ICT and Building a Knowledge-Based Society in Egypt

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ABSTRACT

This article aims to evaluate Egypt's progress on the road towards a knowledge society. The paper discusses the evolution and assesses the outcomes of ICT initiatives in place in Egypt. Equally, the paper analyzes the status and potential of factors that are necessary for the realization of such a society at this turning point in the country's history. The paper pinpoints the progress achieved on many fronts and identifies necessary steps to match leading knowledge and digital societies. The paper suggests some useful strategies for the government to expand access and contribution to knowledge – promoting a shared knowledge society in co-operation with the private sector in order to bridge the gaps. Efforts should not only be focused on expanding and enhancing connectivity and technology, but should also promote content development, provide educational opportunities and foster a comprehensive enabling environment.

Keywords: Access to Knowledge, Digital Divide, Egypt, ICT Assessment, ICT for Development, ICT in Developing Countries, Information and Communication Technology (ICT), Knowledge Society

INTRODUCTION

Information and communication technology (ICT) is setting the pace for a changing, competitive and dynamic global marketplace, representing an invaluable vehicle for business and socioeconomic development and introducing new forms and structures of organizations that are not constrained by geographical or time barriers. Egypt, as an emerging economy, has strived to achieve the potentials of ICT since the 1960s and has increasingly invested in building its infostructure and infrastructure in an effort to expand the economy's disposition as an important growing player in the global economy.

The purpose of this article is to evaluate Egypt's progress towards a knowledge society through assessing the socioeconomic implications of the diffusion of ICT in Egypt. The article assesses the steps that Egypt has taken towards transforming into a knowledge society through answering a set of questions. How have the ICT for development policy, strategy formulation and infrastructure deployment evolved? How ICT has become a platform to access knowl-

edge and a vehicle for development towards a knowledge society? What are the challenges remaining towards edging closer towards a knowledge society?

SYNOPSIS OF INFORMATION, KNOWLEDGE AND ICT STRATEGY EVOLUTION IN EGYPT

Through its ancient history that extends over 3000 years B.C, Egypt has witnessed massive information flows from Rosetta stones and papyrus papers, to the establishment of the Library of Alexandria. During the middle ages, Arabic manuscripts became one of the most common means for information and knowledge dissemination. In the early 19th century, Egypt witnessed the publishing of the first journal and the establishment of the first national archive system (Kamel, 1998a).

Yet in the 20th century and prior to 1985, Egypt was perceived as being rich in data but poor in information. Computers were viewed as ends and not means; accumulated bureaucracy through red tape and the existence of islands of innovation with no connecting bridges restrained the production of information (Kamel, 1999; Kamel, 1998b). Moreover, government focus was on technical issues and not decision outcomes; multi-sector coordination was poor, synergy between information and socioeconomic development strategies was lacking and a clear case of the 'brain drain' became evident. Given how important and useful ICT has proven to be to socioeconomic development elsewhere around the world, building the required information infrastructure for Egypt was a necessity. The strategy deployed had to have a two-tier approach. Society with its different stakeholders can contribute in shaping the infostructure, which in turn will effectively contribute in the socioeconomic development and growth. (World Bank, 2006). Table 1 demonstrates the development of the information society in Egypt during the 20th and 21st century (Kamel, 2007).

Information and knowledge continue to be major drivers in the global economy, taking precedence over land, capital or labor. The capacity to manage knowledge-based intellect is the critical skill of this era where having a good base of knowledge leads to the creation of further knowledge (Kamel & Wahba, 2002). As the impact of ICT on socioeconomic development became apparent, governments around the globe directed investment towards national information infrastructures (Petrazzini & Harindranath, 1996). Accordingly, Egypt has heavily invested in its technology and infos-

Table 1. The development of the information society in Egypt

Programs	Year
Open Door Policy	1974
Economic Reform Program	1985
Information Project Cabinet of Ministers (IPCOM)	1985
Information and Decision Support Program (IDSC)	1985
National Information and Administrative Reform Initiative	1989
Egypt Information Highway	1994
Ministry of Communications and Information Technology (MCIT)	1999
National Information and Communications Technology Master Plan	2000
Egypt Information Society Initiative (EISI)	2003
Extending ICT to public services	2004
Egypt ICT Strategy 2007-2010	2007

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