

Preface

This book is the product of an intensive international collaboration among experts from seven countries and regions as part of our program at Stanford University, the Stanford Project on Regions of Innovation and Entrepreneurship (SPRIE).

In the year 2000, in response to many inquiries from around the world, especially from Asia, on how Silicon Valley “works,” the Stanford University Press published our book, *The Silicon Valley Edge*. This experience underscored to us the importance of developments on the other side of the Pacific. So beginning in 2002, we held meetings in Kyoto, Seoul, Beijing, Hsinchu, as well as at Stanford, to discuss the progress these regions were making in information technologies.

Out of those meetings and contributions by many authors in Asia comes this book. Its core is a set of chapters on particular regions. We settled on this structure because much of the activity in Asia, as in the United States, takes place in regional clusters. We focused on several regions in Japan, Seoul, Beijing, Hsinchu, Singapore, and Bangalore because they represent the most successful high-technology regions in Asia. There is less on Shanghai, the Multi-Media Corridor in Malaysia and other important regions than we desired, yet, still a wide array is covered.

Our topic is the information technology (IT) industry. As is true of many industries, different analysts use different definitions. For instance, the Organisation of Economic Co-operation and Development (OECD) often refers to the ICT, Information and Telecommunications Technology industry. We also include telecommunications in our definition of “IT.” More troubling is software. That sector has two main parts, which are most simply defined as Products (things in boxes) and Services (increasingly supplied on-line). The problem

x here is with Services. Much human activity can be so classified, so we chose not to spend effort sorting this out. Our contributors adopted their own definitions.

Those looking here for an explicit model that accounts for how Asia rose will be disappointed. For example, one can reasonably maintain that the basic process at work during the period on which we focus, 1970–2004, was one of technology diffusion, principally from the United States and Japan to others. But the paths taken by this process varied greatly, country policies differed, and they changed over time. There are many parameters, some of them fairly well defined (e.g., numbers of “returnees” to Hsinchu in Taiwan) and others not well defined or measured (e.g., “entrepreneurship”). Even getting data on venture capital investment is more difficult than it might seem because of the different definitions in use across regions. Not least as an obstacle to having a unifying theory is the wide range of development of our set of countries from Japan and Singapore at one end to India at the other. The best we have been able to do—or anyone else for that matter—is to array the factors that seem to many industry participants and scholars to have been the most important. The result is some variability among the chapters—along with discussions of many of the same parameters as they were expressed in different regions. We hope this juxtaposition of analysis by Asian scholars who know and study their own regions—combined with cross-cutting consideration of several key institutions—will provide unique insight into the rise of Asia in IT.

Finally, we want to express our gratitude to our many authors who have been thoughtful in considering their own regions, which they know best, as well as entering into a fruitful dialog with colleagues around the Pacific. We owe thanks to many others: to supporters Chong-Moon Lee, Daniel Chen and the Industrial Technology Research Institute (ITRI) of Taiwan; to organizations that hosted meetings—namely, ITRI in Hsinchu, the Stanford Japan Center in Kyoto, the Zhongguancun Science Park; and to the Development Bank of Japan for its survey of high-tech clusters in Japan.

We also acknowledge the members of the SPRIE Advisory Board: John Seely Brown, Carmen Chang, Ta-Lin Hsu, Harry Kellogg, Leonard Liu, Robert Patterson, Chintay Shih, Richard Walker, David Wang, and Kyung Yoon. We are very appreciative of the SPRIE team at Stanford: Jen-Chang Chou, Rowena Rosario, and George Krompacky. And, not least, we are grateful to the faculty and staff of the Shorenstein Asia-Pacific Research Center of the Freeman Spogli Institute for International Studies at Stanford, which kindly provides our home.

Henry S. Rowen
Marguerite Gong Hancock
William F. Miller