



Information Technology in ASIA

New
Development
Paradigms

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The Challenge of Information Technology: Introduction

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The Information and Communications Technology (ICT)¹ revolution, which has swept the world since the 1990s, has been the source of much study and debate. Yet, like all general-purpose technologies,² the full impact of ICT has yet to be completely understood, although it is most likely to fall somewhere between the world-changing hype generated by optimists and the dismal negativism voiced by sceptics. The ASEAN (Association of Southeast Asian Nations) region, in particular, has moved boldly to embrace this new technology, and governments in Southeast Asia have been very pro-active in formulating technology policies.

How far, therefore, have these nations progressed, and what are the impacts and implications of ICT on their economies, societies, and politics? Indeed, what are the ramifications of these national policies on the region? The aim of this volume is twofold. First, it seeks to provide some broad-brush evaluations of the impact of ICT on the region, with

respect to several key issues. Second, as it delves into more detailed country-level studies of national ICT policies, it aims to examine the different approaches that countries have adopted in addressing ICT, and their attendant lessons. Through these two interrelated ways, it draws together commentary and analysis from experts in their respective fields to inform academics and policy-makers in the region regarding the ICT revolution.

The volume is organized into three main sections. The first section deals with the region as a whole, and explores issues of concern to all countries in the region, such as the digital divide, e-commerce, and the social and political impact of ICT. The second section preoccupies itself with case studies of a selection of ASEAN countries; specifically, it has limited itself to the study of Singapore, Malaysia, Thailand, and Vietnam. The third section treats the cases of Taiwan and Bangalore — other Asian countries that have been heavily involved in the development of ICT policies and are internationally recognized as drivers in the global ICT revolution.

1. Regional Issues in the ICT Revolution

The ICT revolution is, appropriately, a global event, and hence, involves many general issues that impact on all countries. The burgeoning literature on ICT can be broadly categorized into several key threads; these core ideas include:

- technological advancement and innovation;
- information and network economics;
- dynamics of domestic politics and international relations; and
- changes in cultural and social theory.

Research in the first category can be broadly classified into the literature on the impact of technology on economic growth, and the work on general-purpose technologies. The first can be further subdivided into models of neo-classical growth — where technical advancement is treated as a “black-box” and is exogenous in nature — and the later studies on the “new growth theory”, where such technological progress is endogenously driven, primarily through forces such as externalities and innovation.³ The second is centred on the various contributions that