

Big Data Management in Libraries: A Case of Busitema University, Uganda

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Abstract

Background: Everything we do, see or communicate in this world amounts to data, resulting in voluminous amounts of data dubbed as Big Data that exceed 1.145 trillion megabytes daily (Bulao, 2021). Academic libraries execute numerous functions that result in the generation of large amounts of data, thus necessitating better management of this data. Big Data can reduce uncertainty, inform decisions and predict future outcomes.

Objective: The purpose of the study was to examine the management of Big Data at Busitema University Library (BUL) and propose measures to enhance the management of Big Data for improved decision-making and the quality of library services.

Methods: The study adopted a qualitative case study design. The study population comprised 34 participants clustered as 5 Head Campus Librarians (HCLs), 19 Library Assistants (LAs), and 10 Library ICT Support Staff (LISS). A sample size of 29 participants (5 HCLs, 19 LAs, and 5 LISS) was purposively selected. Data was collected using interviews, Focus Group Discussions, and document review and analyzed using thematic analysis.

Results: The study found that various types of Big Data emanating from several library operations were managed at BUL. Data was used to support decision-making; understand user information needs, and support collection development as well as planning and budgeting. However, there were major challenges including limited 173 budget, skills gap, unstable Internet, inadequate and outdated ICT equipment and lack of a central data management system, among others.

Conclusion: The study recommends that Busitema University should standardize and centralize the management of Big Data; increase the University library budget; train library staff; increase Internet bandwidth, and recruit a data management specialist. Keywords: Big Data, Management, Library, Busitema University, Uganda.