

Chapter 13

Demystifying Digital Scholarship

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ABSTRACT

The subject of digital scholarship has attracted attention from the scientific community, publishing industry, and libraries, not only as a subject of study or methodology, but also as a tool that aims at addressing how new digital media and technologies can be leveraged to transform teaching, learning, and research. Digital scholarship provides an opportunity to develop cyber-infrastructure, facilitate large scale collaborative projects, and share research data as well as methodologies across disciplines. It enables scholars to develop research questions at appropriate level of sophistication and abstraction in order to allow large scale collaboration that cuts across disciplines, borders, and methodologies. Digital scholarship intersects many academic fields including but not limited to computational linguistics, cloud computing, human computer interaction, content management, cyber-infrastructure, e-publishing, computer modeling, cross language information retrieval, automated language processing, information visualisation, and social networks. Despite its increased pervasiveness, digital scholarship as a discipline of study or as a tool and technology for enhanced learning and research is yet to be widely understood. Besides, literature on the subject is limited. Digital scholarship is therefore a legitimate scholarly endeavour that needs research for clear understanding. This chapter therefore strives to demystify the concept of digital scholarship, its scope, tools for its study and application, what it aims to achieve, why it is important, and any challenges of implementing, it especially in scholarly environments.

DOI: 10.4018/978-1-61350-335-5.ch013

INTRODUCTION

Scholarly communication or scholarship involves: conducting research, developing ideas, and communicating these ideas with other scholars; preparing, shaping, and communicating to a group of scholars what will become formal research, and publishing formal distributed to libraries in print or electronic format (Thorin, 2003). Scholarship or scholarly communication may be perceived as system though which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community and preserved for future use (ALA, 2005). Dulle (2010) citing Correia and Teixeira (2005) says the functions of scholarly communication include author evaluation, author recognition, knowledge validation, and quality control. Besides, scholarly communication originated as an exchange of letters and lectures among scattered peers until 1665 when first print journal known as philosophical transactions was launched by the royal society of London (Thorin, 2003). Dulle (2010) says economic and technological changes were major reasons contributing to notable evolution for the current scholarly communication. Since the genesis of scholarly communication, scholarly publishing was dominated by scholarly societies but commercial publishers came in the picture after world war 11 when scholarly societies were unable to cope with research output (Yiotis, 2005). Developments in information and communication technologies have also contributed the evolution of scholarly communication in terms of documentation format and channels of dissemination. Willinsky (2003) observed that 75% of journals were online of which 100 peer reviewed were in digital format. Scholarly communication is important enhance sharing of knowledge, avoid duplication, spur generation of more knowledge, facilitate collaboration, visibility of authors.

Though current thinking focus on digital scholarship to have emerged with the internet perhaps because early uses of ICT in the classroom during

the 1970s and 1980s involved the use of stand-alone computers and simple data entry devices which did little to change the overall approach to teaching and learning in most tertiary institutions, the idea of networking people via the use of computers originated with the Advanced Research Projects Agency (ARPA) of the Department of Defense and universities in the US. ARPANET linked universities enabling research and sharing of data among scholars. The most significant development in online interaction at the time was Usenet - a public online communication system that allowed people to read and respond to specific conversations and topics (Rheingold, 2004). Digital scholarship is closely allied to enhance technology integration within academic libraries. Libraries are at the heart of universities operations and as citadel of research, they play an important role in scholarship. Besides, academic libraries that provide effective access to information communication technologies are therefore well positioned to play their perceived role of providing information access and knowledge that empowers society to address the social, economic and political problems facing the world in general. The importance of research in university education on the other hand, cannot be overemphasised. In this regard, management consultant, Arthur D. Little's comment that "research makes building stones out of stumbling blocks" speaks volumes to the value and importance of research for socio-economic and political development

During the 1960s libraries the world over, started to experience major development of information technology applications. These developments included on-line interactive processing and telecommunications, production of the keyword in context or KWIC index for articles appearing in Chemical Abstracts. Library of Congress. MARC made it possible for libraries to exchange and share bibliographic data as well as undertake migration of data between systems. The applications also facilitated the establishment of Ohio Computer Library Centre (OCLC), estimated to

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