
Digital Library Services in Selected Private Universities in Ghana

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Abstract

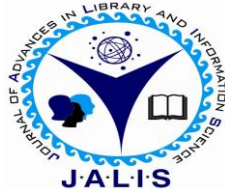
This study examined the provision and utilization of digital library services in private universities in Ghana, aiming to assess availability, current services, challenges, and benefits. Employing a mixed-method approach with data from 314 respondents at Valley View University and Pentecost University, guided by a modified LibQUAL+ Model, the research found low student awareness and usage, alongside insufficient training and support impacting access. User satisfaction was correlated with resource and interface experiences. Key recommendations include increasing awareness to boost usage, tailoring services to academic needs, and addressing training and support deficiencies in Ghanaian private universities.

Keywords

Digital Library, Library Services, Private Universities, Ghana.

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Introduction

The ongoing digital revolution has fundamentally transformed how academic libraries deliver their services, making digital access to information a cornerstone of higher education globally. As university libraries move beyond traditional models, digital library services have emerged as vital tools for enhancing user access to scholarly content. These services offer seamless and remote access to a broad range of information resources e-books, electronic journals, databases, multimedia materials via digital platforms that are accessible across time and location (Skøtt, 2021; Shah & Waghchoure, 2018). In modern academic contexts, digital libraries not only support students and researchers with timely access to relevant knowledge but also contribute to institutional goals related to academic excellence, innovation, and global competitiveness (Lesk, 2004; Sreenivasulu, 2000). In Ghana, digital library services have become increasingly important in addressing the expanding information needs of a growing university population. The country's higher education institutions, particularly public universities, have begun implementing digital platforms and electronic resource management systems to complement traditional library services and support blended and distance learning initiatives (Dadzie & Walt, 2015; Owusu-Ansah, Boakye, & Adjei, 2021). These efforts are often supported by national and donor-driven interventions aimed at building ICT infrastructure and strengthening research capacity. However, a growing body of evidence suggests that private universities many of which operate with limited budgets and smaller student populations face unique challenges in adopting and sustaining digital library services (Amofah-Serwaa, 2018). These challenges include inadequate ICT infrastructure, lack of digital literacy among users, absence of institutional digital policies, and insufficient funding for acquiring licensed e-resources (Adjei & Agyeman, 2025). While some studies have explored the role of digital libraries in Ghanaian academic institutions, the literature is largely skewed toward public universities, leaving a significant gap in our understanding of how private institutions are navigating this transformation (Amofah-Serwaa, 2018; Owusu-Ansah et al., 2021). Yet, private universities are an essential part of the country's tertiary education landscape, contributing significantly to student enrolment, program diversification, and academic innovation. As such, examining the state of digital library services in private institutions is critical to achieving equitable

information access and promoting inclusive academic development. This study, therefore, investigates the usage of digital library services in selected private universities in Ghana. The research addresses a key gap in the literature and contributes valuable insights to inform policy development, institutional planning, and the broader discourse on digital transformation in Ghana's higher education system.

Objectives of the Study

- To determine the extent of digital library provision in the selected private academic libraries
- To assess the current state of digital library services in private universities in Ghana
- To identify the benefits of digital library services to private universities in Ghana.

Methods

This study employed a qualitative case study design to explore digital library services in two selected private universities in Ghana: Valley View University and Pentecost University. The case study approach was chosen for its ability to provide in-depth, contextual insights into how digital services are delivered and experienced within real institutional settings. A qualitative research strategy allowed the researcher to gather rich, descriptive data through flexible and interactive engagement with participants. The study population comprised library staff from both universities. Specifically, only key personnel, namely the heads of e-library units or university librarians, were purposively selected for interviews due to their strategic roles and expertise. At the time of the study, Valley View University had 11 library staff, and Pentecost University had 4, but only top-level staff directly involved in digital service delivery were interviewed. Data were collected using a semi-structured interview guide, which allowed for open-ended questions and follow-up prompts to capture detailed responses on institutional practices, user engagement, and technological challenges. The data were analyzed using content analysis, a method suited for identifying patterns, themes, and meanings within qualitative data (Elo & Kyngäs, 2018). Ethical standards were strictly observed throughout the research. Participants were informed of the study's purpose, assured of voluntary participation and confidentiality, and allowed to withdraw at any time. Data were securely stored, and findings were shared with participants to promote transparency and trust.

Results

Both 2 librarians interviewed were males. One was between the ages of 25 and 35, while the other was between the ages of 36 and 45. They all had worked for 5-10 years in the library. They are all professional librarians. Librarian 1 will be used to represent the VVU interviewee and Librarian 2 will be used to represent the PU interviewee. The researcher found out from respondents about the type of library management software available in their library, frequency of updating resources, databases and journals subscribed to, and management and evaluation of the Digital Library in the two libraries.

Type of Library Management Software

The researcher inquired from the respondents about the type of library management software being used to provide digital library services in their institution. Both two said they use Koha, but librarian 1 said, "They use Koha to manage their catalogue and DSpace for their institutional repository".

Availability of the Digital Library Department

This question sought to find out from participants if they have a specific department in charge of the Digital Library. It was revealed that one library does not have a specific department in charge of that but the other library has an e-library section in charge of the digital library. Responses are below:

Librarian 1 – *there is no specific department responsible for the Digital Library but it is being handled by the reference and information staff.*

Librarian 2- *there is an e-library library section in the library responsible for the Digital Library and its services.*

Frequency of the update of Digital Library's collection

The researcher asked this question to know how frequently new resources are added to their digital library collection. From the interviews, both libraries perform updates monthly as seen in the responses below:

Librarian 1 - *new resources are added to the digital collection every month,*

Librarian 2- *digital collections are updated on a monthly and quarterly basis.*

Examples of online journals and databases accessible through the Digital Library

The researcher asked the respondents to state some of the online journals and databases accessible through their digital library. Both librarians had subscriptions to JSTOR, Taylor & Francis. These libraries had other specific online journals and databases accessible through their digital library. These can be seen in the narration below.

Librarian 1- *there are subscriptions with Sage Journals, Ebsco, Emerald, etc. As well.*

Librarian 2- *there are subscriptions with Science Direct, PubMed, IEEE Xplore, and Wiley Online Library.*

Measures to ensure the availability and accessibility of digital resources

The researcher questioned the librarians about the steps they had taken to ensure the availability and accessibility of digital library resources to library users. According to the interview, only one library had an operational strategy in place to ensure the availability and accessibility of digital library resources to library customers, while the other did not. The following are detailed narrations:

Librarian 1 – *most of the students are not aware of the Google Drive collection because it is new, but efforts are being made to make sure we get the URL to the Google Drive collections shared on all student and faculty WhatsApp and Telegram groups. Also, work is still ongoing about the institutional repository.*

Librarian 2- *there are subscriptions with publishers and vendors to ensure continuous access to digital resources. These resources are provided in multiple formats (e.g., PDF, HTML, ePub) to accommodate various user needs and preferences.*

The Current State of Digital Library Services

The researcher probed the librarians in this section to assess the current state of digital library services in their various libraries. This was done to determine user satisfaction, strategies for increasing digital library usage, and remote access to digital resources in their digital library.

The overall satisfaction of library users with Digital Library services

Interviewees were asked to rate the overall satisfaction of library users with Digital Library services. It was discovered from the interview that one library had a lower user satisfaction because they do not have a digital library while the other library

had a high user satisfaction. The narrations are indicated as below:

Librarian 1- *I will rate our user's satisfaction below average. This is a result of the low patronage of digital library resources.*

Librarian 2- *user satisfaction can be rated to have high satisfaction: this is because the library actively listens to users' feedback and continuously improves services to address their needs which has increased usage of digital library services in our library.*

Promotion of the use of digital library services

The researcher enquired from the interviewees about the strategies they have employed to promote the use of digital library services among students, faculty and other users. It was discovered from the interview that one library did not have a promotional activity in place while the other library uses its website, orientation, workshop and training to promote its digital library services. The narrations are indicated as below:

Librarian 1- *We intend to display banners around to promote the use of electronic Databases. We will also send the URL of the Google Drive collection to all students and faculty on all social media platforms.*

Librarian 2- *The library's website prominently features information about digital resources, making it easy for users to access and discover them. We also conduct orientation sessions for new students and faculty members to introduce them to the Digital Library's resources, services, and how to navigate the online catalogue. We also organize workshops and training sessions to teach users how to effectively search, access, and utilize digital resources, databases, and research tools.*

Availability of remote access to digital resources.

The researcher wanted to find out if these two libraries offer remote access to digital resources to their library user.

Librarian 1 *responded No*, while Librarian 2 *said Yes*. Meaning Library 1 does not offer remote access to digital resources but Library 2 does.

The Benefits of Digital Library Services

In this section, the researcher interviewed participants on the advantages, benefits, improvements and how digital libraries have enhanced teaching and learning.

Advantages of Digital Library

The respondents were asked to state some of the advantages Digital Library services offer in terms of accessing up-to-date and relevant information compared to traditional library resources. Librarians stated that they offer instant access and 24/7 availability to library resources. Response from Librarian 2 agrees with the participants from Library 1 that digital resources are available online 24/7, allowing users to access information at their convenience, regardless of the library's operating hours. This is shown in the narration below:

Librarian 1- The digital library services offer instant access and 24/7 availability to library resources; global reach; ensure search efficiency; provide updated content and diverse formats of library resources and save library cost and space.

Librarian 2 - "Digital resources can be updated in real-time, ensuring that users have access to the latest research findings, publications, and news without any restriction".

Benefits of digital library services to the academic community

Participants were further asked under this section to state more benefits digital library services bring to the academic community.

Librarian 1 stated quite a number of them, many among these are that digital libraries enhance research, support open access to resources, the digital library is cost-effective and thus cheaper to acquire, the digital library support resource sharing, enhance preservation of resources, and easily update resources and information in real-time.

Librarian 2 agreed with Librarian 1 on most of the benefits. He added that the digital library supports open-access initiatives, making valuable research and educational materials freely available to a global audience. Digital resources support remote and online learning, enabling students to access materials and engage in research even when not on campus.

Advantages of digital library services to user's research abilities

The researcher enquired from the participants from the two universities to state how digital library services have improved the research capabilities of their students and faculty members. Both libraries stated they provide access to a wide variety of resources; these are stated in the narration below:

Librarian 1- digital libraries provide access to a wide range of resources, including scholarly articles, books, research papers, and multimedia content, allowing researchers to explore various perspectives and sources of information. Also, the search functionalities enable users to quickly locate relevant materials, saving time compared to manually searching through physical collections. Digital libraries ensure that users have access to the latest research findings and publications, helping researchers stay current in their fields.

Librarian 2- agreed that digital libraries provide access to a wide range of digital resources, including research articles, e-books, databases, and multimedia materials, enabling students and faculty to explore a broad spectrum of knowledge relevant to their research. Digital resources allow researchers to efficiently conduct literature reviews by searching and accessing a multitude of sources, identifying trends, gaps, and key findings in their field.

Discussions

Extent of Digital Library Provision

The first objective was to identify the extent of digital library provision at the selected institutions which is linked to the Information Control dimension under the LibQUAL+ theory. Participating librarians from VVU and PU through the interviews indicated they have subscriptions to some online journals and databases. The findings indicated that the VVU digital library did not have a feasible measure laid out to ensure continued accessibility to these services. PU on the other hand had measures put in place to ensure continued access to these resources. This finding is contrary to that of Smith (2020) who revealed that the majority of users expressed high levels of satisfaction with the availability and accessibility of digital resources. They appreciated the convenience of remote access and the extensive range of materials offered (Smith, 2020). It is therefore necessary for libraries to put measures in place to ensure the availability and accessibility of resources to users.

Current State of Digital Libraries

The second objective was to assess the current state of digital libraries in the selected institutions which is linked to the effect of the Service dimension under the LibQUAL+ theory. The study's findings showed that there is a positive correlation between user satisfaction with the availability of remote access to use digital library and the convenience of accessing digital library resources from any location. Findings from the qualitative analysis revealed that PU actively listens to users' feedback and continuously improves services to address their needs which has increased usage of their digital library services. These components align with the study's findings on the positive correlation between user satisfaction with online help and support services and the efficiency of remote access services. Yang et al. (2012) underscore accessibility as a crucial characteristic of digital libraries, breaking down geographical barriers (Yang et al., 2012). The study's findings on user satisfaction with remote access services and the ease of navigating the digital library website support the idea that digital libraries prioritize universal access to information.

Benefits of Digital Library Services to Library Users

The third objective aimed to investigate the benefits of digital library services to library users. This is linked to assessing desired service and the service outcome under Library as Place under LibQUAL+ surveys. Findings from the qualitative analysis revealed that librarians agree that digital library resources are relevant in teaching and learning though not consistent with the findings from the student. The finding is inconsistent with the findings of Sharma (2018), which emphasized digital libraries as transformative, acting as banks where information is invested. In their research, Tom-George and Onyema, (2020) also claimed that researchers, instructors, and students no longer confine themselves to print materials. Right today, there is a significant level of use of electronic information resources. To support and facilitate learning in this new normal, libraries are offering digital services. This therefore makes digital libraries a valuable asset for research purposes, hence continuous use of it makes a person highly knowledgeable in accessing information which is an indispensable attribute of an effective researcher. It is therefore worrying that the majority of respondents in this research reported no change to their research capabilities and this can be attributed to the unavailability and low patronage of the digital library services for their research purposes. It can be induced that the lack of awareness of digital library

services has resulted in the low patronage of digital library resources.

Conclusion

Digital libraries have become essential tools that are changing the way that knowledge is accessed and shared. As the information era evolves, these digital resource repositories are essential to enabling universal access to a multitude of scholarly materials, including multimedia content and scholarly publications. Digital libraries are dynamic spaces that incorporate cutting-edge technologies, and they are positioned at the intersection of technical advancements, changing academic research, and user expectations. The study or examination of the many aspects of digital libraries highlights their essential function in modern academic and educational environments. User satisfaction is closely linked to their experiences, ranging from the comprehensiveness and accessibility of resources to the user-friendliness of interfaces. The difficulties in managing and maintaining digital libraries are demonstrated by the fact that, despite their many features and advantages, some problems prevent users from using them to their full potential. Therefore, to maximize their use and attain higher and better academic performance, digital libraries should be managed and used critically, particularly in the academic setting.

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