THE FUTURE OF COMPETITION

Co-Creating Unique Value with Customers

C. K. Prahalad Venkat Ramaswamy

HARVARD BUSINESS SCHOOL PRESS
BOSTON, MASSACHUSETTS

Contents

Preface ix

Chapter One	Co-Creation of Value	. I
Chapter Two	Building Blocks of Co-Creation	. 19
Chapter Three	THE CO-CREATION EXPERIENCE	35
Chapter Four	Experience Innovation	51
Chapter Five	Experience Personalization	75
Chapter Six	Experience Networks	93
Chapter Seven	The Market as a Forum	119
Chapter Eight	Building New Strategic Capital	137
Chapter Nine	Manager as Consumer	155
Chapter Ten	Rapid Knowledge Creation	171
Chapter Eleven	Strategy as Discovery	195
Chapter Twelve	Building New Capabilities for the Future	209
	Aids to Exploration 239 Index 251 About the Authors 257	

PREFACE

THIS BOOK RESULTS from an unusual six-year collaboration between a nontraditional strategy researcher and an eclectic marketing scholar. Both of us were searching for meaning in the changes stirring in our economy in the late 1990s. Chance encounters brought us together. Concerns about the underlying causes of these changes dominated our initial encounters. Early on, we agreed that both the constant fear of discontinuities and the wild exuberance were equally unjustified.

In 1999 and again in 2000, one of us taught an M.B.A. course called "Emerging Issues in Strategy." Its basic premise was straightforward: The old, established corporations (let's call them "A-type" firms) would not disappear. The new, energetic dot-coms ("B-type" firms) would not necessarily survive. A new class of firms ("C-type") would emerge, signifying a morphing and evolving of both the A-type incumbents and the B-type start-ups. The changes underway appeared more subtle and profound. Dot-coms weren't simply toppling long-standing firms or vice versa. Both of us implicitly agreed that the phenomenon deserved more active and thoughtful investigation. Thus began our journey together, a period of intense collaboration and research.

We came to some early conclusions. The phenomenon was indeed not cosmetic. It cut across rich and poor, across developed and developing countries, and across private and public sectors. It challenged the distinction between enterprises and households. The phenomenon seemed universal, forcing change in governments and industries alike. In nearly all cases, there was a portending shift in the balance of influence between the individual and the institution—be it the legislature, the hospital, the university, or the corporation. More important, the individual could actively participate in the process by which all these institutions generated value, almost as if one were combining the efficiencies of the modern era with what the English so nostalgically call the "bespoke" world. The consumer and the firm are intimately involved in *jointly creating value that is unique to the individual consumer* and sustainable to the firm.

In this book, we take a cohesive approach to understanding the nature of this emerging reality. Our task here is to "amplify weak signals" from a diversity of institutions, industries, and countries and to present readers with a new frame of reference for value creation. The question is: How can we go from A-type and B-type firms to the C-type firm without exacting an unreasonable human cost? If you want a set of checklists and commandments based on current business fads, then don't read this book. But if you want to understand how the industrial system as we have known it is morphing and evolving, and want a consistent point of view on how it will change the way we compete in the future, then this book is for you.

While we do not suggest a revolution, we do see wide departures from traditional ways of sensing, thinking, and doing. For example, in the conventional realm of A-type and B-type firms, almost all of the work has centered on the firm. It is traditional to categorize enterprises as business-to-business (B₂B) or business-to-consumer (B₂C), decidedly putting "business" first and taking a firm-centric view of the economy. This book challenges those conventions. What if the individual consumer (whether in an enterprise or a household) were at the center, and not the firm? What if we spoke of "consumer-to-business-to-consumer" (C₂B₂C) patterns of economic activity?

Consequently, we challenge the traditional notion of value and its creation, namely that firms create and exchange value with consumers. We believe that, increasingly, the joint efforts of the consumer and the firm—the firm's extended network and consumer communities together—are co-creating value through personalized experiences that are unique to each individual consumer. This proposition challenges the fundamental assumptions about our industrial system—assumptions about value itself, the value creation process, and the nature of the relationship between the firm and the consumer. In this new paradigm, the

Preface xi

firm and the consumer co-create value at *points of interaction*. Firms cannot think and act unilaterally.

This book reveals unprecedented opportunities for value creation and innovation. But to recognize these prospects, we must regard the world through new lenses and with a deep understanding of our existing framework of value creation. Which ideas from the past must we discard? What new perspectives are needed to comprehend the evolving industrial system? Throughout this book, we present new lenses and contrast them with the old set—the point of departure.

This book's purpose is clear: to guide business leaders in their search for new strategic capital, helping them to break out of their old entrenched ways and discover new ones. To move into the new "zones of opportunity," all of us must recognize the limitations of what we know, our "zones of comfort."

Throughout this book, we use a lot of examples as *thinking props* to convey our perspective and key ideas, not to illustrate best practices. Instead, we strive to discover *next* practices, and so no single example could possibly exemplify the entire framework. We neither prescribe "one best way" nor glorify any one company as the model of the future. We recognize a wide array of options that institutions and individuals can explore and "co-shape," to cope with and capture the opportunities available to everyone reading this book.

This book is more than an invitation to think differently; it is a clarion call to action—to help co-create a new world of possibilities. While we focus primarily on the implications for managers, we believe that, ultimately, all of us will have to behave differently—not just as business leaders, but as consumers, employees, investors, and global citizens—thereby rebalancing the relative influence of the individual and the large institution. We expect a long but exciting journey through the unfamiliar that will force us out of our comfort zones.

We expect you to raise your own specific questions as you peruse each chapter. We can imagine a book like ours, someday soon, with enough embedded intelligence to adapt and evolve its contents along with you—a "living book" if you will—so that you can interact with it and co-construct a personalized experience, should you so desire. For now, you can co-create and extract greater value from this book by jotting your questions in margins and at ends of chapters, to review them periodically as you move along.

o book of this kind can be written without help and significant dialogue with a large number of colleagues and managers. We owe a special debt to several who read early versions of the manuscript and shared with us their suggestions for improvement. Our colleagues Gordon Hewitt, M. S. Krishnan, Gautum Ahuja, Richard Bagozzi, Vikram Nanda, and Anuradha Nagarajan provided detailed feedback and support throughout the process.

Several thoughtful managers gave us their perspective and unstinted support: Larry Keeley (Doblin Group), Jan Oosterveld (Philips), C. V. Nataraj (Unilever), Roy Dunbar (Eli Lilly), Vince Barabba (General Motors), Herbert Schmitz (formerly of P&G Europe), Ron Bendersky (UMBS Executive Education), Debra Dunn (Hewlett Packard), Neerja Raman (HP Imaging Labs), Scott Fingerhut and Stefano Malnati (formerly of PRAJA), S. Ramachander (ACME), V. Sriram (Indian Railways), and Jorge Lopez, Tim Enwall, Lauren Shu, and Steve Bell (all at GartnerG2).

We have also benefited from interactions with Diane Coutu and David Champion (Harvard Business Review), Bob Evans and Stephanie Stahl (Information Week), Brian Gillooly (Optimize), and Ann Graham (Strategy and Business).

We have particularly benefited from the contributions of Kerimcan Ozcan, a doctoral student, who has interacted with us very closely, engaging in scholarly debate. Thanks also to Venkatesh Rajah and Sukumar Ramanathan for providing feedback in the early stages of our research.

More than four hundred students in our M.B.A. classes read early versions of the manuscript and provided detailed comments. We extend our gratitude to all of them. We especially thank Kunal Mehra for his persistence and untiring willingness to provide feedback. We have benefited from all the generous and thoughtful suggestions.

Needless to say, we build on the work of several other scholars and writers. Peter Drucker has always inspired us with his ability to see developments in their historical context. We have benefited from the work of Wroe Alderson, John Seely Brown, Frances Cairncross, Manuel Castells, Clayton Christensen, Jim Collins, Thomas Davenport, Stan Davis and Chris Meyer, Michael Dertouzos, Yves Doz, Kathleen Eisenhardt, Philip Evans and Thomas Wurster, Richard Foster, Sumantra Goshal, Andrew Grove, Stephan Haeckel, John Hagel III, Gary Hamel, Charles Handy, F. A. von Hayek, Tom Kelley, Kevin Kelly, Chan Kim and Renée Mauborgne, Philip Kotler, Dorothy Leonard-Barton, Regis

Preface xiii

McKenna, Henry Mintzberg, John Naisbitt, Nicholas Negroponte, Ikujiro Nonaka and Hirotaka Takeuchi, Richard Normann and Rafael Ramirez, Don Peppers and Martha Rogers, Tom Peters, B. Joseph Pine II and James Gilmore, Michael E. Porter, Howard Rheingold, Mohanbir Sawhney, Bernd Schmitt, Michael Schrage, Joseph Schumpeter, Peter Senge, Patricia Seybold, Carl Shapiro and Hal Varian, Michael J. Silverstein and George Stalk Jr., Adrian Slywotzky, Thomas Stewart, Don Tapscott, Stefan Thomke, Noel Tichy, Alvin Toffler, David Ulrich, Sandra Vandermerwe, Eric von Hippel, Gerald Zaltman, Shoshana Zuboff and James Maxmin, and many more. While we have benefited from the work of others and owe them an intellectual debt, this book represents our synthesis and our point of view.

A good editor is a co-creator. Kirsten Sandberg, our editor, continuously and untiringly cajoled and coaxed us to refine the argument. Karl Weber helped us in clearing the underbrush, making the argument simpler without simplifying it. We owe them a deep debt for their persistence and commitment in bringing clarity to a complex argument.

We would also like to thank Susan Catterall, Sharon Rice, Jennifer Waring, and the entire production and marketing team at Harvard Business School Press.

Finally, we could not have done this work without the unwavering support of our wives—Gayatri and Bindu. Their belief in our search and its importance was unwavering. By taking on a disproportionate part of the duties of parenting, they gave us the privilege of time and the peace of mind required for research and writing. Our children—Deepa, Murali, and Lalitha—were a constant source of inspiration and encouragement.

While we are grateful to many who helped us with this book, we alone are responsible for all its shortcomings.

C. K. Prahalad Venkat Ramaswamy

Co-Creation of Value

A Our industrial system is generating more goods and services than at any point in history, delivered through an ever-growing number of channels. Superstores, boutiques, online retailers, and discount stores proliferate, offering thousands of distinct products and services. This product variety is overwhelming to consumers. Am I buying the right digital camera? Am I getting the best treatment for my chronic ulcer? Am I signing up for the right service? Simultaneously, thanks to the propagation of cell phones, Web sites, and media channels, consumers have increased access to more information, at greater speed and lower cost, than ever before. But who has the leisure and the proficiency needed to sort through and evaluate all these products and services? The burgeoning complexity of offerings, as well as the associated risks and rewards, confounds and frustrates most time-starved consumers. Product variety has not necessarily resulted in better consumer experiences.

For senior management, the situation is no better. Advances in digitization, biotechnology, and smart materials are increasing opportunities to create fundamentally new products and services and transform businesses. Major discontinuities in the competitive landscape—ubiquitous connectivity, globalization, industry deregulation, and technology convergence—are blurring industry boundaries and product definitions. These discontinuities are releasing worldwide flows of information, capital, products, and ideas, allowing nontraditional competitors to upend

the status quo. At the same time, competition is intensifying and profit margins are shrinking. Managers can no longer focus solely on costs, product and process quality, speed, and efficiency. For profitable growth, managers must *also* strive for new sources of innovation and creativity.

Thus, the paradox of the twenty-first-century economy: Consumers have more choices that yield less satisfaction. Top management has more strategic options that yield less value. Are we on the cusp of a new industrial system with characteristics different from those we now take for granted? This question lies at the heart of this book.

The emerging reality is forcing us to reexamine the traditional system of company-centric value creation that has served us so well over the past hundred years. We now need a new frame of reference for value creation. The answer, we believe, lies in a different premise centered on *co-creation* of value. It begins with the changing role of the consumer in the industrial system.

The Changing Role of the Consumer

The most basic change has been a shift in the role of the consumer—from isolated to connected, from unaware to informed, from passive to active. The impact of the connected, informed, and active consumer is manifest in many ways. Let us examine some of them.¹

Information Access

With access to unprecedented amounts of information, knowledgeable consumers can make more informed decisions. For companies accustomed to restricting the flow of information to consumers, this shift is radical. Millions of networked consumers are now collectively challenging the traditions of industries as varied as entertainment, financial services, and health care.

For instance, active health care consumers (no longer the passive recipients of treatment, a.k.a., patients) are using the Internet to learn about diseases and treatments; the track records of doctors, hospitals, and clinics; and the latest clinical drug trials and experimental procedures—and to share their personal experiences with others. Consumers can now question their physicians more aggressively and participate more fully in their own treatment modalities.

Global View

Consumers can also access information on firms, products, technologies, performance, prices, and consumer actions and reactions from around the world. Twenty years ago, the two car dealerships (General Motors and Ford) in small towns in North America would probably have influenced the driving aspirations of a local teenager. Today, a teen anywhere can dream about owning one of more than seven hundred car models listed on the Internet, creating a serious gap between what is immediately available in the neighborhood and what is most desirable.

Geographical limits on information still exist, but they are eroding fast, changing the rules of business competition. For example, broader consumer scrutiny of product range, price, and performance across geographic borders is limiting multinational firms' freedom to vary the price or quality of products from one location to another.

Networking

Human beings have a natural desire to coalesce around common interests, needs, and experiences. The explosion of the Internet and advances in messaging and telephony—the number of mobile phone users is already over one billion—is fueling this desire, creating an unparalleled ease and openness of communication among consumers. Consequently, "thematic consumer communities," in which individuals share ideas and feelings without regard for geographic or social barriers, are revolutionizing emerging markets and transforming established ones.

The power of consumer communities comes from their independence from the firm. In the pharmaceutical industry, for instance, word of mouth about actual consumer experiences with a drug, and not its claimed benefits, is increasingly affecting patient demands. Thus, consumer networking inverts the traditional top-down pattern of marketing communications.

Experimentation

Consumers can also use the Internet to experiment with and develop products, especially digital ones. Consider MP3, the compression standard for encoding digital audio developed by a student Karlheinz

Brandenburg and released to the public by the Fraunhofer Institute in Germany. Once technology-savvy consumers began experimenting with MP3, a veritable audio-file-sharing movement surged to challenge the music industry. The collective genius of software users the world over has similarly enabled the co-development of such popular products as the Apache Web server software and the Linux operating system.

Of course, the Internet facilitates consumer sharing in nondigital spheres as well: Aspiring chefs swap recipes, gardening enthusiasts share tips on growing organic vegetables, and homeowners share insights into home improvements. More crucial, consumer networks allow proxy experimentation—that is, learning from the experiences of others. The diversity of informed consumers around the world creates a wide base of skills, sophistication, and interests that any individual can tap into.

Activism

As people learn, they can better discriminate when making choices; and, as they network, they embolden each other to act and speak out. Consumers increasingly provide unsolicited feedback to companies and to each other. Already, hundreds of Web sites are perpetuating consumer activism, many targeting specific companies and brands. America Online's AOL Watch, for example, posts complaints from former and current AOL customers. Blogs (Web logs) that present an individual's worldview through texts, images, and Web links, facilitate public expression and debate.

The Web has also become a powerful tool by which groups focused on issues such as child labor and environmental protection seek corporate and governmental attention and promote reforms. Consumer advocacy through online groups may have even greater impact than company marketing. When Novartis AG launched clinical trials of a promising leukemia drug, Gleevec, word spread so fast on the Internet that the company was inundated by demand from patients wanting to participate. Activism by leukemia patients who were on the early clinical trials for this drug led to a highly effective lobbying effort via Internet support groups to speed up its production, and even get the Food & Drug Administration (FDA) to expedite its approval.²

What is the net result of the changing role of consumers? Companies can no longer act autonomously, designing products, developing production processes, crafting marketing messages, and controlling sales

channels with little or no interference from consumers. Consumers now seek to exercise their influence in every part of the business system. Armed with new tools and dissatisfied with available choices, consumers want to interact with firms and thereby co-create value. The use of *interaction* as a basis for co-creation is at the crux of our emerging reality.

Consumer-Company Interactions: The Emerging Reality of Value Creation

Consider the evolution of the health care industry. Innovations in pharmaceuticals, biotechnology, nutrition, cosmetics, and alternative therapies are creating various treatment modalities and transforming our concepts of health. As both consumers and technologies advance, traditional medicine ("curing sickness"), preventive medicine, and improvements in the quality of life are rapidly merging into a "wellness space." Let us examine the changing dynamics of interaction between a consumer and the firms that participate in the wellness space.

Twenty years ago, when I was feeling ill and visited my doctor, I might have undergone a battery of tests that would have informed my doctor's diagnosis, which he would explain to me only if he had to. He would then choose a treatment modality, prescribe some medications, and schedule a follow-up examination. Health care back then was generally doctor-centric, just as commerce was company-centric. Doctors thought that they knew how to treat me, and since I wasn't a physician myself, I probably agreed. Similarly, most businesses figured that they knew how to create customer value—and most customers agreed.

Now, the health care process is far more complex. As soon as I feel ill, I can tap into the expertise and experience of other patients and health care professionals. I can access an abundance of information, some of it reliable, some not. I can learn what I want about breast cancer or high cholesterol or liposuction. I can investigate alternative treatments for any condition and develop an opinion about what might and might not work for me.

Ultimately, I can cut my own path through the wellness space, thereby constructing a personal wellness portfolio. If I'm grappling with high cholesterol, then I can include pharmaceuticals for blood pressure and cholesterol approved by the FDA, health supplements not approved by the FDA, a fitness regimen developed with an instructor, and genetic screening for hereditary heart disease.

Notice that my wellness portfolio does not fit neatly into any traditional industry classification. Yes, I visit my doctor. I get tests and medications and submit the bills to my medical insurance, provided through my employer. But other services in my wellness portfolio fall outside the conventional doctor-based health care, pharmaceutical, or insurance industries. My wellness space springs from my view of wellness, my biases, values, expertise, preferences, expectations, experiences, and financial wherewithal. My spouse, meanwhile, can construct her own wellness portfolio.

Rather than rely solely on my doctors' expertise, I can seek experts among my peers—other health care consumers—organized into thematic communities, such as a high-cholesterol group. This networked knowledge encompasses not just the medical aspects pertinent to my condition but its sociology, psychology, and likely impact on me, my family, and the community at large.

Thus, my next visit to the doctor can differ dramatically from the conventional checkup. I can ask, Why did you prescribe this treatment? Why not the alternative that I found through my exploration with other consumers and the Web? My doctor probably won't enjoy my challenging his expertise and authority. After all, I'm asking him to explain and defend his approach, which takes time and energy. What's more, I'm testing the depth, breadth, and currency of his knowledge. What if I'm experimenting with alternatives—herbs, dietary supplements, and so on—that he may not yet understand? Will he know of any complex interactions between these treatment modalities? Should he?

Of course, health care consumers have always shaped their own treatment to a certain extent. Remember Grandma's prescribing a remedy such as chicken soup for a cold? But with today's access to information, consumer war stories, and advice from an experienced peer group, consumers are far more likely to network and experiment than ever before. As a health care consumer, I can more actively determine the "value bundle" that is appropriate for *me*, cutting across customary industry boundaries.

Now position yourself as a manager in a pharmaceutical firm. The commingling of traditional industries into a complex, evolving wellness space challenges deeply entrenched and implicit assumptions in managerial tradition, which have evolved over decades. For starters, what constitutes or defines a product or service? Is an antiwrinkle cream with

Retinol a cosmetic, a fashion, or a pharmaceutical product? With unclear industry boundaries, how do we identify the nature of our competitive advantage?

More important, what value does the pharmaceutical firm provide in the wellness space of an active, involved consumer? How does the consumer's increasing desire to interact with both the providers and their provisions affect the various parties involved in that consumer's wellness space? Who bears the risk—the doctor, the hospital, or the patient? Patients will likely hold doctors, as experts, accountable.

Let's move beyond doctors and patients. What if consumers inappropriately use or modify your products and then hold you responsible for any resulting damage? Increasingly, consumers seem to want power without accountability. They want to choose for themselves but not be liable for the consequences of their choice. Are you as a manager responsible for the product's performance even though you cannot control the consumer's usage? How do you protect yourself? Is this risk a new cost of doing business? No matter how the future unfolds in terms of the roles, rights, and responsibilities of companies and consumers, companies will have to engage consumers in co-creation of value.

Thus, when we scrutinize consumer-company interactions and amplify the weak signals reverberating in the wellness space, we glimpse the emerging reality of the active involvement of consumers, whether as thematic communities or as informed individuals. This fundamentally challenges two deeply embedded, traditional business assumptions: (1) that any given company or industry can create value unilaterally; and (2) that value resides exclusively in the company's or industry's products and services. What new concepts do we need to understand the implications of the emerging pattern of interactions between consumers and the firm?

Co-Creation of Value

Let us stay with the wellness space and look at cardiac pacemakers. More than five million adults in the United States suffer from various cardiac maladies. Many of them could get a pacemaker that monitors and manages their heart rhythm and performance, a valuable benefit. However, a patient's comfort level would increase substantially if someone or something monitored his heart remotely, and alerted him and his doctor simultaneously of any deviations from a predetermined

bandwidth of performance, relevant to his condition. Doctor and patient together could decide on the remedial response.

The scenario gets more complicated when the patient travels far from home. A mere alert will not suffice. The patient needs directions to the best nearby hospital, and the attending physician needs access to the patient's medical history. How do the two doctors—his primary care provider back home and the physician on call at the out-of-town hospital—coordinate their diagnosis and treatment? Should he call his spouse? How can he recognize and assess the risks and develop an approach to compliance and cooperation with these medical professionals? Are the doctors, the facilities and services, and the pacemaker all part of a network centered on the patient and his well-being?

Companies are already installing elements of these network capabilities. Consider Medtronic, Inc., a world leader in cardiac rhythm management that seeks to offer lifelong solutions for patients with chronic heart disease. It has developed a system of "virtual office visits" that enables physicians to check patients' implanted cardiac devices via the Internet. With the Medtronic CareLink Monitor, the patient can collect data by holding a small antenna over his implanted device. The data are captured by the antenna, downloaded by the monitor, and transmitted by a standard telephone line to the Medtronic CareLink Network. On a dedicated secure Web site, physicians can review patient data and patients can check on their own conditions—but no one else's—and grant access to family members or other caregivers.³

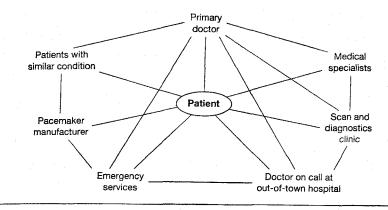
Medtronic's CareLink system goes beyond the cardiac device itself and unleashes opportunities for an expanding range of value creation activities. For example, each person's heart responds to stimulation slightly differently, and the response can change over time. In the future, doctors will be able to respond to such changes by adjusting the patient's pacemaker remotely. Furthermore, Medtronic's technology platform can support a wide range of devices and remote monitoring/diagnostic systems, potentially used for monitoring blood sugar readings, brain activity, blood pressure, and other important physiological measures.

We believe that the pacemaker story, as summarized in figure 1-1, is a prototype of the emerging process of value creation.

Now, as a manager, consider the following questions:

1. How does the patient actively participate in the process of co-creating value?

Cardiac Pacemakers and the Patient Co-Creation Experience



- 2. How does the quality of the patient's *interactions* with the doctor, the family, and the staff of the out-of-town hospital affect the quality of the patient's overall experience?
- 3. What is the basis of value creation here? What role does the total network of related products, services, and caregivers play in creating value? How can any one of them create unique value with the patient at any given point in time? What if the patient values the whole experience co-created with the network, and not simply with the pacemaker?
- 4. How does the network's ability to accommodate different situations affect the patient experience—different time and location of the *event* of an irregular heartbeat? Can the same individual have a different experience with the network under different circumstances, depending on the context of the event and his personal preferences at that moment in time?
- 5. Are experiences therefore *contextual?* Given the same network, can an individual have different experiences, depending not only on the situational *context* (time and space) of the event, but also on the social and cultural context of the event? How much do intangible aspects of a patient's context influence the experience?

- 6. Do patients as individuals react differently to similar problems? Given the same network, similar medical problems, and even similar circumstances, can different individuals have different experiences? How does patient *heterogeneity* influence the nature and quality of experience?
- 7. Can companies create an environment that generates experience variety without burdening the consumer with a variety of products and services?

The pacemaker story illustrates the new value creation space: a competitive space centered on *personalized co-creation experiences* developed through purposeful interactions between the consumer and a network of companies and consumer communities.

Value does not stem from the physical product, the pacemaker, or from the communication and IT network that supports the system, and not even from the social and skill network that includes doctors, hospitals, the family, and the broader consumer community. Value lies in the co-creation experience of a specific patient, at a specific point in time, in a specific location, in the context of a specific event.

The co-creation experience originates in the patient's interaction with the network. It cannot occur without a network of firms collaborating to create the environment that allows the patient to undergo that unique co-creation experience. The network, not owned by any single firm, multiplies the value of the pacemaker to the patient, his family, and his doctors. The patient, by co-creating with the network, is an active stakeholder in defining the interaction and the context of the event. The total co-creation experience with the network results in value that is more personal and unique for each individual.

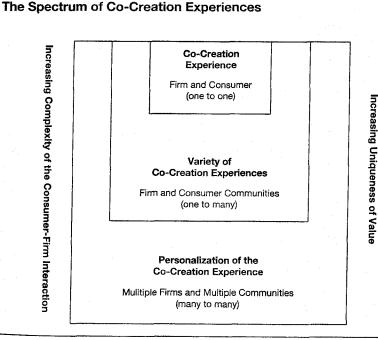
In the conventional value creation process, companies and consumers had distinct roles of production and consumption. Products and services contained value, and markets exchanged this value, from the producer to the consumer. Value creation occurred outside the markets. But as we move toward co-creation, as with the pacemaker, this distinction disappears. Increasingly, consumers engage in the processes of both defining and creating value. The co-creation experience of the consumer becomes the very basis of value.

At a basic level, the pacemaker example encapsulates the changed relationship between the firm and its consumers. As we saw in the patient-doctor interaction, we find that the consumer (pacemaker patient) and all the firms in the network interact intensely, involving access to information on all sides, a level of transparency, and, more important, human dialogue and an ongoing assessment of risk.

However, the pacemaker firm must deal with a large number of consumers, inevitably a heterogeneous lot, with different approaches to the interaction. Consumers can also interact with multiple thematic communities. The firm also interacts with multiple communities in the network, including those of health care professionals and the service providers that operate and maintain the IT and Internet infrastructure. The pacemaker firm may have little influence over these groups. Finally, for the same consumer, the co-creation experience at two different times will not be the same. The event's context in space and time, as well as the eagerness and level of involvement of the individual, influences the experience.

We can conceptualize these increasingly complex patterns of interaction between the consumer and the firm, as shown in figure 1-2. In the emerging reality, these patterns of interactions between the consumer

FIGURE 1 - 2



and the firm will shape the value creation process, challenging existing ways of doing business and creating value. Simultaneously, they create tremendous new opportunities.

But to see these opportunities, we must suspend the traditional distinction between B2"B" and B2"C" customers. In the world of cocreation, we have to imagine every individual who interacts with the company as a "consumer," whether that individual is a fork-lift operator, a pilot, a design engineer, a beautician, a clinical researcher, an instructor, a contractor, a paralegal, or a civic worker. This perspective forces us to discard the artificial distinctions among enterprises and households. Furthermore, historically we have started with "B"—our business—and not the individual consumer. This company-centric view of value creation is deep-rooted, as it has been the very foundation of competition in the industrial era.

The future of competition, however, lies in an altogether new approach to value creation, based on an individual-centered co-creation of value between consumers and companies. To see this future, we must escape the past. And to escape the past, we must understand it—that is, we must recognize the belief structures that underlie our actions as managers.

Escaping the Past:

The Traditional System of Value Creation

The traditional belief structure that has served business leaders so well for the past hundred years is shown in figure 1-3.

The relationships between the rows and the columns in the chart depict the internal consistency of the traditional logic of value creation. Let us start with the premises in the top row of the figure.

Traditional business thinking starts with the premise that the firm creates value. A firm autonomously determines the value that it will provide through its choice of products and services. Consumers represent demand for the firm's offerings.

The implications for business follow from these premises. The firm needs an interface with consumers—an exchange process—to move its goods and services. This firm-customer interface has long been the locus of the producer's extracting economic value from the consumer. Firms have developed multiple approaches to extracting this value—by increasing the variety of offerings, by efficiently delivering and servicing those offerings, by customizing them for individual consumers, or

Focus on supply chains and demand management Consumers represent demand for the firm's offerings Customizing offerings and staging experiences Focus on innovation of technology, products, and processes Creating and delivering a variety of offerings Products and services are the basis of value The Traditional Frame of Reference for Value Creation Focus on value chains and quality of internal processes Firm-consumer interface is locus of value extraction Value is created by the firm Manifestation Implication Premise

by wrapping contexts around them and staging the value creation process, as themed restaurants do.

These premises and implications manifest themselves in the perspectives and practices of firms in the industrial system. Managers focus on the "value chain" that captures the flow of products and services through operations that the firm controls or influences. This value chain system essentially represents the "linear cost build" of products and services. Decisions on what to make, what to buy from suppliers, where to assemble and service products, and a host of other supply and logistics decisions all emanate from this perspective. Employees focus on the quality of the firm's products and processes, potentially enhanced through internal disciplines such as Six Sigma and Total Quality Management. Innovation involves technology, products, and processes.

Thus, we have a coherent system for value creation. The rows and columns are internally consistent. If the firm creates value, then the value creation process is separate from the market, where various parties simply exchange this value. The importance of efficiently matching supply from the firm's value chain with demand from consumers becomes obvious. In fact, matching supply and demand has long been the bedrock of the value creation process.

But the cardiac pacemaker case signals a different starting point. Consider the shifts in thinking identified thus far. Consumers are overwhelmed and dissatisfied by the product variety available today. Armed with new connective tools, consumers want to interact and co-create value, not just with one firm but with whole communities of professionals, service providers, and other consumers. The co-creation experience depends highly on individuals. Each person's uniqueness affects the co-creation process as well as the co-creation experience. A firm cannot create anything of value without the engagement of individuals. Co-creation supplants the exchange process.

The New Frame of Reference for Value Creation

What might a new, internally consistent system based on co-creation of value look like? We present such a system in figure 1-4.

The new starting premise is that the consumer and the firm cocreate value, and so the co-creation experience becomes the very basis of value. The value creation process centers on individuals and their cocreation experiences.

Focus on experience networks Personalization of the co-creation experience The individual is central to the co-creation experience experiences through heterogeneous interactions innovating experience environments Variety of co-creation Co-creation experiences are the basis of value Focus on The New Frame of Reference for Value Creation Value is co-created by the consumer and the firm Consumer-firm interaction is the locus of value co-creation Focus on the quality of consumer-firm interactions Premise Manifestation Implication

FIGURE 1 - 4

New premises inevitably lead to new implications for business. The interaction between consumers and firms becomes the new locus of cocreation of value. Since millions of consumers will undoubtedly seek different interactions, the value creation process must accommodate a variety of co-creation experiences. Context and consumer involvement contribute to the meaning of a given experience to the individual and to the uniqueness of the value co-created.

These premises and implications suggest new capabilities for firms. Managers must attend to the quality of co-creation experiences, not just to the quality of the firm's products and processes. Quality depends on the infrastructure for interaction between companies and consumers, oriented around the capacity to create a variety of experiences. The firm must efficiently innovate "experience environments" that enable a diversity of co-creation experiences. It must build a flexible "experience network" that allows individuals to co-construct and personalize their experiences. Eventually, the roles of the company and the consumer converge toward a unique co-creation experience, or an "experience of one."

Notice what co-creation is *not*. It is neither the transfer nor outsourcing of activities to customers nor a marginal customization of products and services. Nor is it a scripting or staging of customer events around the firm's various offerings. That kind of company-customer interaction no longer satisfies most consumers today.⁴

The change that we are describing is far more fundamental. It involves the co-creation of value through personalized interactions that are meaningful and sensitive to a specific consumer. The co-creation experience (not the offering) is the basis of unique value for each individual. The market begins to resemble a *forum* organized around individuals and their co-creation experiences rather than around passive pockets of demand for the firm's offerings.

Discovering Next Practices

Managers are under intense pressure to create value. But value creation by improving operational efficiency—through such initiatives as outsourcing, business process reengineering, and work force reduction—has natural limits in terms of morale and potential. Firms must couple such efficiencies with innovation and new business development. Internally generated profitable growth is at a premium. Even the best firms

have struggled and are still struggling to create new markets or sustain a high rate of commercially successful innovations.

Obviously, managers need a radically different approach for reigniting the growth and innovation capabilities of their firms. We see a new frontier in value creation emerging, replete with fresh opportunities. But successful prospecting will require framing and practicing value creation in a fundamentally different way from that of the past.

Recognizing that the traditional system is becoming obsolete, many firms are already testing new business assumptions. As we reveal later in this book, these experiments can both guide and enlighten managers, when viewed through the new frame of co-creation. But innovation by extrapolation from the past, using those dusty one-way lenses, will likely fail to create the fundamental change required to compete in a world of co-creation.

In the emergent economy, competition will center on personalized cocreation experiences, resulting in value that is truly unique to each individual. This book provides a road map to that future, a map for a journey that we believe all business leaders must eventually and boldly make.

About the Authors

C. K. Prabalad is the Harvey C. Fruehauf Professor of Business Administration at the Michigan Business School. He is coauthor of the landmark bestseller Competing for the Future and widely regarded as one of the foremost strategy thinkers in the world. His research has consistently focused on "next" practices.

Venkat Ramaswamy is the Michael R. and Mary Kay Hallman Fellow of Electronic Business and Professor of Marketing at the Michigan Business School. His eclectic interests span innovation, customer experiences, communities, new market creation, networks, information and communications technology, human resources, and strategy. His research focuses on new frontiers in experience innovation, consumer company interactions, experience quality management, infrastructure for experience networks, and co-creating value.

Prahalad and Ramaswamy have coauthored several articles in the *Harvard Business Review*, Sloan Management Review, Strategy and Business, Information Week, Optimize, and other publications.