Chapter 4
Web Content Management in Institutions of Higher Learning in Emerging Economies

Gregory Wabuke Wanyembi
Mount Kenya University, Kenya

ABSTRACT
This chapter aims at examining the concept of content management (CM) and the need to identify it as a global best practice in light of its emergence in modern organizations, and specifically so in the context of institutions of higher learning in developing economies. The chapter also examines a number of models and approaches used in the adaptation of web content management systems (CMS), which provide a guide to the separation of digital content that is relevant to an institution of higher learning and also point out relevant management issues. The merits and demerits of these approaches are discussed. The stages in Content Life Cycle (CLC), information architecture and infostructure, quality of good online content, types of content suitable for a website, and are discussed. Content management tools and system have also been covered in some detail, which offers an institution part of the solution that they require to effectively manage and maintain their content. The chapter concludes with a set of recommendations and points at possible areas for further research.

INTRODUCTION
The emerging economies in Africa, Kenya included, are still at their infant stage insofar as technological development in general and content management systems in particular are concerned. However, these economies have become leaders in innovation of some of the modern information systems (IS). As Watson (2013) has noted, Ushahidi.com, a frugal IS for gathering information during a crisis situation, and which was developed in Kenya in 2007, has evolved into an “open source software for information collection, visualization, and interactive mapping” (Ushahidi.com, 2011). This information system has since been used in South Africa (to combat violence), the Democratic Republic of Congo (violence), Haiti (earthquake), New Zealand (earthquake), and Japan (earthquake). Further, according to the Econo-
Web Content Management in Institutions of Higher Learning

Kenya leads the world in mobile banking (The Economist, 2013) through its now world famous M-PESA (Ngugi, Pelowski, & Ogembo, 2010), which is an exemplar of frugal IS thinking. M-pesa is a mobile money transfer service with a cover of about 18 million customers in Kenya. These two examples point to Africa as a continent that is ready to play its leading role in technological advancement and innovation and, given the opportunity, could make more significant contributions that could benefit mankind as a whole.

According to Kashorda and Waema (2007), the use of ICTs in higher education institutions has the potential of enhancing the quality of teaching and learning, the research productivity of the faculty and students, and the management and effectiveness of the institutions in general. In Kenya, ICT policies have already been put in place, which articulate the significance of ICT in education. ICT on its part is an enabler for content management as it facilitates the creation, manipulation, publishing, and the use of content in multiple forms, for example text and multimedia. Several initiatives are being made to implement content management systems in institutions of higher learning in these economies, as examples in Kenya and South Africa have shown. However, the main challenge is that web content management technology has had little impact on many institutions of higher learning due to inadequate ICT infrastructure, limited funding and lack trained manpower in the new technology.

Whereas there are a few enthusiastic advocates who are willing to champion the concept of content management in African countries, the reality is that most African educators generally have as yet had little knowledge about, or interest in, its implementation and usage. There remains very considerable infrastructural constraints to be overcome before the technology can be widely adopted for use in institutions of higher learning across the continent, and there is still a lot of reluctance in many institutions to develop systems that can enable information and storage resources to be made available. This does not mean that the potential of high quality digital content management systems should be ignored in Africa, but rather that much more sustained work needs to be done in human capacity development and infrastructural provision if African learners are truly to benefit from the interactive experiences that such systems as content management systems can deliver. This chapter examines various aspects of web content management in institutions of higher learning in emerging economies in Africa, and the role they play in enabling institutions of higher learning to effectively improve their web content and market themselves globally.

CONTENT IN WEB DEVELOPMENT

The term content in the context of web development is generally used to refer to electronic content (e-content) such as graphics, videos, images, sound, electronic journals, and so on that appear on websites. In this chapter, content refers to pieces of information in the context of an institution of higher learning that appears in the form of documents such as reports, theses, dissertations, research papers and articles. Content is continuously generated internally by the institution and externally from outside the institution of higher learning. The generation of content may be categorized as either short term or long-term depending on how long it takes to generate it. The challenge that faces many institutions is how such huge amounts of content can be effectively and efficiently managed for them to receive returns on their investment. According to Mutula and Wamukoya (2007) define content management as a set of processes and technologies that support the generation, dissemination and use of content. Thus, content, in their view is any type of digital information. Cox (2002), on the other hand defines content