Research Papers/Extended Abstracts

Digitalization of Library Services and Its Benefits to the Students of the University of Ruhuna

During Crisis Periods

K.A.I.M. Amarasekara*, D.M.T. Madushanka and H.E.P. Mayuri

Library, University of Ruhuna, Matara, Sri Lanka

*Corresponding author: inoshaamarasekara@lib.ruh.ac.lk

Abstract

This study examines the digitalization of library services at the University of Ruhuna in Sri Lanka and its impact on students during crisis periods. The University of Ruhuna's digital library services encompass varied services and this study emphasizes the value of digital libraries in maintaining academic continuity and improving learning outcomes, particularly in times of emergency like the COVID-19 pandemic. The main objective of this study was to assess the effects of digitalization on University of Ruhuna library services during times of crisis and to identify the requirement of preparing a library marketing plan. Data collection was done by distributing a Google form consisting close ended questions among the undergraduate students of University of Ruhuna. The findings of this survey highlighted the lack of awareness of the students about digital library services. Moreover, students who benefited from those services showed a high level of satisfaction. The study also highlights that a significant proportion of the students did not fully access those services, even during the pandemic and economic crisis periods. The study's findings emphasize the importance of promoting digital library services and broadening students' awareness in order to maximize the benefits of those services. It involves modifying outreach programs to fit student preferences and bridging the gap between the availability of resources and their efficient use.

Keywords: Crisis Periods, Digitalization, Library Services

Introduction

A crisis has the power to fundamentally alter a nation's structure, impacting the economy, healthcare system, social cohesiveness, and general well-being of the citizens. Accordingly, combination of severe disasters, COVID-19 pandemic and an economic crisis posed significant challenges for Sri Lanka. The nation was amid of two crises, each of which affected different facets of the society. To stop the spread of the COVID-19 virus, the government put in place stringent measures like lockdowns, travel bans, and social isolation rules. Despite being necessary, these actions had a significant negative impact on the economy, leading to a loss of jobs, closing of businesses, and a

slowdown in economic growth. As the nation slowly comes out of this phase, important lessons have been learnt about the value of readiness, resilience, and the requirement for varied economic strategies.

The Education system in Sri Lanka has undergone severe challenges like many other industries of the country, because of the circumstances of COVID-19 pandemic and the complementary economic crisis. Even though those crises comparatively have adversely affected the lives of the people, a significant transformation towards digitalization of educational services has been brought about in the Sri Lankan education system. Traditional learning methods were disrupted by the closing of universities and schools, prompting educational institutions to quickly adopt online platforms and distance learning facilities. This change emphasized the benefits and difficulties associated with technology to guarantee ongoing access to education. Consequently, Sri Lanka's education system implemented initiatives including online classes, e-learning platforms, and digital resources to support distance learning. This digitization effort aims to minimize the educational gap during the crises, increase educational possibilities, and raise the nation's educational standard as a whole.

Accordingly, University of Ruhuna, the leading public university of Sri Lanka, located in southern province introduced some key digitalized educational platforms including library services during the crisis period. As the first goal of the university, to expand access to education, research and services, online lectures and digital library services were started. Then, students were able to study from home. Subsequently, it shifted them to online learning, and online reading platforms to gather required reference materials. Therefore, a digital library was essential to the university, as a result of that, Digital Library Services of University of Ruhuna emerged including E-Databases, E-Books, Online Public Access Catalog (OPAC), E-Journals, digital Institutional Repository (IR), Document Delivery Service, Article Request Service, Place hold option for Books reservations, and Books Renewing option to extend the due date. There are four electronic databases Emerald Insight, JSTOR, Wiley Online Library, and Oxford University Press that can be accessed at the University of Ruhuna's Library. These are accessible through using either on-campus or off-campus options. Installing Virtual Private Network (VPN) and logging in are prerequisites for using on campus facility when users connect databases through home/personal internet connections. The university library administration provided the necessary Username and Password for users when necessary. All these digital library services have been provided up-to-date. For these enhancements, 539 e-books subscribed in 2020, university scholarly publications such as Academic Sessions of University of Ruhuna, Conference and Symposia Proceedings, Scholarly Journals, Scholarly Publications of Academic Members, and examination past papers were added to the IR, scanned copies of the prefaces of books are added to the OPAC to get a brief idea about the books, supply scanned copies of book chapters which are requested

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by students through the Document Delivery System, and awareness session were conducted adequately by the Assistant Librarians, Senior Assistant Librarians, and Deputy Librarians.

This would be an added advantage and a great opportunity for the students to enhance their knowledge of the digital library. In addition to that, Laptop Lending Service also introduced as a new service to the students providing one-week borrowing facility. In conclusion, numerous innovative technologies and new services have been introduced. Therefore, despite the difficulty of education, the crisis period was the perfect time to learn and change traditional learning concepts.

When considering the current global scenario and the growing digital revolution, it has become more important to investigate how digital tools and services could enhance academic activities, specially in university libraries. The library services at the University of Ruhuna have long been recognized as a key player in academic activities of both academics and students. However, due to the development of digital technologies and the growth of online materials, libraries are undergoing significant modifications. This survey's objective is to understand further about University of Ruhuna students' perspectives and experiences with the recent modifications and transformations related to digitalization of library services.

Therefore, the objectives of this study were to examine accessibility of available digital resources, to evaluate the effects of digitalization on library services at the University of Ruhuna during times of crisis and to educate about the requirement of preparing a library marketing plan.

Since the library is the beating heart of the university, digital library services should be adopted as higher education institutions progressively shift to online learning. This study attempts to investigate how the University of Ruhuna students are affected by the digitalization of library services and its advantages during the time of crisis. Digital library services are now essential in university education due to the rising demand for online education. However, the use of digital library services can be challenging, and students may struggle with engagement and access to them. Digital Library emerged as a promising approach to improve students engagement and motivation in learning, but its effects on remote access are not yet fully understood. This study is significant because it can provide valuable insights into the potential benefits of digital library services that enhance students learning outcomes and interest in digital library while highlighting the necessity of integrating some parts into their curricula to have better utilization of the services that students can access virtually when they are engaging on academic activities.

Literature Review

According to Kopp et al. (2019) & Leszczyski et al. (2018), the phenomenon of digital transformation is not new and has being applied in higher education institutions for some time. Universities must be up to the task of preparing future professionals to be able to face challenges and offer solutions, as the digital transformation of higher education institutions is a topical issue that several stakeholders in education must feel concerned about (Bond et al., 2018; Sandkuhl & Lehmann, 2017). This transformation has suggested the integration of sustainable management to be implemented in higher education institutions (Adedoyin & Soykan, 2020).

Moreover, many researchers (Poon & Peiris, 2020; Smedly, 2010; Leszczynski et al, 2018; Demirabilek, 2014) have pointed out challenges and opportunities of digitalization of the education system specially during a crisis period like COVID-19 pandemic. The major challenges are technology dependence, socio-economic factors, digital competence of the users, compatibility for various subject streams, heavy workload to the ICT staff and assessment and supervision difficulties for the teachers. Even though it has numerous challenges, there are some key opportunities in terms of digitalization such as research innovations, technological innovations and socio-economic interventions from developed nations.

Asimah, Akaba, Dzogbede (2021) pointed out in their study, that public libraries around the world responded quickly to the COVID-19 pandemic, not only by modifying already-existing services but also by launching brand-new services to stay in touch with their patrons (using digital library systems). They changed how they operated, made changes to how they used social media for communication and made changes to how they promoted library services like e-books, streaming media, virtual programming, virtual story-telling, and online knitting groups. The researchers further highlighted those computers and/or other internet-connected mobile devices are necessary to access the digital library and other academic electronic resources. Additionally, dependable and efficient internet connectivity is required. The use of the digital library won't be an issue provided that all students have access to computers and/or other mobile devices, as well as reliable and efficient internet connectivity.

As cited in Ali, et al (2021) in their study, researchers have highlighted the importance of digitalization of library services during the pandemic. The pandemic's positive side is encouraging the use of digital technology at a time when creative approaches to strengthen education are being used (De Giusti, 2020). While there have been several social, cultural, and economic obstacles to libraries becoming digital, Tammaro (2020) found that obtaining a Digital Library initiative license helped to lessen the increasing difficulties brought on by Covid-19. This means that even after the pandemic, educational

institutions will choose to rely on their web-based system for the library. The post-Covid-19 formal learning environment will be enhanced by these digital libraries, which will also help the electronic learning system (Obeidat, 2020). Furthermore, according to Ali, et al. (2021), selecting digital libraries will highlight their significance for eLearning and general reading habits. Highlighting their use is more important because digital libraries are a crucial part of keeping the learning process going. The value of Digital Libraries in the formal education system will also increase if they are addressed as a component of the crisis management system. Additionally, it might be believed that they primarily support both traditional and eLearning systems globally.

Methodology

To understand the student viewpoints and interactions with the digital library services, during the pandemic period, a Google form was circulated among the undergraduate students of the University of Ruhuna. To fulfil the objective of the study, researchers collected student views and experiences regarding the digitalization of library services, including their awareness of the services offered, their level of satisfaction, and suggestions for the library's digital infrastructure that would better serve their needs in times of crisis.

The questionnaire consisted of closed-ended questions and could be able to collect 157 responses and it was a cross-sectional study where the researchers collected the data at one point in time. The collected data were analyzed using Statistical Package for Social Science (SPSS) research and mainly frequency analysis, and cross-tabulations test were performed to measure the level of usage and experience of the library services. The expectations of use of those tests were to identify if there any gap of usage levels and the awareness while plan to develop and organize more outreach programs and marketing activities to promote the services and improve the level of standard and the quality of the digital library services providing by the Library, University of Ruhuna.

Results and Discussion

The analysis of this study focused on determining the distribution and occurrence of various answers of the respondents concerning digital library services of the Library, University of Ruhuna. The Table 1 summarize the demographic information about the respondents and the responses provided by them.

According to Table 1, there are 54% of male respondents and 46% of female respondents participated in the open survey and it displays the number of students represented by each faculty and the majority of students are from the Faculty of Management and Finance.

Table 1: Representation of Faculties by Respondents

Faculty	Male	Female	Total
Agriculture	12	8	20
Allied Health Sciences	4	6	10
Engineering	14	4	18
Fisheries and Marine Sciences and	8	6	14
Technology	0	6	14
Humanities and Social Sciences	6	13	19
Management & Finance	16	12	28
Medicine	12	8	20
Science	10	8	18
Technology	3	7	10
Total	85	72	157

Source: Survey Data (2022)

Table 2: Year of Study vs Awareness about the Digital Library Services of the University of Ruhuna

Faculty	Awar	Total	
	Yes	No	
First Year	0	13	13
Second Year	24	18	42
Third Year	28	20	48
Fourth Year	26	28	54
Total	78	79	157

Source: Survey Data (2022)

As per the Table 2, most of students do not have an awareness of the digital library services including E-Databases, E-Books, OPAC, E-Journals, and Institutional Repository etc. Among them, the first-year students do not have an awareness about these services. Most of the time, the Online Orientation programs launched during the crisis period and the lack of physical library tours may bring this kind of results because they do not have interactive engagement with these services and different collections in the library. When examining the responses from third- and fourth-year students, 54 students responded that they were aware of the services, while 48 said they weren't. The majority of University students focus on research throughout their third and fourth years, yet these findings reveal that there is significant variation in the respondents' understanding of the digital library services offered by the library.

Level of Usage of the Digital Library Services

As per the responses collected from the undergraduates of the University of Ruhuna, the following figure 1 shows that 80% of respondents have not used these services if they have engaged in their academic programs.

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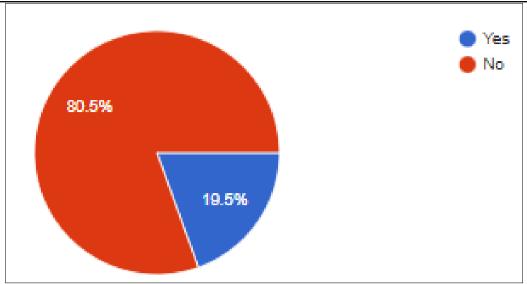


Figure 1: Level of Usage of the Digital Library Services

Source: Survey Data (2022)

Level of Experience of Digital Library Services

Students' experience of digital library services was tested on the following seven criteria (Table 3)

Table 3: Students' Experience of Digital Library Services

Factor	Strongly		Disagree		Neutral		Agree		Strongly	
	Disagree								Agree	
	N	%	N	%	N	%	N	%	N	%
My university provides digital library	12	7.6	54	34.3	13	8.2	46	29.2	32	20.3
Services										
I access books in my university's	36	22.9	49	31.2	22	14	32	20.3	18	11.46
digital library										
I prefer digital library than physical	00	-	00	-	48	30.5	51	32.4	58	36.9
library										
I supplement information from books	04	2.5	12	7.6	66	42	45	28.6	24	12.2
and journals from the digital library										
I download adequate and relevant	02	1.2	38	24.2	51	32.4	30	19.1	36	22.9
information related to my courses from										
the digital library sources										
I spend more hours a day/week on the	68	43.3	56	35.6	32	20.3	01	0.6	00	-
digital library										
I access the digital library during the	54	34.3	71	45.2	24	15.2	05	3.1	03	1.9
pandemic and crisis period										

Source: Survey Data (2022)

The Table 3 provides the analysis of responses to several inquiries regarding the university's use of digital library services. A significant number of respondents strongly disagree or disagree with the assertion that offers digital library services of the Library, University of Ruhuna. Similar to this

scenario, multiple individuals report having trouble accessing the university's digital library's services. Most of participants feel that the digital library is preferable than the physical one, which is an interesting finding. A substantial number of people is neither in agreement with nor against adding content from digital library sources. Additionally, it seems to be rather common to download pertinent information from digital library sources. It's noteworthy that most participants don't spend a lot of time using the digital library. Even though there are many virtual services of the library, a significant percentage of respondents have not used the digital library during the epidemic and crisis period.

Conclusion

In conclusion, even though digital library services have enormous potential to improve students' educational experiences, it is clear that their adoption is still low. The observed underutilization of these services, despite the clear advantages they offer, emphasizes the necessity of targeted promotion and awareness initiatives. The results emphasize the need to develop creative strategies to include students and convey the benefits of digital libraries. Library of the University of Ruhuna can close the gap between the availability of valuable resources and their effective utilization by adjusting promotional activities to match student preferences. In addition to empowering students, fostering a thorough grasp of the convenience, accessibility, and knowledge enrichment that digital libraries offer will also increase the influence of these resources on their academic success.

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