

## Chapter 58

# Ethical Implications of the Techno–Social Dilemma in Contemporary Cyber–Security Phenomenon in Africa: Experience From Nigeria

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### ABSTRACT

*This article examines the cyber security dimension of the global information Infrastructure which has resulted in the attainment of remarkable milestones and unlimited opportunities. However, these benefits notwithstanding, the cyberspace is increasingly under attack by cybercriminals, and the cost and damages from such attacks are increasing alarming. This article therefore, sets out to examine the ethical implications of cybersecurity phenomenon. Relying upon an extensive contemporary literature on cyber security, this study examines the phenomenon using the protection motivation theory. The article employs qualitative analysis of the current cybersecurity landscape in Nigeria. With an insight provided into understanding the independent layers of cyber security in Nigeria, a criterion on what should constitute appropriate procedure for cyber security is thus supplied. Findings posit that with the vulnerability of cyberspace, cyber security phenomenon in Africa, mirrors the existing social inequalities and widens the social division that is more apparent with the expansion of the ICTs.*

### INTRODUCTION

The emergence of the internet as an international technological communication tool is one of the most significant developments in the 21st century cyberspace landscape (Wada & Odulaja, 2012). But behind this achievement is the question of ethics, values, and norms that transcends borders, creating a variety of challenges in today's interconnected society which have to be addressed (DeJooode, 2011). There are

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no mincing words that the rise of the Internet and new media in particular and the digital economy in general has brought to the fore the fact that Africa is the most marginalized and excluded region of the world and she is facing a number of threats as her own share of the global insecurity problem. Apparently, as part of the evolving trend, Africa's territorial sovereignty and integrity is no longer limited to its sea and land borders but its cyberspace (John, 2013). This explains why today's threats to security have been globalised while their impact has been localized. Nevertheless, the world's growing dependence on the internet has revealed that the cyber space is now as important as the physical space and its vulnerability to disruption and attack, has highlighted the importance and the necessity for a coordinated response for security at all sphere, be it national, regional or global levels (Kumar, 2010).

Additionally, these threats concern the well-being of an individual whose identity is rooted in different socio-economic and cultural backgrounds. The security concern includes the rapidly evolving threat landscape of the cyberspace which has heightened the extent to which cyberspace vulnerabilities and limited capacities prevent Africa from maximising the benefits of the digital economy (Cassim, 2011). Besides, the people are facing a growing number of uncertainties related to the use of the digital environment such as the digital security threats and incidents that have increased the financial, privacy, and reputational consequences, and in some cases, produce 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 (Cassim, 2011).

Even though recent scholarship has endeavored to articulate a more nuanced conceptualization of the nature of global cyber security today which has changed and require different thinking and responses. It lends credence to the fact that most of the global threats we face today are rooted in the deeper issues of ethics and values in international relation, politics and interaction (Alexander, 2008). A good example is the cyber security with a techno-social fissure that has splintered into a multitude of cracks with a phenomenal impact on the nature and future of Africa's growth, development and existence. This poly-semic socio-ethical condition no doubt has a profoundly contentious security implication for Africa that are most dramatic and urgent (Atta-Asamoah, 2010). It threatens not only the security of the region but the security of communities and/or the entire portions of the region's population. It is therefore a risk to both regional/national as well as the human security.

But despite the seeming pessimism of this development, the rhetoric of the discourse concerning the emerging pattern of cyber activity in Africa today reveals that the digital divide is not only a technological predicament; it is also an ethical crisis. This is so because the cyber security divide and processes are redefining security in the 21st century (Chiemeké, Ewuekpaege & Chete, 2006). This study therefore examines some of the numerous ethical issues/challenges posed by contemporary information society and technology to several sections of African communities. It posits that cybersecurity though a new issue with a global dimension, has an important developmental implication for Africa (Atta-Asamoah, 2010). Therefore, breaking it apart into its ethical underpinnings will provide a framework for effectively addressing cyber threats and digital vulnerability in Africa. For Africa, cyber insecurity leads to social exclusion and questions the information economy that generates consequences for social divisions, social insecurity, diversity and differences among the already diversified African society (Longe & Chiemeké, 2008). Though scholarly investigation into the ethical issues concerning cyber security in Africa has regrettably been modest and disproportionate, the solutions to today's cyber security problems have to take into account some ethical considerations as well as the region's and/or individual's cultural and

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