Chapter 2 Ethical Implications of Cooperation and Safety visà-vis Cyber Security in Africa

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ABSTRACT

Discourses on the threats to cyber security in today's digital society have revealed that cyberspace has become an arena of complex national security concern. This lends credence to the fact that many countries, especially in Africa, need to urgently scale up their efforts to effectively secure the Internet and ICT infrastructures. Drawing upon extensive literature on cyber-security challenges, this chapter examines the phenomenon of cybercrime using Ronald Rogers' "protection motivation theory". The study employs qualitative analysis of the current cyber-security landscape in Africa. Findings posit that with the risk and vulnerability of the cyberspace, cyber security in Africa poses a number of unique challenges which predicate a coordinated response for security and safety engagement. The study suggests collaborative measures to counter cybercrime through investigation, prosecution, and sharing information.

INTRODUCTION

Empirical studies linking contemporary discussions on digital society and cyber security indicate that Africa and indeed other developing countries faces a number of interrelated challenges, foremost being the cyber threat

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visibility among African organisations, government establishments and businesses (Zillien & Hargittai, 2009). Currently, technology has changed the business landscape in Africa dramatically. From strategic options to creation of new opportunities for innovation in products and services, technology is now incorporated in many if not all aspects of business. Internet usage has also seen a tremendous increase especially within the African region. However, as more businesses digitize their business processes and move to the Internet, the potential attack vectors for these organisations expand (Agboola, 2006). It is obvious that today, new types of crime perpetrated by means of sophisticated technology have replaced traditional crimes such as fraud, stealing by tricks, and obtaining under false pretence. Also, traditional boundaries have fallen away and a virtual borderless world has become a platform for crime. In recent years, cyber security related incidents have continued to increase in frequency and impact. In spite of the huge successes and positive attributes that the digital environment has introduced as an integral part of the modern information society, the resultant growth trajectory for cybercrime and related incidence heightens the extent to which cyberspace vulnerabilities and limited capacities prevent Africa from maximising the benefits of the digital economy (Zillien & Hargittai, 2009).

Given this scenario, the use of Internet and Information and Communications Technology (ICTs) has become a matter of strategic importance. With the increase in cybercrime activities, people are facing a growing number of uncertainties related to the use of the digital environment. Digital security threats and incidents have increased the financial and reputational consequences, reduced privacy and in some cases, produced physical damage. Although stakeholders are increasingly aware of these challenges raised by digital security risk, they often approach the problem only from the technical perspective, and in a manner that tends to play down on the ethical implications of the social cleavages in digital use and applications that accompany information poverty and insecurity challenges (Ahmed, 2008). In the light of this turn of events, cyber security landscape and processes are redefining security in the 21st century everywhere in the world (Wada & Odulaja, 2012). The Internet and the ICTs constitute vital infrastructure for growth and development. They are the new drivers for innovation and social well-being.

In fact, the role of the Internet in supporting the economy, delivering information and education, and in enabling creativity is well implicit and acknowledged (Kuma, 2010). The Internet economy is a dynamic environment where technologies, applications, uses and markets constantly evolve, often in a volatile manner. While the Internet benefits economic growth and innovation, attacks against Internet infrastructure represent a major risk to economic growth and innovation in any society. Apparently, the world's growing dependence on the Internet has revealed that cyber space is now as important as physical space. Its vulnerability to disruption and attack has highlighted the importance for a coordinated response for security in 18 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

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