

## Evaluation On Digital Library Resources Through Purpose, Usability And Importance Of Technology Among Users With Special Reference To Selected Universities Of West Bengal

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### ABSTRACT:

Digital libraries are places that have the tools and staff to choose, organize, make intellectual access easier to, interpret, share, keep the integrity of, and make sure the longevity of collections of digital works so that communities or groups of communities can use them easily and affordably. Users can independently access digital libraries, which is a significant attribute. Nevertheless, most studies assessing digital libraries have employed subjective criteria. These studies specifically focus on the ease of utilizing digital libraries. Users have assessed the identification and rating of digital libraries. In this article, evaluation on digital library resources through purpose, usability and importance of technology among users with special reference to selected universities of West Bengal has been discussed.

**Keywords:** Digital, Library, Resources, Users, Universities, West Bengal.

### INTRODUCTION:

Digital libraries embody traditional libraries, comprising both digital and physical, fixed media collections. [1] Thus, they include both electronic and printed information. [2] It integrates digital materials that are available outside the administrative and physical constraints of an individual digital library. [3,4] It encompasses all operations and services that form the backbone and neural framework of libraries. [5] These traditional methods, which are at the heart of how digital libraries work, had to be changed and improved to account for the differences between new digital media and traditional fixed media. [6] It should ideally offer a coherent summary of all material included within a library, irrespective of its format or kind. It caters to certain groups or constituencies, akin to contemporary traditional libraries, despite its possible distribution throughout the network. [7] Success also necessitated the expertise of computer scientists and librarians. [8,9] These attributes render a digital library the most rational choice, as it maintains the essential functions of traditional libraries while integrating contemporary materials, technologies, and methodologies. [10] The objective of the study was to the purpose, usability and importance of technology in digital library resources used by the postgraduate and PhD students.

### RESEARCH METHODOLOGY:

Research is a methodical way of asking questions. It involves gathering data, writing down important details, and then using standard methods accepted in academic and professional fields to evaluate and make sense of that data and information. Research methodology refers to the systematic and theoretical examination of the methods employed in a specific field. Digital libraries are curated assemblages of digital materials, accessible through a platform, encompassing books, articles, photographs, videos, audio files, data, and software.

**Hypothesis 1 (H<sub>1</sub>):** It is hypothesized that the purpose, usability and importance of technology in digital library resources correlated to the postgraduate and PhD students.

**Study Area:** Five universities were selected from West Bengal.

### Variables:

Dependent Variables: Gender, Educational qualifications, Students.

Independent Variables: Digital Library resources, Universities.

**Research Design:** Quantitative research design.

**Sources of Data:** Primary and secondary data.

**Sampling Plan:** Simple random sampling.

**Sample Size:**

*Initial Sample Size: 550 (Male: 278 & Female: 272)*

Out of 278 Male: PG students 229 & PhD students 49.

Out of 272 Female: PG students 226 & PhD students 46.

*Final sample size: 500 (Male: 250 & Female 250)*

Out of 250 Male: PG students 213 & PhD students 37.

Out of 250 Female: PG students 213 & PhD students 37.

### Methodology:

The selected universities in West Bengal were visited for the purpose of the collection of respondents. After clearing the research objectives, the structured questionnaires (5 Point Likert Scale) were distributed in favor of the respondents. Sufficient time was given in favor of each respondent. Then, after collection of the sheets, these were preserved for further data analysis.

**Research Tools:** Structured Questionnaires (5 Point Likert Scale).

### DATA ANALYSIS, RESULTS AND DISCUSSION:

| SYMBOLS, ABBREVIATIONS AND LIKERT SCALE POINTS (1 TO 5): |  |
|--|--|
| STRONGLY DISAGREE (SD): 1                                |  |
| DISAGREE (D): 2  |  |
| NEUTRAL (N): 3   |  |
| AGREE (A): 4   |  |
| STRONGLY AGREE (SA): 5                                   |  |

**Table 1. Gender:**

| Gender       | Respondents | Percentage |
|--------------|-------------|------------|
| Male         | 250         | 50         |
| Female       | 250         | 50         |
| <b>Total</b> | <b>500</b>  | <b>100</b> |

Source: Primary Data, Survey

**Table 2. Educational Qualifications (Pursuing):**

| Educational Qualifications (Pursuing) | Respondents | Percentage |
|---------------------------------------|-------------|------------|
| Post Graduate (PG) student            | 426         | 85.2       |
| Doctor of Philosophy (PhD) student    | 74          | 14.8       |
| <b>Total</b>                          | <b>500</b>  | <b>100</b> |

Source: Primary Data, Survey

**Table 3. That could be beneficial (Research Purpose-Thesis & Dissertation):**

| Options   | Respondents | Percentage |
|-----------|-------------|------------|
| <b>SD</b> | 72          | 14.4       |
| <b>D</b>  | 128         | 25.6       |
| <b>N</b>  | 16          | 3.2        |
| <b>A</b>  | 186         | 37.2       |
| <b>SA</b> | 98          | 19.6       |

|              |            |            |
|--------------|------------|------------|
| <b>Total</b> | <b>500</b> | <b>100</b> |
|--------------|------------|------------|

Source: Primary Data, Survey

**Table 4. That could be beneficial (Academic Purpose-Teaching, Study Materials, Lectures):**

| <b>Options</b> | <b>Respondents</b> | <b>Percentage</b> |
|----------------|--------------------|-------------------|
| <b>SD</b>      | 78                 | 15.6              |
| <b>D</b>       | 126                | 25.2              |
| <b>N</b>       | 27                 | 5.4               |
| <b>A</b>       | 139                | 27.8              |
| <b>SA</b>      | 130                | 26                |
| <b>Total</b>   | <b>500</b>         | <b>100</b>        |

Source: Primary Data, Survey

**Table 5. Strategic part of service (Paper presentation, Training, Seminar, Conference and Workshop):**

| <b>Options</b> | <b>Respondents</b> | <b>Percentage</b> |
|----------------|--------------------|-------------------|
| <b>SD</b>      | 86                 | 17.2              |
| <b>D</b>       | 106                | 21.2              |
| <b>N</b>       | 57                 | 28.5              |
| <b>A</b>       | 133                | 26.6              |
| <b>SA</b>      | 118                | 23.6              |
| <b>Total</b>   | <b>500</b>         | <b>100</b>        |

Source: Primary Data, Survey

**Table 6. I'm very familiar with digital libraries for publishing article/book:**

| <b>Options</b> | <b>Respondents</b> | <b>Percentage</b> |
|----------------|--------------------|-------------------|
| <b>SD</b>      | 61                 | 12.2              |
| <b>D</b>       | 84                 | 16.8              |
| <b>N</b>       | 58                 | 11.6              |
| <b>A</b>       | 141                | 28.2              |
| <b>SA</b>      | 156                | 31.2              |
| <b>Total</b>   | <b>500</b>         | <b>100</b>        |

Source: Primary Data, Survey

**Table 7. I found enough results to my research topic:**

| <b>Options</b> | <b>Respondents</b> | <b>Percentage</b> |
|----------------|--------------------|-------------------|
| <b>SD</b>      | 95                 | 19                |
| <b>D</b>       | 135                | 27                |
| <b>N</b>       | 39                 | 7.8               |
| <b>A</b>       | 121                | 24.2              |
| <b>SA</b>      | 110                | 22                |
| <b>Total</b>   | <b>500</b>         | <b>100</b>        |

Source: Primary Data, Survey

**Table 8. I got relevant results in reasonable time and satisfy library 4<sup>th</sup> law save the time of the users:**

| <b>Options</b> | <b>Respondents</b> | <b>Percentage</b> |
|----------------|--------------------|-------------------|
| <b>SD</b>      | 105                | 21                |
| <b>D</b>       | 120                | 24                |
| <b>N</b>       | 77                 | 15.4              |
| <b>A</b>       | 106                | 21.2              |
| <b>SA</b>      | 92                 | 18.4              |

|              |            |            |
|--------------|------------|------------|
| <b>Total</b> | <b>500</b> | <b>100</b> |
|--------------|------------|------------|

Source: Primary Data, Survey

**Table 9. I got information relevant to my topic:**

| <b>Options</b> | <b>Respondents</b> | <b>Percentage</b> |
|----------------|--------------------|-------------------|
| <b>SD</b>      | 96                 | 19.2              |
| <b>D</b>       | 111                | 22.2              |
| <b>N</b>       | 34                 | 6.8               |
| <b>A</b>       | 139                | 27.8              |
| <b>SA</b>      | 120                | 24                |
| <b>Total</b>   | <b>500</b>         | <b>100</b>        |

Source: Primary Data, Survey

**Table 10. Availability of sufficient Hardware Facility (like computer, server, router, CD/DVD, UPS, Digital camera, scanner, printer, storage server):**

| <b>Options</b> | <b>Respondents</b> | <b>Percentage</b> |
|----------------|--------------------|-------------------|
| <b>SD</b>      | 59                 | 11.8              |
| <b>D</b>       | 99                 | 19.8              |
| <b>N</b>       | 56                 | 11.2              |
| <b>A</b>       | 147                | 29.4              |
| <b>SA</b>      | 139                | 27.8              |
| <b>Total</b>   | <b>500</b>         | <b>100</b>        |

Source: Primary Data, Survey

**Table 11. Availability of Library Management Software facility (like KOHA, SOUL, NewGenLib, Libsys, TCSION, SLIM):**

| <b>Options</b> | <b>Respondents</b> | <b>Percentage</b> |
|----------------|--------------------|-------------------|
| <b>SD</b>      | 158                | 31.6              |
| <b>D</b>       | 104                | 20.8              |
| <b>N</b>       | 38                 | 7.6               |
| <b>A</b>       | 124                | 24.8              |
| <b>SA</b>      | 76                 | 15.2              |
| <b>Total</b>   | <b>500</b>         | <b>100</b>        |

Source: Primary Data, Survey

**Table 12. Availability of Library Automation Software Facility (Acquisition, Cataloguing, Circulation, Serials, OPAC):**

| <b>Options</b> | <b>Respondents</b> | <b>Percentage</b> |
|----------------|--------------------|-------------------|
| <b>SD</b>      | 150                | 30                |
| <b>D</b>       | 131                | 26.2              |
| <b>N</b>       | 19                 | 3.8               |
| <b>A</b>       | 115                | 23                |
| <b>SA</b>      | 85                 | 17                |
| <b>Total</b>   | <b>500</b>         | <b>100</b>        |

Source: Primary Data, Survey

**Table 13. Availability of Digital Library Software Facility (like DSPACE, TCSION, GSDL, Greenstone, EPrints, Fedora):**

| Options      | Respondents | Percentage |
|--------------|-------------|------------|
| SD           | 79          | 15.8       |
| D            | 103         | 20.6       |
| N            | 38          | 7.6        |
| A            | 154         | 30.8       |
| SA           | 126         | 25.2       |
| <b>Total</b> | <b>500</b>  | <b>100</b> |

Source: Primary Data, Survey

**Table 14. Technology improves quality of information service:**

| Options      | Respondents | Percentage |
|--------------|-------------|------------|
| SD           | 66          | 13.2       |
| D            | 96          | 19.2       |
| N            | 24          | 4.8        |
| A            | 203         | 40.6       |
| SA           | 111         | 22.2       |
| <b>Total</b> | <b>500</b>  | <b>100</b> |

Source: Primary Data, Survey

**Table 15. Technology helps to enhance knowledge skill and professional development:**

| Options      | Respondents | Percentage |
|--------------|-------------|------------|
| SD           | 56          | 11.2       |
| D            | 193         | 38.6       |
| N            | 20          | 4          |
| A            | 127         | 25.4       |
| SA           | 104         | 20.8       |
| <b>Total</b> | <b>500</b>  | <b>100</b> |

Source: Primary Data, Survey

**Table 16. Technology improves job satisfaction, communication and fluency:**

| Options      | Respondents | Percentage |
|--------------|-------------|------------|
| SD           | 121         | 24.2       |
| D            | 187         | 37.4       |
| N            | 50          | 10         |
| A            | 95          | 19         |
| SA           | 47          | 9.4        |
| <b>Total</b> | <b>500</b>  | <b>100</b> |

Source: Primary Data, Survey

**Table 17. Technology helps to reduce workload of professional activities:**

| Options      | Respondents | Percentage |
|--------------|-------------|------------|
| SD           | 158         | 31.6       |
| D            | 184         | 36.8       |
| N            | 27          | 5.4        |
| A            | 78          | 15.6       |
| SA           | 53          | 10.6       |
| <b>Total</b> | <b>500</b>  | <b>100</b> |

Source: Primary Data, Survey

**Table 18. Use of links to other important websites like google books etc.:**

| Options | Respondents | Percentage |
|---------|-------------|------------|
| SD      | 106         | 21.2       |

|              |            |            |
|--------------|------------|------------|
| <b>D</b>     | 103        | 20.6       |
| <b>N</b>     | 67         | 13.4       |
| <b>A</b>     | 75         | 15         |
| <b>SA</b>    | 149        | 29.8       |
| <b>Total</b> | <b>500</b> | <b>100</b> |

Source: Primary Data, Survey

### Testing of Hypothesis:

So, from the above data analysis and interpretation it was stated that the “Hypothesis 1 ( $H_1$ ): It is hypothesized that the purpose, usability and importance of technology in digital library resources correlated to the postgraduate and PhD students” has been accepted.

### CONCLUSION:

The efficacy of the digital library has been evaluated based on user happiness, the aesthetic and functionality of the website, its adaptability and usability, and its performance in fulfilling tasks. Students favoured adaptability and functionality. The subject of technology and content has been examined through three primary concepts: digital library page design, technological infrastructure and site information, and the functionalities of digital library websites. The design of digital library pages has been examined through five key concepts: text readability on digital library websites, the significance of images and graphics, the arrangement of menus and submenus, the grouping of pages and texts, and supplementary links to other relevant websites. We saw photographs and graphics as particularly advantageous, enhancing the website's usability, akin to page layouts. Utilizing images—particularly icons—in lieu of text conserves space and enhances aesthetics. Arrange the relevant material in the correct sequence on the pages. The responders advocated for its significance and essentiality. The technology and content were looked at based on the following criteria: how clear and easy to understand the prompting messages were; how consistent the message placement was; how easy it was to understand the terminology, language, and format; and how clear and easy to understand the feedback messages and procedural information were. The accessibility of information relies on the uniform application of terminology, language, and organization. Consequently, regularly upgrading these three qualities in alignment with worldwide standards is crucial for optimal utilization. Consistency is essential; however, comprehensibility is equally significant. Comprehension is essential to optimize use. Therefore, the organization, vocabulary, and terminology must be straightforward yet impactful.

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