# E-Strategies for Technological Diffusion and Adoption: National ICT Approaches for Socioeconomic Development

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#### Chapter 1

This chapter presents a unique national initiative in Macedonia reflecting a multi-partner, scaled ICT for education project where every school across Macedonia was equipped with computing and wireless Internet connections leading the Internet to reach all citizens across the nation. The chapter demonstrates some best practices including pre-deployment training of teachers in IT adoption, equality of provision to promote positive inter-ethnic relations, and the long-term focus on all stakeholders in terms of outcomes. The ultimate goals of the project relate to educational and socioeconomic development issues.

#### Chapter 2

Khor Yoke Lim, Universiti Sains Malaysia, Malaysia

The chapter presents the case of Malaysians aspiring to leapfrog from the developing nations rank to one that hopes to be fully developed by 2020 based on their vision that was formulated in the 1990s. One of the building blocks of such vision is the provision of world-class information and communication technology infrastructure and the creation of competitive human capacities that are skilled and electronically ready. Therefore, the Malaysian government embarked on the Smart School Initiative, a flagship application that aims to transform the way students are being taught. With an implementation plan in 88 different schools across Malaysia, a growing and completed ICT infrastructure is shaping up coupled with educational courseware and a clear transformation in various learning practices. The chapter includes lessons learned from the initiative that could be replicated representing an invaluable resource to education policy makers, administrators and the school community in other countries with similar ecosystem and environmental settings.

#### **Chapter 3**

eSME Slovenia: Initiative and Action Plan for the Accelerated Introduction of eBusiness	
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Andreja Pucihar, University of Maribor, Slovenia	
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The authors present the e-Strategies, initiatives and action planes in the European Union intended for the successful implementation of the Lisbon Strategy which should see Europe become the most competitive and dynamic society based on knowledge by 2010. The chapter focuses on the policies, legislative setting and initiatives adopted in Slovenia with an emphasis on e-Business development. The chapter demonstrates the lagging experience and stature of SMEs with respect to the adoption and utilization of e-Commerce leading to the formulation of the eSMEs Slovenia initiative and action plan aiming at accelerating e-Business introduction and adoption in SMEs.

#### **Chapter 4**

Regional-National ICT Strategies	
Melih Kirlidog, Marmara University, Turkey	
Stephen E. Little, The Open University Business School, UK	

The chapter addresses the growing fact that an overwhelming majority of developing and developed nations are formulating national information and communication technology strategies with an objective to realize socioeconomic growth and competitiveness status. The chapter demonstrates the differences between developed and developing nations in formulating and realizing these strategies with nations such as Japan that is increasingly outward oriented to sub-Saharan African nations that are developing their strategies with the support of international agencies and non-government organizations. The chapter provides an exploratory analysis of the internationalization of national ICT strategies.

#### **Chapter 5**

Information System Strategy Development and Implementation in the Egyptian Small	
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Khaled Samaha, The American University in Cairo, Egypt	
Khaled Dahawy, The American University in Cairo, Egypt	

This chapter addresses Egypt's diversified economy which has historically performed below its potential; however with growing interest by the government of Egypt recognizing the importance of SMEs. The chapter provides an investigation into the information system strategy of SMEs in Egypt and its importance in organizational success. The chapter enforces the importance of IS and business strategy alignment coupled with top management support and engagement in the different stages of the decision making process amongst other lessons learned.

#### **Chapter 6**

Broadband Development Challenges and Measures: The Analysis of EU Countries ...... 122 Peter Trkman, University of Ljubljana, Slovenia Tomaž Turk, University of Ljubljana, Slovenia The chapter analyses the use of broadband in EU countries to identify the differences across the continent with an emphasis on enablers and means, the utilization of different services and the overall ICT sector development. The chapter focuses on the development of a two-dimensional framework that enables the classification of policy actions depending on the influencing factor and type of influence.

#### **Chapter 7**

Assessing Electronic Government Readiness in Egypt: Comparison between Two	
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Nahed Amin Azab, The American University in Cairo, Egypt	

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This chapter addresses the evolution of Electronic Government in Egypt. The chapter addresses the role of e-Government in reshaping the public sector and remake the relationship between citizens and government. The objective of the chapter is to present a framework that assesses e-Government readiness in Egypt, focusing on public administration while addressing internal factors affecting e-Government readiness including strategy, processes, people, and technology through studying two public sector organizations in Egypt.

#### **Chapter 8**

An Information Communication Technology Adoption Model for Small	
and Medium Sized Enterprises1	65
Dan J. Kim, University of Houston - Clear Lake, USA	

This chapter brings a much-needed focus in the literature on the factors affecting SME ICT adoption decision with emphasis on e-Business adoption models. Therefore, the objective of the chapter is to review the literature on the factors affecting SMEs adoption decision, propose a theoretical framework of e-Business adoption for SMEs and to provide insightful discussions on the driving factors and barriers of the SMEs e-Business adoption decision.

#### **Chapter 9**

ICT for Development (ICT4D) Projects in Developing Countries: A Proposed	
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Md. Mahfuz Ashraf, University of Dhaka, Bangladesh	
Bushra Tahseen Malik, Brainstorm Bangladesh, Bangladesh	

This chapter addresses the notion that information and communication technology leads to socioeconomic development in developing nations pushing many nations to implement ICT for development projects in rural areas in collaboration with international organizations and donor agencies. This chapter focuses on identifying the actual impact at the micro, community, level while identifying the key challenges, which influence the success of ICT4D projects through proposing a conceptual framework aimed to improve the situation at the micro level.

#### **Chapter 10**

The Challenges of the National ICT Policy Implementation Process: A Comparative Study	
of Malaysia and Thailand1	88
Nicholas C. Maynard, RAND Corporation, USA	

The author addresses the path that both Thailand and Malaysia have gone through with respect to the transformation of their ICT sector including their telecommunications networks, national policies, institutions, and regulatory regimes. The chapter demonstrates the importance of competitive markets and government regulators. The objective of the chapter is to provide a set of tools for local and international policy makers and technology providers to help assess the benefits of technology initiatives while tying them to the larger issue of economic development.

#### Chapter 11

This chapter discusses the efforts of organizations through interconnectivity to source talent, goods and services from other organizations in different locations around the world and supporting socioeconomic development. The chapter considers the fundamental tenets of business models and ways in which value can be created for development effort with an emphasis on the application of global capability sourcing model to enable businesses to compete globally with insights into the sustainability of business models for development.

#### Chapter 12

The author discusses the fact that many developing nations face difficulties in applying successful electronic government projects based on the lack of use by citizens due to the lack of appropriate ICT infrastructure that support e-Government services. The chapter introduces an empirical research that investigates various e-Government weaknesses in developing nations while focusing on e-Readiness and trust. The chapter proposes a model based on e-Readiness assessments and relevant literature that investigates the impact of citizens' readiness for e-Government on e-Government success within developing nations.

#### Chapter 13

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Jawed Siddiqi, Sheffield Hallam University, UK	
Ja'far Alqatawna, Sheffield Hallam University, UK	
Mohammad Hjouj Btoush, Sheffield Hallam University, UK	

This chapter addresses the issues related to the digital divide facing developing nations. The chapter focuses on asserting that insecurity and the digital divide are highly dependent on each other. The chapter

proposes to extend the concept of the digital divide to include information security features by putting forward a new model of security that is multi-faceted and that is able to assist in bridging the digital divide.

#### Chapter 14

Communicating Farm Technologies through Traditional and New Media Channels:	
Lessons from India	
D. Puthira Prathap, Sugarcane Breeding Institute (Indian Council of Agricultural Resea	rch), India

This chapter highlights the importance of knowledge and information in agricultural development. The chapter focuses on how traditional mass media channels have been instrumental in India's agricultural technology transfer. The chapter also addresses the role of emerging media and the associated challenges as well as provides a comparative study on the effectiveness of traditional versus emerging media in communicating farm technologies.

#### **Chapter 15**

Strategy of Accounting Automation: The Case of the Egyptian International Motors	
Company (EIM)	
Khaled Dahawy, The American University in Cairo, Egypt	

The author addresses the role of information in today's marketplace and its interrelation to management information systems in rationalizing the decision making process to managers and decision makers. The focus of the chapter is a case study addressing the issues related to the deployment of accounting information system. The case indicates the importance of the integration of accounting and technology coupled with strong management support and commitment to insure successful implementation.

#### Chapter 16

Financial Aspects of National ICT Strategies	.277
Melih Kirlidog, Marmara University, Turkey	

This chapter addresses the fact that all developing and industrialized nations strive to get benefits of information society and to this end almost all of them have developed strategies for effective utilization and development of information and communication technology. These strategies usually require sub-stantial funds from domestic and international sources. This chapter analyzes the types of these sources.

#### Chapter 17

ICT Strategy for Development: Lessons Learnt from the Egyptian Experience	
in Developing Public-Private Partnerships	293
Sherif Kamel, The American University in Cairo, Egypt	
Dina Rateb, The American University in Cairo, Egypt	

The final chapter demonstrates how emerging information and communication technology is setting the pace for a changing, competitive and dynamic global marketplace and representing an enabling platform for business and socioeconomic development in the 21st century. The chapter shows that building the ICT infrastructure and infostructure will not realize quantum leaps in the development process unless it