Nitin Nohria
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The DIFFERENTIATED NETWORK

Organizing Multinational Corporations for Value Creation

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Preface

This book represents the synthesis of a stream of research that began more than a decade ago when we were both at the Massachusetts Institute of Technology. It is based on a series of papers that we have written over this period, some together, others in collaboration with graduate students and colleagues who became interested in our research and joined us in advancing it further.

We decided to write this book because we felt that even though we had published many of the ideas in various outlets, the sum of these parts did not adequately capture all we had learned through our research. A major theme in this book is that to be truly effective, multinational corporations should be differentiated and integrated. Similarly, this book represents an attempt to integrate what might otherwise have remained differentiated parts.

The primary idea we wish to advance here is that the modern MNC must be organized as a differentiated network to tap the full value-creation potential of its globally distributed capabilities. This basic idea is not new. Indeed, it has been elaborated in some detail by Chris Bartlett and Sumantra Ghoshal in *Managing Across Borders: The Transnational Solution* (1989), a book that is the intellectual forebear of this one. What is new in this book is a more systematic examination of this core idea—especially an effort to ground the concept of a differentiated network more firmly in organization theory and to test its validity more rigorously using large-sample data.

Our aspirations in writing this book are twofold. First, we continue to believe that despite their increasing importance in the global economy, MNCs remain neglected in organization theory.

This neglect, we believe, stems in part from the practical difficulties of studying these complex organizations. We hope that the concepts and the pragmatic empirical strategies advanced in this book will stimulate more research on MNCs.

Second, we wish to revive interest in the topics of organization structure and design. The internal structures and processes of complex organizations was a subject of intense study in the 1970s, the heyday of contingency theory. However, since then, these topics have taken a backseat to an interest in the organization's environment. Indeed, in most of the currently popular strands of organization theory, such as population ecology, institutional theory, network analysis, and organizational economics, the internal organization of firms is almost completely neglected. Though much has been learned from these new perspectives, we feel that it is time to think about organization design again, especially because the concepts advanced in the 1970s do not always provide a good guide for designing organizations moving forward into the new millennium.

As these aspirations indicate, this book is written primarily for our academic colleagues. Yet we have tried to write in plain English. We hope that practitioners will thus be able to read and benefit from this book. To enhance their interest in doing so, we have explicitly spelled out the practical implications of our findings throughout the book.

This book's intellectual genesis lies in the work of Chris Bartlett. We owe him a great debt for having introduced us to the fascinating world of MNCs and for having been a mentor, friend, and research partner throughout the years. This book could never have been written without his contributions.

We also wish to thank Luis Almeida-Costa, Ranjay Gulati, Monica Higgins, Harry Korine, Peter Moran, and Gabriel Szulanski, our coauthors on some of the papers that we draw on in this book. Don Lessard, Michael Scott-Morton, and Eleanor Westney, our teachers at MIT, have had an intellectual influence on us that is evident throughout this book.

As we have all experienced, the final 20 percent of the work involved in writing a book seems to take 80 percent of the time. Ramin Toloui, our research associate, was a driving force for this project during this final stage. We are also grateful to Peter Amirault, Vanita Datta, Diana Line, and Misiek Piskorski for burning the midnight oil to help complete this book. Cedric Crocker and David Horne, our editors at Jossey-Bass, waited patiently and showed remarkably good cheer as we struggled to meet our deadlines. Their encouragement was instrumental in enabling us to get this book done.

We would also like to thank the Division of Research at the Harvard Business School and Booz, Allen, and Hamilton, the sponsors of the Strategic Leadership Research Program at the London Business School, for their generous support.

Finally, we reserve our last acknowledgment for the two people who have sacrificed the most for the cause. In recognition of the numerous occasions when we turned over to them at home work that we should have done ourselves, we dedicate this book to Monica Chandra and Susmita Ghoshal, our wives. We hope that they will deem the result worthy of all they have given up for it.

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January 1997

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Sumantra Ghoshal

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Chapter One

The Differentiated Network

It was about thirty years ago that Vernon (1966) proposed the product cycle theory that identified the ability to innovate as the *raison d'être* for multinational corporations. Over the past three decades, many new theories have been proposed to explain why MNCs exist, but innovation has continued to occupy center stage in these explanations (see Calvet, 1981). The multinational's facility to invest and manage its affairs in many different countries, it is argued, allows it to secure the benefits of innovations in multiple locations through its own internal organization more effectively than market-mediated mechanisms (Buckley and Casson, 1976; Rugman, 1981).

As this characterization suggests, the focus of traditional theories of innovation in the MNC has been on knowledge appropriation. The multinational is an organizational form that internalizes knowledge flows that would otherwise have to take place through market transactions among its diverse set of subsidiary organizations. Because the price mechanism fails to value knowledge properly in the marketplace, thus inhibiting socially beneficial transactions, the multinational creates value by internalizing knowledge flows. This account of the existence of the MNC is simply a version of the standard microeconomic transaction cost theory of the firm. It is in essence a *negative* theory of the firm: the reason for the existence of the firm is described in terms of its facility to avoid a stifling market failure.

Increasingly, however, the MNC's ability merely to enable the flow of knowledge from its headquarters to its national subsidiary units no longer represents a sufficient competitive advantage. The maximization of innovative activity and knowledge creation has become an imperative organizational challenge for today's multinational firms. Traditionally, many MNCs could compete successfully by exploiting scale economies or arbitraging imperfections in the world's goods, labor, and capital markets, but these advantages have tended to erode over time. In many industries, MNCs no longer compete primarily with national companies; nowadays they go head-to-head with a handful of other giants that tend to be comparable in size, international resource access, and worldwide market position. Under these circumstances, the ability to innovate prolifically (and to exploit those innovations rapidly and efficiently) across the globe has become crucial to a multinational's competitive advantage.

Moreover, the division of the global economy into a technologically advanced center that produces all innovation for a technologically backward periphery is rapidly becoming obsolete. Modern multinationals depend on innovations created not only in home-market units but also in a growing number of national subsidiaries. Furthermore, as markets outside the home market grow in importance, national subsidiary units command larger and larger shares of the firm's total resources. To remain competitive on a global scale, the firm must leverage all of these resources in the service of knowledge creation. The idea that the multinational organizational form can act to facilitate innovation throughout its network of national subsidiaries offers a rather different economic rationale for its existence than that espoused by the transaction cost approach. According to this argument, in addition to avoiding market pitfalls in knowledge appropriation, the MNC can create a shared social context that actively promotes knowledge creation—potentially, a *positive* theory of the multinational firm (Moran and Ghoshal, 1996).

These accounts of negative and positive conceptions of the existence of the multinational are not merely descriptive; they also have normative implications for the ideal structure of MNCs. If the central function of the multinational is knowledge appropriation, a hierarchical organization structure is sufficient for the task. With decision-making authority centralized in the headquarters unit, knowledge can be distributed from one subsidiary to others according to the will of central management. Subsidiary autonomy is not required for the avoidance of transaction costs associated with market-mediated knowledge transfer; indeed, such autonomy may actually inhibit knowledge dissemination if subsidiary managers disagree with the judgments of headquarters.

As knowledge creation becomes increasingly important for the MNC, a hierarchical structure may be inferior as an organizational form. For example, highly centralized management can suffocate the innovative energies of individuals in the subsidiary units. At the same time, a highly formal system in which internal processes are governed by a set of impersonal rules may discourage creativity. Indeed, Hedlund (1994) has argued that the logic of hierarchical organization must be reconsidered in light of the requirements for effective knowledge management. As contemporary MNCs mobilize firm assets worldwide to meet the innovation challenges of the global marketplace, business academics have identified a growing number of alternative organizational forms for the multinational. The traditional focus on hierarchical headquarters-subsidiary relations has given way to the recognition of a diverse set of intrafirm relations, whether "heterarchical" (Hedlund, 1986), "multi-focal" (Prahalad and Doz, 1987), or "transnational" (Bartlett and Ghoshal, 1989). All of these models describe in some way the structural responses of the modern MNC to meet the demands of innovation and knowledge creation in a dynamic global economy.

Two Themes

The imperative of knowledge or value creation and its structural requirements highlight the inadequacy of the hierarchical archetype as a preferred organizational form for MNCs today. The challenge for business academics and managers is to replace the hierarchical model with a theory of the MNC that acknowledges the new environmental conditions and the changes in the internal organization of MNCs that are needed to confront them. The purpose of this book is to offer a new theoretically and empirically useful model of the multinational. In the course of this investigation, two central themes will be visited and revisited. Concerning what pulls organizational units apart and what pulls them together, these themes, taken together, provide an incisive framework to enhance our understanding of the structure of the MNC. This framework holds relevance for managers seeking to implement changes in their administrative systems to boost firm performance and for academics attempting to explain the existence of prevailing administrative forms and, in the process, to discover organizational features best suited for future managerial challenges.

Our first theme is that the structure of the MNC must be conceptualized as a *differentiated network* rather than as a broad structural archetype, such as an area, a product, or a matrix structure. The MNC consists of diverse subsidiaries operating in distinct national environments. Each presents unique exigencies that cannot be adequately addressed by a uniform organizationwide structure. Thus a model that fails to differentiate the various organizational entities and linkages within an MNC does not accurately represent the realities of the business world, one in which internal differentiation is requisite to a firm's success. A greater elaboration on internal structural relations is necessary for a theoretically sound model to test interesting empirical propositions.

A model of the multinational is developed in this book that takes these considerations seriously. It is called the differentiated network to underline its network perspective. At its crux is the premise that the structure of the MNC can be understood as a differentiated network composed of distributed resources linked through different types of relations: (1) the "local" linkages within each national subsidiary, (2) the linkages between headquarters and the subsidiaries, and (3) the linkages between subsidiaries themselves.

In Part One of this book, we demonstrate that the differentiated network model is a powerful tool for analyzing knowledge flows and value creation through the generation and exploitation of innovations within the multinational. Chapter Two provides an overview of distributed innovation in the multinational. Chapter Three examines how the existence and distribution of slack resources affects knowledge creation in the national subsidiaries, and Chapter Four investigates the impact of a range of structural attributes on the creation, adoption, and diffusion of innovations throughout the MNC. The transaction cost view of the firm focuses primarily, if not exclusively, on the transfer of innovations from the headquarters to the subsidiaries, tasks that the hierarchical structure is particularly well suited to address. To the extent that the creation, adoption, and diffusion of innovations needs increasingly to be distributed throughout the MNC for the organization to perform well, a more complex model of the multinational is required. In Part One of this book, we demonstrate that MNCs organized as differentiated networks are most likely to tap their full global innovative capacity. In addition to its utility for academic empirical research, the differentiated network model is shown to offer prescriptive insights for managers seeking to organize their firms to enhance innovation.

Part Two generalizes the conclusions of Part One to the overall performance of the multinational. In Chapter Five, employing the differentiated network model, we find that overall subsidiary performance is positively correlated with a high degree of internal differentiation, in the same way that differentiation is required for enhancing innovation. These results illustrate the inadequacy of general structural archetypes, such as area, product, or matrix, used to characterize MNCs in the past. Such models obscure the important reality that diversity through internal differentiation is essential to optimal firm performance. By highlighting the degree of complexity with which internal relations in the firm can be structured, the differentiated network model offers a useful heuristic for managers seeking to adapt their organizations to the demands of the global business environment.

Chapter Six reveals that firm profitability is also positively correlated with high levels of shared values across the subsidiaries.