Chapter 32
The Growing Impact of ICT on Development in Africa

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ABSTRACT

Information and communication technology for development has been evolving for almost four decades, realizing business and socioeconomic development and growth and capitalizing on channels for information acquisition and knowledge dissemination allowing the creation of an emerging global knowledge-based society with innovative means of communication that can help increase competitiveness for individuals, organizations, and societies. ICT tools and applications could be used as an effective platform to minimize the digital divide and promote social inclusion. The transformation process enabled through ICT is affecting different aspects of the economy and is forcing governments to rethink the way they handle their socioeconomic challenges as they move forward in their development paths. This chapter addresses some of the initiatives in Africa to minimize the intra- and inter-digital divide and join actively the global knowledge society by capitalizing on emerging technologies but more importantly by focusing on human capital as the most invaluable element in the technology ecosystem.

INTRODUCTION

Information and communication technology for development (ICT4D) has been evolving for almost four decades realizing business and socioeconomic development and growth and capitalizing on channels for information acquisition and knowledge dissemination allowing the creation of an emerging global knowledge-based society with innovative means of communication that can help increase competitiveness for individuals, organizations and societies. ICT tools and applications could be used as an effective platform to minimize the digital divide and promote social inclusion. The transformation process enabled through ICT is affecting different aspects of the economy and is forcing governments to rethink the way they handle their socioeconomic challenges as they move forward in their development paths. This article addresses some of the initiatives in Africa to minimize the intra and inter digital divide, and join actively the global knowledge society by capitalizing on emerging technologies but more importantly by

focusing on human capital as the most invaluable element in the technology ecosystem. Many African nations have invested heavily in building their ICT infrastructure with its different building blocks to help improve the readiness of their communities and smoothly integrate into the global digital world[1].

BACKGROUND

During the recent few decades, ICT tools and applications have transformed the way people live, work, study, travel, and get entertained amongst other daily routines. The global ICT sector is currently a significant sector in its own right accounting for up to 7.5% of worldwide gross domestic product. ICT has not only changed the world, but it has also increased its potential (Figueres, 2003). In addition, with more challenges facing the world today, more opportunities are being created for ICT to have an effective role. On a different note, emerging and innovative ICT coupled with globalization and the role of societal norms, values and cultures are constantly affecting societies around the world. It is forcing organizations both private and public to rethink and reengineer the way they manage their operations and resources and face competition both locally and globally. Moreover, it is fair to claim that the processes of globalization are increasingly depending on ICT (Musa, 2006). This situation has generated new forms and structures of economic, business and social organizations that are no longer affected by geographic or time constraints but depend mainly on teleworking, telecommuting and overcoming barriers of time and distance which is emerging as the platform for business and socioeconomic development in the 21st century. The digital platform is increasingly becoming at the center stage of most businesses and industries. ICT has the potential, given proper infrastructure in place, trained skilled human resources and timely infostructure, to improve the balance in economic and social progress, increase growth of the economy, boost the capacity to face societal challenges, enhance progress of democratic values and augment cultural creativity, traditions and identities (Kamel, 2009).

During the 1990s, there was an unprecedented link between the technological innovation process and the economic and social organizations. Moreover, as the links between economic development, productivity and the availability of information resources became invaluable, governments around the world started to invest heavily in building their national information infrastructure (Petrazzini & Harindranath, 1997). This led to major changes and transformations in the activities and relationships of individuals and organizations within the society, leading to the evolution of the information society, where the services provided by ICT represent a set of challenges and opportunities for the global society. However, it is important to note that, although access to ICT is a prerequisite to its use, individual differences in time and space as well as capabilities and choice may play a role on the use, value and application of ICT (Alampay et al, 2003).

In today's global environment, it is becoming easier within the context of business and socioeconomic development and growth to identify and evaluate as well as compete across all sectors and industries using the wealth of information and knowledge that are disseminated through global information networks. The ICT infrastructure makes information more accessible with more benefits to the society (Shapiro & Varian, 1999), which puts more pressure on firms around the world to exploit all possible opportunities to leverage productivity and efficiency. Businesses are increasingly becoming more aware of the vitality of ICT to stay competitive, with other global implications to productivity, employment and profits to the extent that organizational operations are becoming unthinkable without the effective and efficient use of ICT, especially in a global society, where information travels across national boundaries (Branscomb,

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