the new age of innovation

DRIVING COCREATED VALUE THROUGH GLOBAL NETWORKS

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INTRODUCTION

This book is a result of an interesting personal journey. C. K. Prahalad had authored two books: *The Future of Competition* (with Professor Venkat Ramaswamy) and *The Fortune at the Bottom of the Pyramid* in 2004. While at a superficial level they appeared to be unrelated, they presented a unified message. They touched on three critical aspects of innovation and value creation. First, value will increasingly be cocreated with consumers—be they rich consumers in the West or very poor consumers in Bangladesh and India. Second, no single firm has the knowledge, skills, and resources it needs to cocreate value with consumers. Every firm has to learn to access resources from multiple sources. Third, the emerging markets can be a source of innovation.

While researching these issues, it became obvious that there is yet another major change in the focus and processes of innovation afoot. It was the rapid acceleration in "outsourcing" of information technology–related work. C. K. Prahalad's experience in cutting-edge software start-ups, including Praja, Inc., sensitized him to the implications of this trend. Does this mean that the patterns of innovation will morph further? It was an obvious question.

At this juncture, Professor Krishnan joined the research effort. The two of us had worked before on developing a point of view about the role of information technology in strategy. We noticed the emergence of newer business models, fragmentation of traditional organizational structures, centrality of information technology that enabled business processes, collaboration between then-unknown small, specialized Indian firms and considerably larger global firms, and increasingly complex demands on the managerial systems of established firms. These patterns were intriguing. We also recognized through our consulting and research engagements the significant gap that exists between strategic intent and "capacity to act" in organizations.

Four years of concerted effort by both of us to understand the phenomena resulted in this book. Needless to say, it builds on our previous work but presents a new and we believe a unique perspective on the essence of innovation. This book represents the critical operational link in the evolving approach to innovation and value creation. The focus is on *building organizational capabilities* that allow a firm to create the capacity for continuous innovation.

This book is about the nature of innovation—the locus, sources, and processes of innovation and strategy in the new competitive context. More important, we focus on the often hidden links—business processes and analytics—that mediate between innovations, business models, and day-to-day operations. Successful innovations seamlessly connect concepts and ideas to their operational manifestations. We do not present a "charismatic leader" approach to innovation. Neither do we focus on big breakthroughs. We believe that the changing dynamic of markets driven by ubiquitous connectivity, technology, industry convergence (as in computing, communications, consumer electronics, and content), and consumer activism and involvement will create a need for continuous change—not just episodic big breakthroughs.

Development of new features and functionality, new channels, new levels of ease of use, new businesses, and new pricing models is as critical as the hope for a big breakthrough. Given this focus, we will discuss the technology and social infrastructure requirements to deliver an ongoing innovation advantage. The unifying theme of this book is that for successful management of innovations, managers must think differently about innovation and act differently to mobilize the organization. The new game is about more efficiency and more innovation. The managerial agenda in this book is about building this new strategic capital—a new approach to innovation and creating value.

We start with the nature of the transformation of business. We recognize that the nature of the relationships between consumers and the firm has changed radically. Starting over a hundred years ago, firms assumed undifferentiated consumers (for example, the consumers who bought the Ford company's Model T). Since then, we have moved through various levels of marketplace segmentation of consumer groups. We have finally reached the point where the confluence of connectivity, digitization, and the convergence of industry and technology boundaries are creating a new dynamic between consumers and the firm. Traditionally, we have assumed that the firm creates value and exchanges it with its consumers. This firm- and product-centric view of value is being rapidly replaced by a personalized experience and a cocreation view of value.

iGoogle, for example, is about cocreation of value and personalization of experience. Google provides the platform. Individual consumers decide how to use it (personalize it) to suit their particular needs—that is, for fun or learning. So too is skin care personalized by the Ponds Institute at Unilever. The Ponds Institute measures your skin conditions and seeks your views about how you want to look and feel. The company allows you to suggest your personal skin-care budget, to which the company responds by developing a recipe of products for you. It is your personal portfolio. You cocreated it.

As we will argue in this book, these are not isolated examples. This focus on unique personal experiences is increasingly permeating industries as diverse as toys, financial services, travel and hospitality, retailing, and entertainment. The message ought to be clear: Even if a company is dealing with a hundred million consumers, each manager must focus on one consumer experience at a time. The firm can provide the platform around which customers can cocreate their own experiences. Consider Starbucks. You decide whether you want to pick up your favorite coffee and run, stay and read the newspaper, have a meeting, or do your homework. A Starbucks storefront, in this sense, is a platform for experience. We are moving to a world in which value is determined by one consumer-cocreated experience at a time. We will call this phenomenon $N = 1$. This phenomenon extends beyond Google or Starbucks, as we will show in this book. It is one of the two emerging pillars of innovation in all businesses.

Similarly, during the industrial revolution many a large firm was vertically integrated (for example, IBM, Ford, Kodak, Philips, and Siemens). It was only around the mid-1980s that firms started to source critical components from suppliers. Now, most have moved to global supply chains, accessing specialist and low-cost producers. As a result, access to resources is increasingly becoming multivendor and global. This trend toward access to resources from multiple sources (either local or global), and not just from the firm and its subsidiaries, we designate $R = G$. This is the second pillar of innovation in all businesses.

The key is that the supply of products, services, and competencies is multi-institutional. The firms should build capacities to access the global network of resources to cocreate unique experiences with customers. It is not necessary for firms to own all the resource bases they need. Capacity to access these networks of resources is sufficient. The world defined by $N = 1$ and $R = G$ is the exact opposite of where we started a hundred years ago. Our approaches to managing have undergone significant change over the years. Yet the legacy of our past still lingers. In this book, we will start with the two pillars of the next generation of innovations—

$N = 1$ and $R = G$—and develop the nature of the changes that are critical to win in that competitive space.

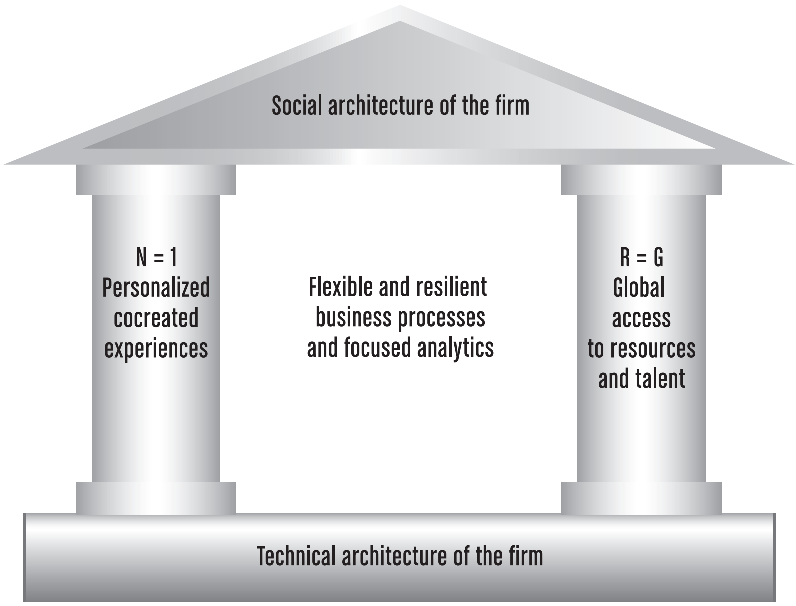
The intellectual underpinnings of the $N = 1$ and $R = G$ concepts were established in the book *The Future of Competition*, which outlined clearly the new concept of value creation and the rationale for cocreating personalized experiences with customers. Even in emerging markets and among very poor consumers, the need for differentiated and personalized experiences is quite pronounced. Many of the solutions to poverty that treat the poor as one undifferentiated mass have failed, while approaches that recognize their unique circumstances and needs by creating locally responsive and personalized solutions have worked.

For example, in India, self-help groups (SHGs), which are voluntary organizations consisting of about 12 to 15 women in a village, are able to obtain loans from large banks that are developing microfinancing mechanisms to make such loans possible. The loans are given to the groups, not to individuals. The group then decides, based on discussion among its members, who among them and what projects need to be financed on a priority basis. Because the self-help groups have intimate knowledge of the local circumstances—of individuals (their financial standings, their behaviors, and their character) as well as the community—their decisions are as local as they can get. The groups cocreate their own experiences. They also implicitly supervise how the money is being spent. It is no surprise that the repayment rates tend to be extremely high—as high as 99.5 percent.

The ICICI Bank, as the microfinance institution, provides global standards. Global standards and local responsiveness are increasingly seen as the solutions to building inclusive markets and adding the *next 4 billion consumers.* This was the substance of the book *The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits.*

We view innovation as shaping consumer expectations as well as responding continually to the changing demands, behaviors, and

FIGURE I.1
The New House of Innovation



experiences of consumers. We must do this by accessing the best talent and the resources available anywhere in the world. These two ideas must be connected—the resources of many to satisfy the needs of one. We suggest that this is possible only if we pay attention to the glue that enables ideas to be transformed into operations. We will focus on business processes and analytics as the glue.

However, business processes must be connected to the skills, attitudes, and orientations of managers. The social architecture—organization structure, performance measurement, training, skills, and values of the organization—must reflect the new competitive imperatives. So must the technical architecture of the firm—its information technology backbone. We may describe this view of innovation as the *New Age of Innovation.* The relationships between the various aspects of innovation described in the book can be captured in the form of a "House of Innovation," as shown in Figure I.1.

THE STRUCTURE OF THE BOOK

The first four chapters of the book focus primarily on the "what" and "why" of the morphing of the competitive landscape and therefore the value creation (and innovation) space. Chapters 5 through 8 focus on an approach to taking stock of where a firm is in its transformation. We believe that most firms, whether consciously or by happenstance, are moving in this direction; certainly most firms are moving toward $R = G$ in search of cost reductions. We develop a methodology for an orderly and systematic migration from where a firm is to where it needs to be. This transformation need not be traumatic. Small steps, taken one at a time, can lead to significant new capabilities over a very short period of a few years. But these changes must be directionally consistent.

In Chapter 1, we start with demonstrating the trend toward $N = 1$ and $R = G$ in a wide variety of industries. We then develop the managerial demands that this approach to value creation imposes on a firm.

In Chapter 2, we identify the new sources of competitive advantage in a world where the traditional sources of advantage—access to technology, labor, and capital—are no longer unique differentiators for most firms. We suggest that the new source of competitive differentiation may lie in the internal capacity to reconfigure resources in real time. This chapter focuses on business processes—the link between strategy, business models, and operations. We argue that clearly documented, transparent, and resilient processes are a must.

But the $N = 1$ and $R = G$ world demands more than transparency. Managers must develop a deep sense of consumer behavior, consumers' needs and skills (to enable cocreation), and the capabilities of their large network of suppliers to make $R = G$ a reality. Focused analytics that can identify trends and reveal unique opportunities for managerial intervention is an integral part of the capability we need. Chapter 3 focuses on analytics.

In Chapter 4, we describe the specifications for the technical architecture for the firm that will enable it to develop resilient business processes and focused analytics and to anticipate competitive trends and opportunities. First, we describe the new value creation space and identify the new sources of advantage—business processes and analytics. We then specify the nature of the technical architecture that can enable these new capabilities.

We then move to the "how." We recognize that each organization is unique, with its own history. Each has followed its own evolutionary path, often with a large number of acquisitions and mergers. So every large organization represents not just one culture or technical capability, but often multiple subcultures and often a patchwork of technical capabilities consisting of "legacy skills, managerial mindsets, and technical systems."

In Chapter 5, we start with this perspective as a point of departure. We identify the typical legacy issues and the problems of migrating from where a firm is to where it needs to be to compete effectively in an $N = 1$ and $R = G$ world. This migration is a staged process, and we need to ask how an organization can take small steps that lead to big changes over time.

In Chapter 6, we identify the linkages between managerial skills, mindsets, and authority and decision structures and the technical architecture of the firm. We discuss an approach to managing the tension between flexibility and efficiency in business processes in this transformation. For effective competition, both systems—social and technical—must be managed.

In Chapter 7, we identify the need for accessing new skills from around the world to stay competitive.

Finally, in Chapter 8, we build an agenda for managers to move forward in the $N = 1$ and $R = G$ world of competition and value creation.

The transformation of large firms is neither hard nor easy, but it does take a lot of effort. That effort must start with a deep conviction about the nature of the changes required. Change must start with a point of view about the emerging competitive environment. Guiding the organization toward that future in small but directionally consistent steps is the substance of "how." We believe that strategy is about your knowing "what" and "why," and "how."