Abstract

We are living in the knowledge age where information and knowledge has become the most sought after commodity as characterized by proliferation of digital devices and systems. This has seen a paradigm shift in the world where there is an increasing need for Digital Forensics (DF) as a vehicle that organizations can use to provide good and trustworthy evidence and processes. Previous research however points out that developing countries have not yet derived expected benefits from DF technology since very few organizations have the structures in place to enable them to conduct cost effective, low-impact and efficient digital investigations. The adoption, proliferation and maturation of digital forensics in Kenya have been slow due to improper regulatory policies, procedures/processes, technologies, standards, legal and governance challenges. The purpose of this research was to develop a digital forensics framework that will serve as a blueprint for Kenyan courts of laws in apprehending digital criminals. Existing DF models were surveyed and then adopted to create a specific application framework. Towards achieving this goal, the research investigated best practices, standards, regulatory policies, procedures, technologies, governance, legal systems and people in place and explored some areas in the legal system where digital forensics evidence is most likely to be questioned. To validate the framework, the research methodology employed in this research was a combination of descriptive survey and case study. The findings of this study have various implications for research as well as practice. For research, best practices, standards, regulatory policies, procedures, technologies, governance and people are critical to influencing digital evidence admissibility in courts. For practice, the findings of this study provide a generic framework for implementation of Digital Forensics. The finding can be used by both government and private agencies in developing countries like Kenya as a guide in providing Digital Forensics services whether Internal investigation, disciplinary hearing or court case.