

# Chapter 1

## An Evaluation of ICT Policy Developments in Botswana

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### ABSTRACT

*This chapter provides an evaluation of ICT policy developments in Botswana. In particular, it highlights major advancements in areas of national ICT policy development and its implementation in the country. The country's National ICT policy, Maitlamo, has been a significant factor in driving ICTs in the country. The chapter asserts that opportunities in ICT development in the country are evidenced by not only implementation of the policy but further by greater investment of financial resources by the government and the role of the private sector. Further, the chapter argues that while implementation of the national ICT policy has brought achievements in liberalisation and expansion of public services in rural areas, there are still a number of challenges to address if universal access has to be achieved. Among these are unavailability of ICT services in rural areas, high costs of the technology and the lack of public awareness on the use of technology. Proposals made at the end of the chapter call for the government to speed implementation of ICT policy, form stronger partnerships with the public sector and further balance the role of BTC vis a vis other players so that the playing field is leveled.*

### INTRODUCTION

The embracing of information communication technologies (ICTs) in world economies has greatly enhanced production, and easy accessibility to public services. ICTs have been broadly defined

in the literature as the technologies that are used for capturing, creating, accessing, manipulating, presenting, communicating and transferring information and knowledge (Tiamiyu & Aina, 2008). Examples of these can include equipment such as hardware (computers), software applications as Internet and networking infrastructure. With the help of ICTs, organisations are now able to create

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and store large amounts of information and can also have quick access to it, therefore promoting efficient, evidence-based decision making. Further, it also contributes to knowledge sharing by putting in the public domains research outcomes. Without doubt these technologies have improved service delivery and have been important in opening up opportunities for socio-economic development (Mutula & Brakel, 2006). For example, ICTs have played a major role in economic growth which has been realised through foreign direct investment; it has led to poverty reduction and employment creation. ICTs also facilitate access to public services such as education, health and banking. Further, with the realisation of e-government strategies in many African countries, ICTs play a central role in facilitating the interaction of government and the ordinary citizens. However, this can only be realised if the infrastructure is available, affordable, fully accessible to the public and there is an enabling environment, proper regulatory frameworks and multi-stakeholder partnership. Unreliable infrastructure leads to high costs due to high transaction costs (Gerster Consulting, 2008).

While use of ICT has occasioned many benefits, it has also brought about problems that have to be addressed if its full potential and value has to be realised. For example, dependence of computers on power supplies which is becoming a major problem in most countries including Botswana has affected some business operations when there are power cuts and load shading. Technology also has a short life-cycle which is costly to update which means that when its life comes to an end new technology is needed and this comes at a high cost. For example, Microsoft Patch Security Management System (MPSMS) is a Windows security update system which makes sure that Microsoft operating software programs remains up-to-date with contemporary security threats. The short life cycle also results in data loss where migration of data from one software to another has to be done after upgrading. Another

problem that has to be addressed if full potential of ICT were to be realised is its over-dependence on the internet. For Botswana, and many other African states, Internet Service Providers (ISP) charge exorbitant rates for internet service provision. There is also an issue of expensive prices in acquiring basic end-user gadgets such as printers, desktop computers, scanners, network adaptors, etc. Another challenge that cannot be ignored is usability. With the setting up of Trans Kgalagadi Fibre optic network in 2008, setting up of appropriate telecommunications infrastructure by Botswana Telecommunications Company (BTC), liberalisations of the telecommunications sector, and plans to put in place efficient backbone infrastructures in Botswana, it is assumed that by 2016, there will be widespread accessibility of all forms even in the rural areas. This being the case, one has to ask, will the ordinary citizenry be informed enough to take advantage of the ICTs and therefore extract maximum or any appreciable value brought about by such developments? This chapter is timely as it endeavours to investigate whether the ICT policy evolution and developments in Botswana have delved towards addressing these challenges.

In spite of all the problems associated with ICTs, most countries have and continue to put ICT development at the top of their priorities and this has resulted in development of national ICT policies to guide implementation of ICT infrastructural developments. This is especially true in Africa where a number of countries are either in the process of developing or at advanced stages of policy implementation. African governments have invested financial resources to ensure the adoption of ICTs for social and economic developments in their respective countries. For example, it was established during the 10<sup>th</sup> meeting of the Africa Partnership Forum held in Japan in 2008 that 'contracts totalling over US\$1 billion for at least 30,000 kilometres of national fibre-transmission networks have been awarded by African operators during the last 18 months' (Gerster Consulting, 2008). These

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