

PREFACE

Notwithstanding reports to the contrary, the size of the information economy in the United States has been steadily increasing from about 46 percent of the GNP in 1967 to about 56 percent of the GNP in 1992 and to 63 percent of the GNP in 1997 (Apte and Nath, 2007).¹ In short, information has become a major part of the US economy already, and will continue to dominate it for the foreseeable future, making the United States truly an information economy. Although the information economy can be defined as the sectors involved in the production of information goods and services, findings from the Apte and Nath 2007 study also show that it is information services that are dominating.

This move towards information services is accompanied by the “industrialization” of sectors which is fundamentally technology driven and has significant implications for: (i) global trade and competition; (ii) economies and national policy; (iii) industry sectors; (iv) firms and organizations; and (v) individual jobs and functions.

Changes in the workforce, such as the number of people facing the screen and the technologies used to collaborate and communicate, are expected to redefine individual jobs and functions in organizations. Technological and infrastructure developments are also expected to change the structure of firms in terms of organization and work process, information chains and inter-organizational relationships, as well as the structure of industrial sectors. Technological developments are also expected to impact economies as well as global trade and competition due to their ability to make organizations’ location independent.

In short, these changes will be far reaching and broad as well as deep. The Business and Information Technologies (BIT) project was created to study these changes at multiple levels of economic and business activity. The BIT study documents the information technology driven changes that are occurring in business structure, business practice and sector structures across a wide spectrum of industry sectors in the United States and worldwide. A survey of CIOs (Chief Information Officers) is conducted across all sectors to get a broad understanding of the changes occurring within firms in terms of their structure and workforce as well as changes to the firms’ relationships with their partners and customers. GNP studies were also conducted using labor and trade data to capture global economic changes, and in-depth studies of sectors of interest conducted detailed understanding of impacts to sectors and industry value chains.

¹ Apte, UM and HK Nath (2007). Size, structure and growth of the US information economy. In *Managing in the Information Economy: Current Research Issues*, UM Apte and US Karmarkar (eds.), New York: Springer, pp. 1–28.

The BIT project is being conducted at a global scale. At the time of writing, BIT has 20 partners in sixteen countries. Partners are leading academic and research institutions. The partnering countries include the USA, Argentina, Colombia, Chile, Germany, Greece, India, Italy, Korea, Malaysia, New Zealand, Peru, Portugal, Spain, Switzerland and Taiwan.

The survey was conducted by the partner institution for their country and subsequently repeated at appropriate time intervals as well as in various countries, to track the changes that are actually occurring, so as to provide hard information on what is really happening across the globe and over time as a result of changes in information technologies. Ten of the partners (Colombia, Chile, Germany, Italy, India, Korea, New Zealand, Spain, Taiwan and the USA) have conducted surveys at least once; nine partners have conducted the survey at least twice and many are conducting their third surveys. The survey has been translated into at least five different languages. This global perspective combined with the longitudinal view is able to provide a unique and comparative picture of technology and business practice across the world. Seven partner reports are included in Part I of this book; five reports were printed in the previous book on the BIT Project titled *The Business and Information Technologies (BIT) Project: A Global Study of Business Practice* (published by World Scientific in 2007).

In addition, GNP studies to study labor and trade issues have been conducted by partners for their countries. Part II of this book includes five GNP studies conducted by partnering institutions for their respective countries.

Many partners have also studied specific sectors and technologies, including telecommunications, healthcare, retail, financial services, RFID and hospitality. Part III of this book contains five sector and technology studies and other related studies; five similar studies were included in the previous book on the BIT Project titled *The Business and Information Technologies (BIT) Project*.

The potential for learning across these groups is vast. The nature of best practices in different countries varies widely. It is not always the case that the most developed countries are always the most advanced in technology use and penetration. For example, many countries are far ahead of the United States in the degree of conversion to electronic banking and monetary systems. As an example, certain European countries have already closed their check processing facilities, since check use has stopped almost completely. India surpasses many countries in the extent of software project involvement and exports, despite a miniscule level of penetration of PC use or for that matter, phone usage. In many eastern countries, the use of wireless communication is rapidly outstripping traditional wire-line systems. It is expected that several interesting local variations in business practices will be found.

This book titled *The UCLA Anderson Business and Information Technologies: A Global Study of Business Practice* is the second book in the BIT project series.