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Usability Study of Digital Collections of Select Special Libraries attached to Ministry of Culture, Government of India

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This paper presents the result of a survey conducted to know user satisfaction with the digital platforms of select special libraries of Delhi attached to the Ministry of Culture, Government of India. In addition, user expectations from such systems have also been explored and presented in an attempt to evaluate the usability of digital collections of the select special libraries.

Keywords: *Usability, Digital Library, User Perception*

1 INTRODUCTION

Libraries are enhancing their services and collections in the current digital era to better accommodate a diverse set of demands and requirements of their numerous patrons. Progressively, they have shifted their process of managing information by substantially expanding their electronic resources and services. Consequently, many Digital Libraries (DLs) projects have been started in a different part of the world by various governments, institutions, and libraries. It is observed that the libraries are heading toward an environment in which digital information may substitute the print-based information if not they will surely compliment the print resources to better serve the users. Further, the mission of the future libraries will not only be confined to maintain and provide documents rather its mission will be to link the past and the present, and help in shaping the future by preserving the records of human culture by integrating emerging information technologies (Trivedi, 2010).

In India also such projects have started gaining ground but we are still in stage of infancy and their successful development and sustainability depends on how easily the users can interact and find useful information from such

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systems so to support the research, teaching, and learning activities of faculty members, researchers, and students.

Therefore, strategic development of DLs requires their usability analysis to enhance the quality of such systems because they hold a significant position in research institutes where their services are critical. Thus, it becomes mandatory to assess them periodically so as to upgrade the same (Alipour-Hafezi & Amanollahi Nick, 2015) so to fill up the gaps in the existing systems and enhance the quality of future DLs.

In this context, this study was an attempt to evaluate the usability study of digital collections of select special libraries which falls in Delhi jurisdiction under the Ministry of Culture, Government of India.

2 STATEMENT OF THE PROBLEM

Even though, there has been an increase in published research on DLs, but most of the Indian research articles focuses on technical difficulties. Hence, to improve the sustainability of the existing and future digital collections, there is a need to understand the usability of them from the user's point of view so as to get auser centric DLs. All institutions/organizations must understand the requirements of their users and importance of their involvement in the development process of DLs. Hence a time-bound usability examination is a must to confirm whether the existing DLs are meeting the user's expectations for which they wereestablished (Jose, 2007).

Usability studies primarily aims to find out how easily users can interact with the interface of the DL, to find useful information and uses retrieved information to accomplish a specific task, and what their general impression about the various features and functionalities of the DL are (Chowdhury & Chowdhury, 2011). In India, fewer studies have been done on the usability of Digital Libraries. Furthermore, only few studies could be traced which have applied usability evaluation criteria for websites. Along with this, one or two studies could be traced which have used DL users' evaluation criteria to know the usability of existing DLs. Hence, the present study wasan attempt to analysis the user's responses on usability of select DLs in Delhi.

3 REVIEW OF LITERATURE

Khan and Tabassum (2022) examined the user's perception regarding the usability and usefulness of Shaheed Benazir Butto University Digital Library with help of questionnaire, observation and interview.The results demonstrate that the university gives internet access to all students and they have abundant access to digital libraries, yet the majority of students are unaware of their use. Digital libraries are only used by researchers for research purposes. Furthermore, when looking for visual materials, students used a variety of search browsers and fail to recognize academic libraries as a reliable source

for digital images. Students also complained that the digital library websites were challenging to use and didn't do enough to indicate how many resources were available. Students' impressions of digital services were negatively impacted by their experiences.

Alokluk and Al-Amri (2021) evaluated a digital library with the help of structured interview, popup questionnaire and transaction analysis. The results reveals that online journals were the most commonly used resources as compare to reference resources. The usability and information retrieval aspects were good as per the respondents. They also suggested that need to improve the interface of the digital library,provide more awareness activities for their users to utilize the information resources and services and subscribe the more online journals as per their user's needs.

Iqbal, Ikram, Imtiaz and Imtiaz (2022) conducted a usability study in two phases; in first phase they developed a usability evaluation checklist that helps to examine the general and specific aspects of usability. In second phase they examined effectiveness and efficiency of proposed checklist as per the existing "Academic Library Website evaluation checklist". The results reveal that the proposed usability checklist was very beneficial for academia as well as industry to evaluate their web-based information system. Kuhar and Mercum (2022) used a questionnaire and an eye tracking approach to investigate the user experience of two digital libraries (Europeana and D-Lib). The outcomes indicate that interactions with digital libraries were generally good, but that Europeana DL provided a superior user experience to dLib. The results of the eye tracking data, the participants' attention was somewhat more evenly distributed among the elements on the dLib homepage compared to Europeana, where the centrally located elements (search box, text, search icon, background image) drew the majority of focus. Pinki (2014) proposed standard guidelines and models for the libraries which are planning to develop their own DL in future.Khanand Qutab (2016) found that computer efficiency impacts the acceptance of NDL of Pakistan among the respondents and is considered as a vital information source by its users.

4 OBJECTIVES OF THE STUDY

The main objective of the present study wasto analyze the usability of digital collection of select libraires (DLs) in Delhi which fall under the Ministry of Culture, Government of India. In addition, the following objectives were alsoframed:

(i) To determine the efficiency of digital collection platforms of the selected libraries covered under the study.

(ii) To assess the learnability of digital collection platforms of the select libraries covered digital library.

(iii) To check user perspective and their expectations from the digital platforms.

(iv) To deduce the effectiveness of the selected libraries in terms of providing digital collection.
(v) To suggest the various methods to improve user interfaces and
(vi) To assess the overall level of user satisfaction with their respective digital collection, services and platforms.

5 RESEARCH METHODOLOGY OF THE STUDY

The present study is quantitative in nature and was carried out to analyze the usability of selected libraries in Delhi. For the purpose of data collection a survey was done using a questionnaire including structured as well as open ended questions among the registered users, i.e., students, researchers, scientist and faculty members from the librariescovered under Ministry of Culture, Government of India, Delhi jurisdiction.For testing the usability of selected platforms for providing digital collection an eight-point usability criterion specified in Table 1.2 was used and respondents were asked to give their response on a five-point Likert Scale where Strongly Disagree= 1; Disagree=2; Neutral= 3; Agree= 4; Strongly Agree= 5. This criterion was modified as per the requirement of the present study.

For selecting the sample, simple random sampling method was applied and a total of 237questionnaires were distributed. out of which 203 (85.6%)questionnaires were received back. Out of these 203, 136 (68%) were male and 67 (32%) were female.

Table 1.1: DLs -Wise Cumulative Response of the Respondents

SN	Selected Special Libraries	Distributed	Received
L1	Central Secretariat Library (CSL)	37	34
L2	Kalasampada, IGNCA	48	42
L3	National Archives of India (NAI)	70	52
L4	National Gallery of Modern Art (NGMAL)	38	35
L5	Prime Ministers Museum & Library (PMML)	44	40
TOTAL		**237**	**203**

Table 1.2: Criteria Utilized for Usability Testing

Criteria	**Description**
Learnability	Ease of use so that the user may begin utilizing the system fast and conveniently.
Efficiency	How quickly learned users can accomplish their tasks on the system?
Effectiveness	In terms of success andfailure, features offered, commands to perform the task, and overall workload response.
Satisfaction	User perception on overall services and structure of the system?
Interface & Navigation	Ease in navigating between bars, icons, menus, color/typographic coding, etc.
Error management	The system should have a low error rateand easy recovery from the errors.
User expectations	Availability of services as per clientele requirements.
Service Quality	How well the system fits within the context of service quality.

6 DATA ANALYSIS AND INTERPRETATION

To understand the user's point of view, few statements were given under each criteria and respondents were asked to give their level of agreement on five-point Likert scale i.e. (Strongly Agree= 5; Agree= 4; Neutral= 3; Disagree=2; Strongly Disagree= 1). For analysis, mean, grand mean and standard deviation were calculated for each statement. To further add clarity about each criterion, results arealso summarized library-wise and statement-wise. It accentuates which selected DLs performance was good in a particular usability criterion and which criterion need to improvement. Each usability criterion wise analysis is illustrated in below given (Tables 1.3 to 1.10) and the highest values are marked in green color whereas the lower side responses have been highlighted in red.

Table 1.3: Learnability

9Digital Libraries	Mean/ Standard Deviation	Statements						Grand Mean
		S1	S2	S3	S4	S5	S6	
		It is Simple and Easy to Use	The terminologies used are understandable	Vocabulary used is clear to you	Interface is memorable	Information is well organized	You became skillful quickly while using it	
L1	Mean	3.41	3.35	3.32	**2.91**	**2.59**	2.65	3.03
	SD	1.02	1.01	1.20	**1.14**	1.13	1.23	
L2	Mean	3.71	3.12	3.52	**2.98**	3.50	2.69	3.25
	SD	1.33	1.31	1.19	**1.26**	1.57	1.12	
L3	M	3.88	**4.38**	4.33	4.25	4.10	3.88	**4.13**
	SD	0.94	**0.49**	0.47	0.74	0.66	0.96	
L4	M	2.97	3.03	3.09	2.86	3.14	2.83	**2.98**
	SD	1.18	0.92	1.27	1.33	1.44	0.95	
L5	M	3.75	3.90	3.90	3.90	3.95	3.48	3.81
	SD	1.26	0.81	1.10	1.03	0.99	1.22	
Grand Mean		3.54	3.55	3.63	3.38	3.45	3.10	

Note: (L1=CSL, L2=IGNCA, L3=NAI, L4=NGMAL, L5=PMML)

In Table 1.3, findings clearly shows that most of the respondents are agreed with Vocabulary used is Clear with a highest grand cumulative score of (3.63), followed by The Terminologies used are Understandable with a grand mean score of (3.55) and Simple and Easy to Use with (3.54). Whereas, They become Skillful While Using their DL got the least grand mean score of 3.10. As per the results, Vocabulary used is clear is the most striking statement as compared to the other parameters of Learnability.

As far as the individual libraries are concerned, NAI (L3) performance is good among all selected DLs with a highest grand mean score of 4.13, followed by PMML which secured second position with 3.81. On the other hand, NGMAL (L5) need performance evaluation again as the grand mean score remained below 3 which towards disagreement on features of Learnability.

Table 1.4: Efficiency

Digital Libraries	Mean/ Standard Deviation	Statements							
		S1	S2	S3	S4	S5	S6	S7	Grand Mean
		Response time is quick	Few steps are required to complete the task	Task completion is easy	Many tasks can be performed at a time	You are able to handle the error yourself	It allows to use all functions easily	Provides information in a reasonable time	
L1	M	2.59	2.79	2.79	**2.47**	2.29	2.97	2.62	**2.67**
	SD	1.08	0.91	1.15	**0.90**	1.03	1.14	1.13	
L2	M	2.88	3.43	3.19	3.29	3.10	3.05	3.12	3.15
	SD	1.13	1.13	1.37	1.15	1.39	1.45	1.50	
L3	M	4.10	3.98	4.31	3.75	3.38	3.94	4.17	**3.94**
	SD	0.66	0.70	0.47	0.95	0.97	0.70	071	
L4	M	3.09	3.03	3.06	3.03	2.86	2.94	3.00	**2.98**
	SD	1.50	1.38	1.21	1.10	1.31	1.19	1.28	
L5	M	3.48	**3.33**	3.53	**3.25**	**3.38**	**3.35**	3.60	3.45
	SD	1.26	**1.16**	1.22	**1.37**	**1.41**	**1.35**	1.15	
Grand Mean		3.22	3.31	3.37	3.15	3.00	3.25	3.30	

Note: (L1=CSL, L2=IGNCA, L3=NAI, L4=NGMAL, L5=PMML)

Finally, among all statements Task Completion is Easy is the most remarkable feature with highest grand mean score of (3.37), followed by Few Steps are Required to Complete Task (3.32), It Allow to Use all Function Easily and Provides Information in Reasonable Time with a grand mean score of (3.30). However, a striking finding reveals that for all the statements on efficiency, grand mean value is less than 3.40 which indicate neutral response among users.

Among individual libraires, NAI (L3) got the highest grand cumulative value of (3.94) for almost majority of the statements, followed by PMML (L5) with grand mean score of (3.45). CSL (L2) performance in Efficiency does

not seem much appealing as it got the lowest grand mean value of(2.67) and NGMAL (L4) with grand value (2.98).

Table 1.5: Effectiveness

Digital Libraries	Mean/ Standard Deviation	Statements									Grand Mean
		S1	S2	S3	S4	S5	S6	S7	S8	S9	
		Reliable and given information according to your needs.	Information location is accurate	Information is easy to found	Information retrieved is current	Information retrieved is from a credible source	You are able to save & retrieve your searches	Adequate documents are	You would like to recommend this	Its services and facilities are	
L1	M	2.71	3.47	3.44	3.76	3.82	3.47	2.12	3.35	2.71	3.09
	SD	1.14	0.66	1.24	0.74	0.76	0.96	1.27	1.28	0.97	
L2	M	3.10	3.26	3.31	3.26	3.74	3.00	2.81	3.36	3.14	3.22
	SD	1.54	1.29	1.24	1.17	1.25	1.23	1.31	1.19	1.20	
L3	M	4.06	3.92	4.13	3.96	4.33	4.25	3.67	4.62	4.02	4.55
	SD	0.64	0.71	0.69	0.82	0.47	0.74	0.96	0.49	0.78	
L4	M	3.90	2.86	3.09	2.91	3.11	3.60	3.23	3.80	3.46	3.17
	SD	1.50	1.31	1.17	1.38	1.47	1.53	1.68	1.55	1.42	
L5	M	3.53	3.68	3.40	3.65	3.88	3.58	3.43	4.10	3.30	3.61
	SD	1.34	1.05	1.37	1.08	0.94	1.17	1.15	0.90	1.24	
Grand Mean		3.46	3.43	3.47	3.50	3.77	3.58	3.05	3.84	3.32	

Note: (L1=CSL, L2=IGNCA, L3=NAI, L4=NGMAL, L5=PMML)

Analysis on the above Table 1.5 reveals that among all selected libraires, majority of the respondents said that They Would like to Recommend this to their Friends and Colleague with the highest grand mean score of (3.84) followed by Information Retrieved from Credible Sources (3.77) and Information Retrieved is Currentwith grand mean score of (3.50).

As far as the individual libraries are concerned, NAI (L4) performance is good with highest grand mean value of (4.55) among all given statements, followed by PMML (L7) with a grand mean score of (3.61). Whereas, CSL got a least grand mean score of 3.09.

Table 1.6: Satisfaction

Digital Libraries	Mean/ Standard Deviation	Statements													
		S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	Grand Mean
		Appearance is aesthetic	You are satisfied with its use	Content of the screen is easy to read	Layout of the screen is pleasing	Links and their meanings are clearly understandable	Page view is attractive	Use of graphics is appropriate	Gives you results according to your desired search	Colorused draw attention	Fontsize is appropriate	Icon are visually and conceptually distinct	Textype and font size are consistent and readable	Variety of documents are available	
L1	M	2.71	2.79	3.29	2.76	3.38	2.35	2.76	2.47	2.50	3.15	2.79	3.24	2.82	2.84
	SD	1.00	1.20	1.06	0.99	0.89	0.92	0.92	1.13	0.99	0.82	0.81	1.05	1.03	
L2	M	2.81	2.64	2.67	2.40	2.64	3.05	3.12	3.38	3.24	3.24	3.31	3.02	3.31	2.98
	SD	1.17	0.85	1.14	0.83	1.12	1.40	1.33	1.36	1.28	1.23	1.30	1.54	1.30	
L3	M	4.06	4.25	4.17	4.10	4.02	4.02	3.96	3.98	3.90	4.19	4.06	4.06	4.02	**4.06**
	SD	0.42	0.44	0.38	0.75	0.37	0.92	0.71	0.83	0.69	0.49	0.46	0.73	0.75	
L4	M	3.29	3.23	3.14	3.26	3.34	3.26	3.11	3.06	3.17	3.34	3.26	3.29	3.26	3.23
	SD	1.25	1.33	1.44	1.29	1.37	1.29	0.96	1.21	1.58	1.16	1.36	1.38	1.15	
L5	M	3.48	3.45	3.40	3.28	3.38	3.18	3.43	3.45	3.80	3.28	3.53	3.38	3.45	3.42
	SD	1.15	1.01	1.15	1.13	0.95	1.01	1.11	1.24	1.07	1.15	1.15	1.15	1.18	
Grand Mean		3.27	3.27	3.33	3.16	3.35	3.17	3.27	3.26	3.32	**3.44**	3.39	3.39	3.37	

Note: (L1=CSL, L2=IGNCA, L3=NAI, L4=NGMAL, L5=PMML)

As per the finding's, most striking feature is Font Size is Appropriate with a highest grand cumulative value (3.44), followed by Content of the Screen are Easy to Read and Text type and Size are Consistent and Readable with (3.35). The finding reveals that for all the statements on Satisfaction grand mean value is less than 3.40, which indicate neutral response among users.

Based on the analysis, we can say that NAI (L3) and PMML (L5) libraires are satisfying their respondents in terms of Aesthetic Appearance, Use, Content, Layout, Page View, Graphics, Color, and Variety of Documents Availability etc. However, CSL (L1) and IGNCA (L2) need some improvements to increase the satisfaction among users.

Table 1.7: Interface and Navigation

Digital Libraries	Mean/ Standard	Statements									Grand
		S1	S2	S3	S4	S5	S6	S7	S8	S9	
		Interface is attractive	Search filters labels are available	Visual-based interface is available	Simple and advance search options are available	Menu is logically related	Orientation is straightforward	Navigation is comfortable	Links are working properly	Content presented in logical	
L1	M	2.56	2.41	2.35	1.97	2.79	2.85	2.68	3.12	2.56	2.57
	SD	1.16	1.02	0.98	1.03	0.88	0.82	1.04	1.01	1.16	
L2	M	2.50	2.48	2.60	2.83	2.88	3.02	3.12	3.38	2.98	2.86
	SD	1.09	1.06	1.13	1.27	1.21	1.37	1.37	1.34	1.42	
L3	M	4.10	3.98	3.67	4.08	3.67	3.83	4.19	4.06	3.98	3.95
	SD	0.72	0.64	0.68	0.93	0.73	0.58	0.40	0.24	0.80	
L4	M	3.54	3.03	2.89	3.06	3.06	3.31	3.06	3.31	2.91	3.13
	SD	1.09	1.34	1.16	1.16	0.76	0.83	0.94	0.80	0.70	
L5	M	3.13	3.33	3.18	3.58	3.28	3.43	3.35	3.63	3.30	3.35
	SD	1.09	1.05	1.28	1.28	1.06	0.87	1.12	0.95	1.16	
Grand Mean		3.16	3.04	2.93	3.10	3.13	3.28	3.28	3.50	3.14	

Note: (L1= CSL, L2= IGNCA, L3= NAI, L4= NGMAL, L5= PMML)

It can be inferred based on the grand mean value for all statements, that Links are Working Properly among all other options with highest grand mean value of (3.50), followed by Navigation is Comfortable with a grand mean score of (3.28). Whereas "Simple and Advanced Search Options are Available" has been marked almost in the neutral category. This means simple and advance search feature are not available in majority of librariesand they should add this feature for better searching of resources.

Among all DLs, NAI (L3) got the highest grand mean score of (3.95) and PMML (L5) had neutral response forall statements. However, CSL (L1), IGNCA (L2), and NGMAL(L4) got the mean score under 3, which indicate dissatisfaction among the users. These libraries need to enhance their Interface and Navigation features.

Table 1.8:Error Management

Digital Libraries	**Mean/ Standard Deviation**	**Statements**					**Grand Mean**
		S1	**S2**	**S3**	**S4**	**S5**	
		Help facility is available	Response is error free	Interaction with librarian to solve your problems is easy for you	Virtual assistance is helpful in case of problem	You can accomplish the task at your own	
L1	M	2.24	2.47	2.65	2.26	3.29	2.57
	SD	0.99	0.86	1.01	0.93	0.97	
L2	M	2.71	2.76	3.17	2.90	3.12	2.93
	SD	1.31	1.38	1.36	1.28	1.31	
L3	M	3.88	3.46	3.98	3.46	3.98	**3.75**
	SD	0.96	0.90	0.64	1.00	0.67	
L4	M	2.80	3.06	3.37	3.00	2.91	3.02
	SD	1.21	1.33	1.35	1.11	1.09	
L5	M	3.40	3.15	3.60	3.43	3.25	3.36
	SD	1.46	1.49	1.41	1.30	1.48	
Grand Mean		2.92	2.98	3.35	3.01	3.31	

Note: (L1= CSL, L2= IGNCA, L3= NAI, L4= NGMAL, L5= PMML)

Among all the statements, Interaction with the Librarian to Solve your Problem is Easywith a grand mean score of (3.35) which too mean to neutral response, followed by you can Accomplish the Tasks at your Own received the grand mean score of (3.31) again neutral. On the other hand,Help Facility is Available received the lowest grand mean score of (2.92) which shows quite disagreement towards the statement, followed by Virtual Assistance is Helpful in Case of Problem with a grand mean score of (3.01). That accentuates the disagreement among users.

Further library wise analysis reveals that NAI (L3) received the grand mean score of 3 and above for all the statements. Whereas CSL (L1), IGNCA (L2) and PMML(L5) Error Handling is coming below grand mean value of 3 for majority of the statements. Therefore, almost all the libraries need improvement as far as this feature is concerned as the grand mean value for all the statements in coming below 3.40 which shows either neutral response or disagreement among users.

Table 1.9: User Expectations

Digital Libraries	Mean/ Standard Deviation	Statements				Grand Mean
		S1	S2	S3	S4	
		It shows responses according to your expectations	You think it has all expected functionality	You do not need any guidance to use Digital Library	Digital Library should provide links to other Digital Library	
L1	M	2.35	2.21	2.12	3.97	2.26
	SD	1.10	1.15	1.25	0.76	
L2	M	2.95	3.24	2.95	3.88	3.25
	SD	1.34	1.23	1.64	1.27	
L3	M	3.87	3.83	3.33	3.77	**3.70**
	SD	0.56	0.79	1.42	1.08	
L4	M	3.34	3.14	2.34	4.23	3.26
	SD	1.11	1.09	1.11	0.43	
L5	M	3.43	3.08	2.90	3.60	3.25
	SD	1.01	1.19	1.22	1.37	
Grand Mean		3.16	3.11	2.68	3.64	

Note: (L1= CSL, L2= IGNCA, L3= NAI, L4= NGMAL, L5= PMML)

It clearly shows DL should provide links to other DLs got highest grand mean score of (3.64) among all statements, whereas They don't need any Guidance to Use DL received lowest grand mean score of (2.68).So, it can be inferred from the analysis that users want improvised system and require library staff intervention in addition to current as majority said that they need guidance from the authority to use digital collection.

As far as the libraries are concerned, results highlight that NAI (L3) performance is good with highest grand mean score of (3.70). On the other hand, the performance of CSL (L2) is not good with a lowest grand mean score of (2.26).

Table 1.10: Service Quality

Digital Libraries	Mean/ Standard Deviation	Statements						Grand Mean
		S1	S2	S3	S4	S5	S6	
		Registration directions are given	Instant technical support from library staff is	Smooth services are given without breakdown	Provides access to full text resources	Feedback option is available	Multi languages facility is available	
L1	M	1.94	2.41	2.35	2.79	1.97	2.65	2.35
	SD	0.81	0.96	1.01	1.01	0.87	0.69	
L2	M	2.71	2.83	2.69	2.93	2.60	2.81	2.76
	SD	1.33	1.40	1.26	1.33	1.27	1.09	
L3	M	3.62	3.63	3.85	3.98	2.98	3.48	**3.59**
	SD	1.17	1.16	0.87	0.83	1.06	0.96	
L4	M	3.03	2.57	2.43	3.06	2.83	2.69	2.76
	SD	1.15	1.14	0.85	0.94	0.79	0.83	
L5	M	3.40	3.63	3.08	3.30	3.65	3.23	3.38
	SD	1.24	1.13	1.12	1.11	1.27	1.12	
Grand Mean		2.94	3.01	2.88	3.21	2.80	2.97	

Note: (L1= CSL, L2= IGNCA, L3= NAI, L4= NGMAL, L5= PMML)

Majority respondents of two libraires namely NAI (L3) are agreed to most of the statements related to Service Quality with a grand mean value of 3.59. Whereas among remaining, i.e., CSL (L1), IGNCA (L2), NGMAL (L4), and PMML (L5) mean score value is below 3.40.

Among all the selected libraries, CSL (L1) got the lowest grand mean value i.e., 2.35. This clear indicate the disagreement by the respective users for all the statements on service quality. As per the finding shows that majority of respondents are not happy in terms of Registration Steps, Technical Support, Service without Breakdown, Feedback Options, Multi-Language Facility.

7 MAJOR FINDINGS OF THE STUDY

(i) As per the findings, Vocabulary used is Clear is the most striking statement among the respondents.
(ii) About efficiency all the statement received neutral response with a grand mean score of less than 3.41 which shows a neutral response and users are not in positive agreement on the same.
(iii) NAI (L3) and PMML (L5) are satisfying their respondents in terms of Aesthetic Appearance, Use, Content, Layout, Page View, Graphics, Color, and Variety of Documents Availability etc.
(iv) Findings reveals that Simple and advance search feature are not available in majority of DLs and institutions DLs should add this feature for better searching of resources.
(v) Findings shows that CSL (L1), IGNCA (L2), and NGMAL(L4) needs to enhance their Interface and Navigation features.
(vi) All selected DLs need to enhance their error handling system to improve their usability as users' point of view.
(vii) Finding shows that majority of respondents are not happy in terms of Registration Steps, Technical Support, Service without Breakdown, Feedback Options, Multi-Language Facility.

8 CONCLUSION

Digital libraries are important because they provide users with easy access to a diverse range of information and resources. The usability of digital collection is crucial because it determines how easily and effectively users can find and use the information they need. A library with poor usability may be difficult to navigate, have a confusing search function, or present information in a way that is difficult to understand. This can lead to frustration and a poor user experience, which can ultimately discourage users from using the library. On the other hand, a library with good usability is easy to use, well-organized, and presents information in a clear and accessible manner. This can lead to a positive user experience and encourage users to return to the library. In conclusion, the usability of digital collectionsis important because it can greatly impact the effectiveness of the library and user satisfaction.

REFERENCES

1. ALIPOUR-HAFEZI, M., & AMANOLLAHI NICK, H. (2015). Evaluation of digital libraries of Iranian research institutions based on the DigiQUAL protocol. The Electronic Library, 33(4), 824-841. https://doi.org/10.1108/EL-07-2013-0131
2. ALOKLUK, J. A., & AL-AMRI, A. (2021). Evaluation of a Digital Library: An experimental study. Journal of Service Science and Management, 14(01), 96-114. https://doi.org/10.4236/jssm.2021.141007
3. CHOWDHURY, G. G., & CHOWDHURY, S. (2011). Information users and usability in the digital age. Facet Publication.
4. IQBAL, S., IKRAM, N., IMTIAZ, S., & IMTIAZ, S. (2022). Maximizing coverage, reducing time: a usability evaluation method for web-based library systems. Scientific Reports, 12(1). https://doi.org/10.1038/s41598-022-11215-7
5. JOSE, A. (2007). Evaluation of Digital Libraries: A Case Study. In A. R. D. Parsad & D. P. Madalli (Eds.), International Conference of Semantic Web & Digital Libraries (pp. 229-238). https://www.researchgate.net/publication/260069679_Evaluation_of_digital_libraries_a_case_study
6. KHAN, A., & QUTAB, S. (2016). Understanding research students ' behavioural intention in the adoption of digital libraries?: A Pakistani perspective. Library Review, 65(4/5), 295-319. https://doi.org/10.1108/LR-06-2015-0070
7. KHAN, P., & TABASSUM, S. (2022). Students' perceptions toward the usability and usefulness of the digital libraries: A case study of Women University in District Peshawar. Library Philosophy and Practice (e-Journal). https://digitalcommons.unl.edu/libphilprac/7176
8. KUHAR, M., & MERUN, T. (2022). Exploring user experience in digital libraries through questionnaire and eye-tracking data. Library and Information Science Research, 44(3). https://doi.org/10.1016/j.lisr.2022.101175
9. PINKI (2014). Managing the knowledge transition from print to digital in selected special libraries in Delhi: a proposed model (Doctoral Thesis).University of Delhi, Delhi.
10. STOBBS, R., SHIRI, A., FARNEL, S., COCKNEY, C., RATHI, D., & CAMPBELL, S. (2018). A Community-Driven Usability Evaluation: The Case of the Inuvialuit Settlement Region Digital Library. Proceedings of the Annual Conference of CAIS / Actes Du congrès Annuel De l'ACSI. https://doi.org/10.29173/cais1034
11. TRIVEDI, M. (2010). Digital Libraries?: Functionality , Usability , and Accessibility. Library Philosophy and Practice (e-Journal). http://digitalcommons.unl.edu/libphilprac/381