report directly to the Chief Executive Officer and will play a major role in determining the future direction of this operating company."5

## An integrative function

"Dealing with the total enterprise provides challenges and opportunities which do not exist in the management of a single part." The chief policy maker of the organization must consider as a totality all aspects of its business, including those which affect the organization from within and without. Not only must he or she be informed about all facets independently, but further must analyze each and then pull together all relevant aspects in a form meaningful to the guidance of the organization. Decisions must be made utilizing the integrated and analyzed information. The monumental complexity of this task, of course, increases almost geometrically as an organization grows in size.

How is this integrative aspect of the executive function accomplished? It is accomplished principally through the function of setting goals or objectives; framing major plans and policies to accomplish these goals; providing

<sup>&</sup>lt;sup>4</sup>For a full discussion of this point, see F. F. Gilmore's article included in the readings of this book, "Formulating Strategy in Smaller Companies," *Harvard Business Review*, May–June 1971.

<sup>&</sup>lt;sup>5</sup>Hillenbrand Industries ad for "Director of Strategy," The Wall Street Journal, November 15, 1977.

<sup>&</sup>lt;sup>6</sup>Robert L. Katz, Cases and Concepts in Corporate Strategy (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970), p. 7.

and organizing the resources needed to achieve the purposes; and carrying out the necessary activities to see that the organization accomplishes its various purposes. This integrative role so vital to all organizations is the essence of strategy management.

#### Setting goals and objectives

Barnard has explained that the executive is "to formulate and define the purposes of the organization." Some would say defining the "mission" of the organization is the central function. In analyzing this task, it becomes apparent that here is the source of inspiration from which flows the life of the organization. It is at this stage that a decision is made as to what the entity is to be, or expressed differently, what business the company is to pursue.

Unless a fully conscious and realistic decision is reached in this area of objective definition, management can never know if it is doing what it might do best, doing what it wants to do, or doing all that it may be capable of doing. Unless its central mission is clearly defined, an organization can hardly find focus for its myriad activities. Strategy formulation is concerned primarily with this most crucial aspect of total organizational purpose.

#### Formulating major policies and plans

The management which succeeds in establishing the major purposes of its organization will not even have completed this important step when it will already be asking how to achieve these ends, in what order, or over what period of time. It will become quickly involved in the policy making and planning needed to steer its way on the road to achieving the objectives that have been established.

Although a tremendous amount of detail and data will eventually be generated and utilized in making policies and plans, the top management team will most likely be concerned only with the most basic of these.

# Providing and organizing the resources of the organization

Strategy formulation as described thus far has suggested a process quite intellectual in nature. It has required an analytical view and a conceptual and integrative ability on the part of top managers to visualize the potential and direction of the enterprise. The process of providing and organizing resources is similar, but it further moves toward action and toward the implementation of strategy.

The well-known investment firms of Loeb Rhodes and Company and

<sup>&</sup>lt;sup>7</sup>Chester I. Barnard, *The Functions of the Executive* (Cambridge, Mass.: Harvard University Press, 1938), p. 215.

Hornblower, Weeks, Noyes, and Trask, Inc., had this process in mind when they announced recently plans to merge into "what would result in one of the nation's largest brokerage houses with capital of about \$120 million and about 250,000 customer accounts." The chairman of Loeb Rhodes "predicted that middle-sized firms will have great difficulty surviving in the future." He noted, "there will always be a place for the small retail firm as well as the giants, but I'm not sure there will be a place for the people in between." These two organizations plan to merge in order to have the resources with which to compete in a rapidly changing investment environment.

Initially, organizing resources, human, financial, and physical, is an exercise in logic with the basic objectives and strategy of the company always in mind. Soon though, as decisions are made, actions must be taken, money must be raised, buildings built, and people hired, or sometimes let go. All of these resources must be organized in a fashion which best serves the purposes of the organization. Organizational structure, once determined, is usually slow to change, and basic changes should be most meaningfully coordinated with the organization's strategy.

#### Implementing and controlling

The line between formulating and implementing is truly a fine one, and in practice it often seems that one hardly exists. Implementation, however, is concerned more with the day-to-day activity by which purpose is accomplished, resources are utilized, activities are directed, results are monitored, and operations are controlled. The heart of this phase of the management process is communication and information. Whether oral or written, whether figures, words, or symbols, whether formal or informal, the information which is generated in and around the activity of the business is what enables the executives to direct and control the organization toward the achievement of corporate goals. It is often, too, the communications of the top executives which motivate the people of the enterprise or which fail to do so. These responsibilities of managers are a vital part of the process of strategy management.

# Problems, opportunities, and decisions

Two activities take a major part of any top manager's time. Discovering the important problems, issues, or opportunities to which time should be devoted is the first; the second is solving these problems by making the appropriate decisions or selecting the most promising opportunities. Both

<sup>8&</sup>quot;Loeb Rhodes, Hornblower Give Details on Merger," The Wall Street Journal, October 28, 1977.

can be most intelligently and ably handled if viewed within the structure of an organization's strategy. New York's largest bank holding company apparently is attempting to utilize better its resources by extending its strategy into the broker-dealer business. "Initially it will sell only Citicorp securities in a test program to tap consumers as a source of financing the operations of the company's nonbank subsidiaries." The notes will be sold through the outlets of a company subsidiary, Person-to-Person Financial Centers, which offer a variety of services ranging from personal loans to second mortgages. While seizing an opportunity, Citicorp has created potential problems for many securities dealers.

It is important here in recognizing problems to emphasize again the integrative nature of the top management job. Problems which gain attention at this level are complicated, multidimensional, and have major ramifications for the organization and, usually, beyond the organization. And these problems seem to be endless. They arrive before the executive from many sources, and the supply never diminishes. The same applies to opportunities, but often these are harder to recognize. The most successful managers might well be those who are able to tell the difference and act accordingly.

The first job for managers then is to decide what problems or opportunities most warrant their attention. Considering such issues and opportunities in the light of the organization's strategy will be of immense help to the executive facing them. If the problem or opportunity is worthy of consideration, the executive must gather all needed information at a cost of time and money, decide how much is enough, and proceed to "solve the problem," or "capitalize upon the opportunity." Again, this response will very often be most appropriate if it is made in light of strategic considerations.

The example of Storage Technology Corporation, a small computer peripherals manufacturer may serve as an illustration of problem solving within the context of an organizational strategy. Started in 1968 by ex-IBM employees, the company scored major successes by 1973, grossing \$150 million and netting \$10 million. The company's product was high precision memory equipment for computers. Problems started in 1972 when IBM slashed prices of its own memory equipment by 35 percent. Chase Manhattan Bank refused to lend the company more expansion money. IBM's price cuts were about sufficient to wipe out Storage Tech's profit margins if it tried to compete on this basis. Jesse Aweida, the company president, decided to compete on the basis of quality as well as on price and to boost production to get unit costs down. While almost going under, the company persisted and today produces more tape devices than even IBM, selling primarily to big quality-conscious users like Ford Motor and the Internal Revenue Service. It has expanded the line to include a memory disc and a small com-

<sup>&</sup>lt;sup>9</sup>"Citicorp Forms Securities Firm, May Fuel Controversy over Banks' Role in Market," The Wall Street Journal, September 16, 1977.

puter system. Its equity capital has grown from \$1.6 million in 1970 to \$4.4 million, with sales expected to be \$220 million in 1978. Aweida discusses the problems and opportunities in this way.

To compete with IBM, a company has to focus down and concentrate on a very narrow market. In that market you have to commit the technological innovation. You must always have the most advanced features, sometimes before IBM has them, and your customers must know that you will never allow your equipment to become obsolete . . . . Actually IBM outspends us on research, even in our own area. But we can be more efficient in our spending . . . . we can make our decisions early in the process. We can do enough homework first to concentrate on the one (approach to a problem) with the greatest promise. 10

At times, the solution of the chief executive may be in a short statement, memo, or telephone call by which the decision is communicated. Actually, this decision will probably only start the mechanism toward the solution. Yet such decisions at the top are the source of direction for the enterprise and lead to countless other decisions within the overall organization. This never-ending process makes it critical that an understanding of the corporate strategy is found at the various levels within the organization. Without such a common denominator, there is far less probability of coordinated action at all levels toward overall organizational goals.

## The conceptual point of view

From the foregoing brief analysis of strategic management as a view of the top executive job, it should be apparent that the individuals who fill these positions or aspire to do so, as well as those who would meaningfully study this field, must develop a point of view indispensable to understanding what is involved. That point of view must involve the nature of conceptualization, that special facility of abstractly constructing and viewing ideas and operations as a totality. Included in this view must be the ever-changing environment in which the organization functions.

The ability to sense what information is needed and appropriate and how it should be ordered to facilitate understanding assumes an analytical and, where feasible, even a scientific approach to knowledge, problems, and decisions. Yet, the exercise of informed judgment retains the essential qualities of an art which has no claims on certainty. The best use must be made of all knowledge, skill, and abilities to exercise judgment, to arrive at conclusions, and to make decisions, while recognizing the uncertainty involved in the entire process.

The management of McDonald's Corporation is credited with these qual-

<sup>&</sup>lt;sup>10</sup>"A Corny but True Story: How Storage Tech Almost Became Storage Wreck, but Ended Up as a Venture Capitalist's Dream," Forbes Magazine, October 15, 1977, p. 130.