

Chapter 29

Bridging of Digital Divide in Africa

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ABSTRACT

This paper discusses the gap created by an international digital divide in Africa. The paper focuses on bridging the digital divide that exists between the developed countries and Africa, especially in the use of the internet and Global System Mobile (GSM) communication services. Issues like bridging the international digital divide, digital divide and Africa, bridging the digital divide in African's universities and libraries, the revolution of GSM in Africa, and effects of government policies and regulations, challenges facing Internet Providers (ISPs), benefits of GSM services in Africa are also discussed. In this paper, the author reveals the commendable penetration of GSM but poor connectivity of the internet in Africa. Problems hindering penetration of the internet and GSM in Africa are mentioned. Recommendations that lead to bridging of this internet gap are highlighted.

INTRODUCTION

Bridging the International Digital Divide

The world is undergoing an information communication technology (ICT) revolution. This revolution has education, library, social and economic implications especially for the developing countries of the world such as Africa. A gigantic

gap already exists between the developed countries and developing countries in terms of access and contents of ICTs. It is the disparity between the technology rich and technology poor or 'have nots' that are referred to as the international digital divide. It has been reported that the industrialized countries are home to 88% of all internet users yet make up only 15% of the world's population (Computer Aid International, 2004). In the developed nations, ICT is the usual source of information, education and communication while in the developing nations of Africa, there is poor

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access to education and information because of lack of adequate ICT facilities and expertise. This is very conspicuous in our academic libraries and other areas that need development. The library is supposed to be the centre of ICT use and display for increasing efficiency of library services and for quick collating and disseminating of vital information to library users.

Digital divide refers to the gap between people with effective access to digital (internet) and those with very limited or no access at all (Wikipedia). This includes imbalances in physical access to internet (technology) as well as the imbalances in resources and skills. Digital divide is said to be an unequal access by some members of society to information and communication technology (ICT) and the unequal acquisition of related skills making the term digital divide to be closely related to the knowledge divide because lack of internet technology result to lack of useful informational knowledge (Isoun, 2010). Digital divide creates gaps in ownership of or regular access to a computer. Internet has become the central aspect of computing.

Bridging the digital gap will enhance contributing to National economic and social development through universal accessibility and availability of telecommunication and ICT infrastructure and services and support the establishment of efficient, self sustaining market-oriented businesses which would continue to expand access to (Internet) ICTS.

Many initiatives have been implemented across Africa to address major obstacles to bridging the digital divide. The communication infrastructure prevents effective connectivity. Enduring infrastructure requirements such as transmission facilities and public power supply is considered a major obstacle as it requires global, long term investment. In order to overcome this obstacle, it is suggested that there should be resources input and support from sources, including government, the private sector, United Nations, financial institutions, World Bank and other global organizations

and initiatives such as the UNICT Task force and G8 Digital Opportunity Task Force (DOT Force). It is believed that the combined efforts of all these organizations and initiatives can help fight ICT poverty in the Africa region.

The United Nations and the administrators of nearly all sectors in Africa have acknowledged the potential of ICT. The way has been paved and it is time to act on what we have learned (Perry, 2004). The ways have been paved for grand challenges. African countries are called upon to move from the digital divide into action of bridging the international divide completely.

The objectives of this paper are; to identify the growth and benefits of GSM communication services in helping to bridge the digital gap between Africa and the developed world; identifies the poor state of internet penetration in African countries and the problems hindering internet connectivity; the importance of internet and GSM in helping to bridge the world digital divide are discussed.

THE DIGITAL DIVIDE AND AFRICA

Background

Mobile broadband or GSM is Africa's most promising broad access technology. There is increased access to mobile networks from 25% population coverage in 2000 to 58.5% in 2008 and a mobile cellular penetration rate of 31% in 2008. Mobile subscription rate are more evenly distributed across the countries. The two main area of concern for the African region are

1. Sustenance of mobile cellular and internet users' growth and extending access to lower-income segments of the population.
2. Taking the necessary steps to enable greater broadband access.

Ajayi (2010) stated that in Nigeria for example that there are only 10 million internet users to

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