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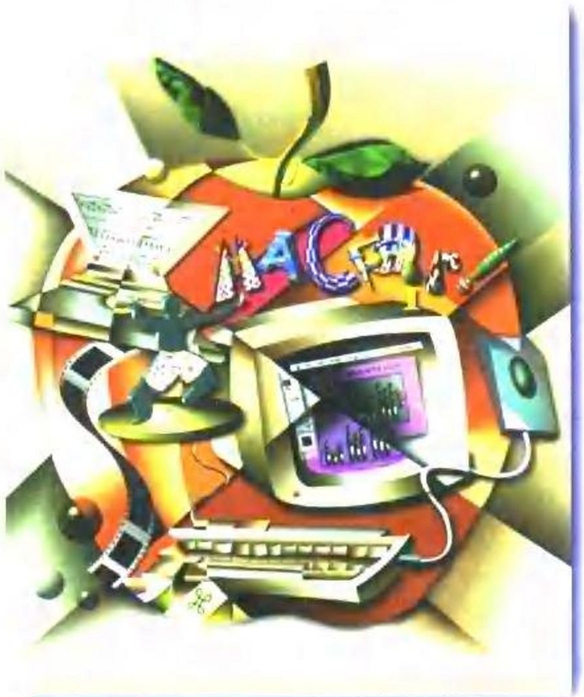
财务与会计系列

成本管理研究

READINGS AND ISSUES IN COST MANAGEMENT

JAMES M. REEVE



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出版者的话

但凡成事，均缘于势。得势则事成，失势则事不顺。顺势而行，如顺水行舟；借势而动，如假梯登高；造势而为，如太空揽月。治学、从政、经商、置业，均不可一日失势。势者，长处、趋势也。

今日中国，是开放的中国；当今世界，是开放的世界。改革开放，大势所趋，势不可挡。经济开放、文化开放、政治开放，世界需要一个开放的中国，中国更要融入开放的世界。借鉴国际惯例，学习他人之长，已经到了不可不为之时。

借鉴国际惯例，学习他人之长，已属老生常谈，但学什么、如何学、以何为蓝本为众多志士仁人所关注。可喜的是，由赤诚图文信息有限公司精心策划，ITP、McGraw-Hill 及 Simon & Schuster 等国际出版公司特别授权，东北财经大学出版社荣誉出版的“世界财经与管理教材大系”现已隆重面世！她以“紧扣三个面向，精选五大系列，奉献百部名著，造就亿万英才”的博大胸襟和恢弘气势，囊括经济学、管理学、财务与会计学、市场营销学、商务与法律等财经、管理类主干学科，并根据大学教育、研究生教育、工商管理硕士（MBA）和经理人员培训项目（ETP）等不同层次的需要，相应遴选了具有针对性的教材，可谓体系完整，蔚为大观。所选图书多为哈佛、斯坦福、麻省理工、伦敦商学院、埃维商学院等世界一流名校的顶尖教授、权威学者的经典之作，在西方发达国家备受推崇，被广为采用，经久不衰，大有“洛阳纸贵”之势。

借鉴国际惯例，毕竟只是因势而动；推出国粹精品，才是造势而为。在借鉴与学习的同时，更重要的是弘扬民族精神，创建民族文化。“民族的，才是国际的”。我们提倡学他人之长，但更希望立自己之势。

势缘何物，势乃人为。识人、用人、育人、成人，乃人本之真谛。育人才、成能人，则可造大势。育人、成人之根本在教育，教育之要件在教材，教材之基础在出版。换言之，人本之基础在书本。

凡事均需讲效益，所谓成事，亦即有效。高效可造宏基，无效难以为继，此乃事物发展之规律。基于此，我们崇尚出好书、出人才、出效益！

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PREFACE

Over the past decade, business enterprises have had to respond to increasing domestic and international competition with newer and better approaches to managing their organizations. These new approaches are being implemented in organizations under names such as: total quality management, employee involvement and empowerment, business process re-engineering, continuous process improvement, and short-cycle management. These philosophies require firms to be responsive, agile, and flexible in profitably providing value-added products and services to customers at competitive prices. Thus, firms are now discovering that they must be able to manage complex and changing environments without the significant costs that traditionally have attended these characteristics.

Within this changing environment, businesses have witnessed a significant rebirth of cost management. By "cost management," we mean a set of techniques and methods for:

(1) identifying and focusing upon strategic options, and
(2) planning, measuring, and improving a company's products and processes.

The first objective relates to strategic improvement, while the second objective relates to operational improvement. Note that these two purposes are necessarily interlinked. The strategy of the firm will dictate product and process improvement priorities.

Thus, cost management is much more than just cost accounting. Cost accounting is concerned with the proper accumulation of cost for inventory valuation in GAAP-based financial statements. Cost management is far more concerned with management's use of cost information for decision making. In this way cost management is much more similar to managerial accounting, yet it incorporates a number of new approaches that can be thought of as additions to the traditional discipline of management accounting.

This book provides a sampling of readings that reflect these dual purposes. There are 16 articles that have been published between 1987 and 1993 and reprinted in this book. The book is divided into five chapters as follows:

Strategic Cost Management
1. Cost Management and Strategy
2. The Design of Activity-Based Cost Systems
3. Applications in Activity-Based Costing

Operational Cost Management
4. Improving Performance
5. Japanese Cost Management Approaches

The first three chapters refer to the role of cost management in strategy, while the last two chapters refer to the operational role of cost management. The articles within these five chapters provide a broad overview of contemporary practices in cost management.

I have preceded each chapter with some opening comments about each of the readings. In many instances these opening comments provide some additional material beyond what is discussed in the articles.

HOW TO USE THIS BOOK—A MESSAGE TO STUDENTS

Cost management is one of the few areas in accounting that does not "follow the rules." By this I mean that cost management practices are not constrained by a set of codified rules promulgated by the SEC, IRS, FASB, or AICPA. Do not look for Generally Accepted Accounting Principles when studying managerial accounting, but instead open your mind to various alternatives for reporting to management. Cost management is an area that is open to good ideas and innovation. New practices that work will be employed, while those that do not will be discarded. The basic charge in cost management is: "Will this idea benefit decision making?" In other words, does the information add value to the firm? The emerging practices discussed by the authors in this book are new ideas that are being tested by a variety of firms all around the world. Thus, these readings give you a glimpse into the exciting changes and innovations that are occurring in this field.

The readings in this book provide primary source material that has been influential in advancing emerging practices in cost management. By "primary source material" I mean articles written by the individuals who have contributed directly to inventing or applying the innovative practice. In this sense, primary literature goes directly to the source, before it has been synthesized by a textbook author prior to your reading it. When you read primary source literature, the job of synthesis is yours!

You will update and improve your skills after you graduate by reading professional journals. Professional journals will provide you a window to the newest ideas and practices. Ideas that you glean from reading professional articles will spark innovation within your own professional life. Thus, this book of readings is designed to provide you an opportunity to begin learning how to read about and interpret new practices that have not yet been synthesized within a textbook.

HOW TO USE THIS BOOK—A MESSAGE TO INSTRUCTORS

Why should you use supplemental readings in your course? We are all faced with more material than we have time to fit into our courses. Yet, even so, it is important to expose students to primary source literature, since this will become a primary method of advancing professional skills once a student leaves with a degree in hand. Thus, we should be helping our students read and digest primary source material before it has been massaged by textbook authors. Students need to realize that the world of the textbook is one that will be left behind once they become professionals. The latest offerings of any field will be found in professional journals, and the student who builds habits of reading professional literature will be more able to adapt to changing professional requirements.

With these thoughts in mind, this book is intended to provide supplemental readings to either a managerial or cost accounting course, or a sourcebook for an advanced topics course. The topics covered in these readings will generally be covered at a greater depth here than would be found in textbooks. The various articles have been chosen for their relevance to emerging cost management practices and for their readability. Thus, my intent was to select readings that your students would be able to understand without great difficulty. However, I would recommend using this book as a supplement to upper division or graduate-level classes. The authors of these articles assume a working vocabulary of managerial accounting.

What I have provided in this book is topical breadth yet flexibility to instructors. Each chapter stands on its own. Thus, it is not necessary to assign every chapter, and you can emphasize the chapters that are important to you. At the very minimum I would stress both the strategic and operational roles of cost management to some degree. Secondly, it is not necessary to assign all the readings within a chapter, yet the readings within a chapter are not redundant. If you wish to assign more readings within a particular chapter area, the end of the chapter provides a more in-depth bibliography.

In addition, I have provided some opening material for each chapter. The opening material provides some of my additional thoughts related to the reading topic. You can either assign these openings in addition to the readings, or use them for yourselves for additional class discussion.

Contents

Strategic Cost Management

STRATEGIC COST MANAGEMENT

CHAPTER ONE

Cost Management and Strategy

INTRODUCTION

In this chapter, three articles will introduce you to the role of cost management in strategy. The three articles each reflect a somewhat different theme. The three basic themes can be identified as:

1. Cost improvement is a strategic endeavor.
2. The value chain is a critical component in evaluating strategy for a strategic business unit.
3. The strategy of the firm will impact the design of a control system.

All three themes begin with the premise that the strategy of a firm consists of the long-range plans of the organization to profitably deliver value-added goods and services to customers. The strategy of the firm impacts how this is to be accomplished. Cost management information provides key information to help formulate strategies and monitor strategies once they have been implemented.

Reading 1.1 Strategic Cost Reduction

Michael D. Shields and S. Mark Young, "Effective Long-Term Cost Reduction: A Strategic Perspective," *Journal of Cost Management* (Spring 1992), pp. 16–30.

Shields and Young (SY) suggest that the conventional "slash and burn" response to impending profit squeezes is neither strategic nor effective. Likewise, a firm cannot naively rely on technology to drive cost reduction. In fact, it will likely be just the opposite. For example, Federal Mogul, an automobile parts supplier, invested in robots, production line computers, and automated material movement systems in order to regain a cost advantage they had lost to the Japanese. Unfortunately, this automation not only failed to lower costs, but caused the plant to become much less flexible than required by customers. As one manager stated, "Very clearly we made some poor decisions. One of them was that high-tech was the answer."[1] SY advocate a firm's taking a much different view of cost reduction —one that is based upon seeking root causes, rather than merely attempting to manage the end results. In SY's view, cost reduction should not just focus on the symptoms, much like losing weight must focus on underlying causes (eating habits, exercise regimen) rather than merely demanding that the pounds be shed.

The root causes are the "why" an organization is incurring cost. These causes are termed *cost drivers*.[2] For example, poor quality is a cost driver. If the firm improves quality, then the cost may go down. Thus, high quality equals low cost. How can this be? To illustrate, if a firm has unreliable quality, then the following costs may be incurred as a result:

scrap (throwing the problem away)
rework (fixing the problem)
rescheduling production (due to unpredictable good output)
paperwork (to record the problem and its likely causes)
inspecting (to make sure problems are detected)
inventory (to protect against uncertain production quantities)
inventory management (the support costs associated with inventories)

If the firm improves the quality of its products and processes, then these sources of cost can be eliminated. Thus, high quality is a source for improved cost (and market) effectiveness. In SY's view, the strategic firm realizes that quality, dependability, and speed lead to strategic advantages as well as to lower costs. Improved costs are a by-product of these activities.

SY go further to suggest that there are a number of organizational cost drivers associated with both structure and processes. These cost drivers are directly related to the strategy of the organization. Firms that poorly match their organizational systems with their strategies will experience a declining profit position. For example, a firm that wishes to maintain a low cost position, but at the same time attempts to provide differentiated service by carrying a broad product line may find itself requiring organizational resources to accomplish the latter and simultaneously dooming the former strategy.

An important point by SY is that organizations are changing from vertical structures with narrow spans of control to more horizontal structures organized around products and customers. These latter structures have a very favorable impact on organizational cost drivers and lie at the heart of organizational reengineering efforts.[3] Exhibit 1 provides some additional perspective on the difference between vertical and horizontal organizations.

As you can see in the exhibit, the horizontal organization requires a very different organizational culture than does the traditional vertical, functionally based organization.

The vertical organization is characterized by functional organizations that are arranged within a multi-layered hierarchy with narrow spans of control. The information and control system mirrors this structure. Therefore, the organizational participants are measured on their ability to meet functional objectives, which may not be consistent at all with the requirements of the external customer. The horizontal organization arranges tasks around products or customers

EXHIBIT 1.
Vertical vs. Horizontal Organizations

Theme	Vertical Organization	Horizontal Organization
Customer	My boss	The external customer
Principle of organization	Tasks (functions)	Products or customers
Focus of economies	Scale economies	Scope economies
Control	Top/down — formal	Local — informal
Role of management	Coordinating	Leading
Role of work force	Entitled	Accountable
Role of information	Assign blame	Support organizational learning

in order to align participants, information flow, and feedback along dimensions that are important to customers.

The vertical organizational structure is designed for a stable environment where "one size fits all" (scale economies). In contrast, the horizontal organization is designed to learn and adapt to changing circumstances. In this organization, one size need not fit all, but can lead to what some have termed "mass customization," or an ability to provide wide product/service scope at low cost (scope economies). In the horizontal organization, participants don't exclusively wait for directives from above, but are empowered to make changes. Employees are accountable for continuous improvement of the processes in which they participate. The senior management does not coordinate disparate functions, but provides leadership in the overall strategic direction of the firm. Without leadership from the top, an organization will be unable to adapt quickly enough to new market realities. Note that this is one of SY's major points for a cost-conscious organizational culture.

Reading 1.2 Value Chain Strategic Cost Management

John K. Shank and Vijay Govindarajan, "Strategic Cost Management and the Value Chain," in *Handbook of Cost Management*, edited by Barry Brinker (New York: Warren Gorham and Lamont), D1, 1993.

Shank and Govindarajan (SG) have been the major proponents of value chain strategic cost management. This article provides a concise overview of their thoughts in this area, as well as some examples to illustrate their points. A *value chain* is a linked set of value-adding activities that link product/service creation to final customer product/service consumption. The concept was originally developed by Michael Porter.[4] SG use Porter's strategic model to provide management guidance in identifying strategic options and opportunities.

A key aspect of SG's approach is that the firm must look beyond its own four walls in order to appreciate its strategic environment. All firms are part of a value chain. Vertically integrated firms control greater portions of the value chain than do non-vertically integrated firms. However, few firms control the complete value chain. To illustrate a value chain, consider Exhibit 2, which is a value chain for men's slacks.

The value chain in Exhibit 2 incorporates a number of different organizations. For example, a textile company spins and weaves the cotton into fabric. An apparel manufacturer purchases the fabric and manufactures the slacks. A trucking company transports the slacks into a retailer's distribution center, and the slacks are then transported to the individual stores and sold to final consumers.

Value chain cost management asks the following questions about the value chain:

Where are the profits in this value chain?

Which firm holds the economic power?

How can the value chain be improved to serve customers better and lower overall value chain costs?

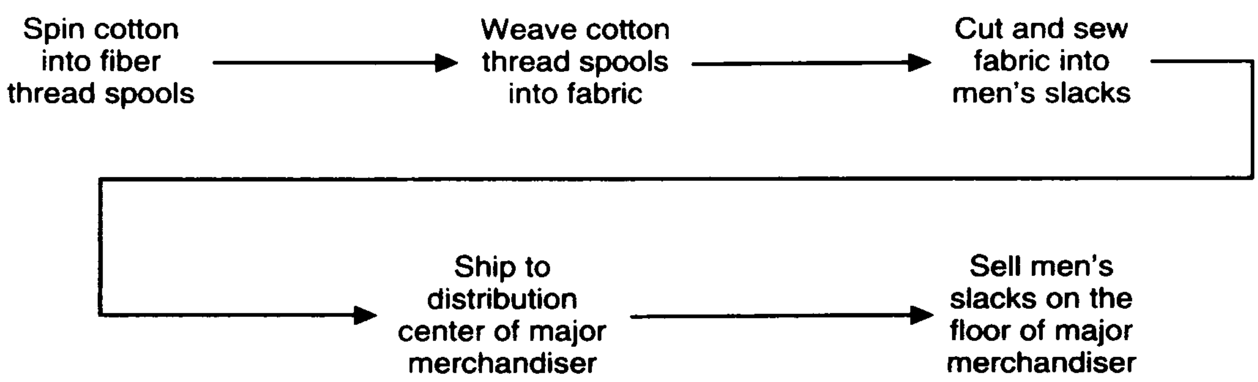
Are there superior value chain configurations, and how will this impact value chain participants?

All of these questions are strategically important and can begin to be answered by analyzing the profitability of the value chain segments. SG would argue that each element of the value chain can be evaluated with respect to (1) revenues and costs and (2) structural cost drivers. Thus, the value chain elements can be evaluated with respect to their individual contributions to the overall profits that can be earned across the complete chain.

In the example in Exhibit 2, the textile company could evaluate the profits in spinning and weaving (separately), the apparel manufacturer could evaluate the profits of manufacturing slacks (or cutting and sewing separately), and the retailer can evaluate the profitability of distributing and retailing slacks. This information would provide any one of the value chain participants insights as to their position in the chain. Low profitability would imply low economic power within the chain, while high profits would indicate high power, but vulnerability to competing value chain strategies. For example, in the Exhibit 2 value chain the retailer currently has a great deal of power and profitability (especially if the men's slacks are private label and not branded). However, the retailer now must compete with alternative value chain configurations, such as catalog sales that bypass the retailer entirely. In this alternative configuration the catalog merchandiser captures the retailer's profit in the value chain.

SG stress that a particular company should "develop sustainable competitive advantage by either controlling cost drivers or reconfiguring the value chain." SG go on to say that a firm should consider reconfiguring the value chain outside of its

EXHIBIT 2.
Value Chain for Men's Slacks



own organization "box" by looking upstream to vendor relations and downstream to customer relations. For example, the apparel manufacturer could look to the customer's activities in the distribution center and re-engineer its own processes to increase value to the chain. This could be done by separately boxing all merchandise with bar coded advance shipping labels (to retail stores). The advance shipping labels allow the retailer's distribution center to effectively unload the apparel manufacturer's shipment and immediately "cross dock" the boxes into trucks that will go to the individual retail store. By using advance shipping labels, the apparel manufacturer saves the retailer from having to store and sort merchandise in the distribution center. The distribution center becomes a regional switching station rather than a storing and sorting location. However, this can only be accomplished if the manufacturer provides the necessary pre-packaging and bar code information. There will be some cost to providing this activity, for which the manufacturer receives some price premium, but the total cost to the chain will drop, since the manufacturer's cost of providing this value-added service is less than the distribution center performing the same activities across all product lines.

SG also point out that the value chain for different products of the same company may be different. A strategic company will outline major product categories and identify value chain opportunities or competitive threats. For example, one of British Air's most frequently traveled routes is London to Paris. The value chain for this "product" includes all the items identified in the SG article. However, what is on the horizon that will significantly alter this value chain? The answer is a tunnel under the English Channel. The new tunnel will allow passengers to take a train from central London to central Paris in less time and cost than it would take to commute to and from airports and fly to Paris. This particular British Air value chain, the London to Paris route, will undergo a major competitive threat. How should British Air respond? There are any number of choices, but one might be to expand into the commuter rail business or partner with commuter railroads to provide seamless transportation between rails and air in other routes (value chains).

The SG article represents a new area wherein cost information can help guide firm strategy. There are few actual examples in the literature of this approach, but it appears to be one that holds much future promise.

Reading 1.3 Control Systems and Strategy

Vijay Govindarajan and John K. Shank, "Strategic Cost Management: Tailoring Controls to Strategies," *Journal of Cost Management* (Fall 1992), pp. 14-24.

The Govindarajan and Shank (GS) article is the second in this series by these authors. The topic discussed in this article is much different than the value chain considerations in the previous article. In this article, GS address an element of contingency theory. *Contingency theory* states that accounting performance and control system designs will be contingent upon the nature of the firm (its strategy, industry, capital intensity, competition, regulatory requirements, structure, power, and culture). The GS paper focuses upon one aspect of the firm, its *strategy*, and its impact on accounting control systems.

One of the important learnings from contingency theory is that there is no such thing as the single "right" accounting and control system. Although textbooks provide a number of approaches, the "correct" accounting and control system is the one that fits the firm. Thus, we should not be surprised to see a variety of different accounting and control system designs in practice, combined with some degree of clustering of systems around firms with common characteristics. This is the basic point of GS.

GS point out that the firm's mission can be on a continuum that goes from aggressive growth and market share development (build stage) to maximizing short-term profit and cash flow (harvest stage). To illustrate, Microsoft would be said to be in a "build" stage of its product life cycles, while the Philip Morris tobacco units would be in a "harvest" stage of product life cycles. GS suggest that the accounting and control systems for the firm in the build stage will need greater flexibility and less cost precision than would be found in the "harvest" mode. The article provides specific expectations of what should be found for each stage.

Although this article does not provide the necessary case evidence to validate the hypotheses empirically, a more extensive set of case study findings that are supportive are listed in footnote 8 of the article.

Notes

1. Quoted from *Wall Street Journal*, May 7, 1993, pA6.
2. We will see that managing cost drivers is a common theme identified in the readings in this book.

3. A bestselling book that is a "must read" is M. Hammer and J. Champy, *Reengineering the Corporation* (New York: HarperBusiness, 1993).
4. M.E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (New York: The Free Press, 1985).

Additional Readings

Archer, S., and D. Otley. "Strategy, Structure, Planning and Control Systems," *Management Accounting Research*, (December 1991): 263–303.

Govindarajan, Vijay, and John K. Shank. "Strategic Cost Analysis: The Crown Cork and Seal Case." *Journal of Cost Management*, (Winter 1989): 5–15.

McGaughey, Nick, and Claire Starry. "Cost/Value Analysis: A Strategic Tool." *Journal of Cost Management*, (Summer 1989): 32–38.

Richardson, Peter R. "Managing Costs Strategically." *Journal of Cost Management*, (Summer 1987): 11–20.

Shank, John K. "Strategic Cost Management: New Wine, or Just Different Bottles?" *Journal of Management Accounting Research*, (Fall 1989): 47–65.

______. "Strategic Cost Management and the Value Chain." *Journal of Cost Management*, (Winter 1992): 5–21.

Shank, John K. Vijay Govindarajan, and Eric Spiegel. "Strategic Cost Analysis: A Case Study." *Journal of Cost Management*, (Fall 1988): 25–33.

Shields, Michael P., and S. Mark Young. "Managing Product Life Cycle Costs: an Organizational Model," *Journal of Cost Management*, (Fall 1991): 39–52.