

# UX aspect of ETD repositories of top ten Central Universities: A Comparative Evaluation through webometric methods

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# Introduction

## □ Importance of ETD Repositories

- Serve as platforms for preserving academic works.
- Valuable academic resources
- Facilitate knowledge sharing across the academic community.

## □ Role in knowledge sharing

- Acts as a bridge between students, researchers, and faculty by offering their scholarly works.
- Enhances the visibility and accessibility of academic research.
- Boosts collaboration and academic discussions by connecting similar research areas and topics.

# Problem Statement

- **The gap in research on UX aspect**
  - Limited focus on the user experience (UX) of Indian ETD repositories.
  - UX and overall user satisfaction are often overlooked in Central Universities in India.
  - The need to bridge the gap between technology and user-centric design in ETD repositories.

# Objectives

- ❖ To evaluate and compare the UX aspects of ETD repositories in the top ten Central Universities.
- ❖ To propose recommendations for improving the UX of ETD repositories in Central Universities.

***“Development of a Framework”***

# Our Approach

## ❖ **Selection of Central Universities**

- Top ten Central Universities of the National Institutional Ranking Framework (NIRF) 2023 Rankings.
- Represents the best institutions in terms of overall performance.
- Followed by other Institutions.

# Our Approach

## ❖ Webometric (Tool+Manual)

- Tool based + Manual Accessibility assessment
- Aspects of UX functionalities (Identified through Lit. Review)
- User perception Survey for abstract UX characteristics (upcoming)

# Status of ETDs in Top Central Universities

SI No	Name of the University	Theses	Dissertations	Thesis on ShodhGanga
1	Jawaharlal Nehru University	8033 Total T/D is 22733, not mentioned separately. Coverage till Dec. 2020 only	--	5650
2	Jamia Millia Islamia	--	--	2267
3	Banaras Hindu University	more than 15000 printed (no detail regarding etd)	--	6365
4	Aligarh Muslim University	15659 (Printed) 12325 (e-collection) (Info. available on library website)	--	9679
5	University of Hyderabad	3922	4576	2484
6	University of Delhi	19643 (Info. available in collections of library)	8512 (Info. available in collection of library)	5010
7	Babasaheb Bhimrao Ambedkar University	1112	--	524
8	Tezpur University, Assam	1372	--	820
9	Mizoram University, Aizwal	671	510	752
10	North-Eastern Hill University, Shillong	--	--	2587

# Accessibility Challenge

SI No	Name of University	URL (Library)	URL (IR/ETD Repository)
1	Jawaharlal Nehru University	<a href="http://lib.jnu.ac.in/">http://lib.jnu.ac.in/</a>	<a href="http://etd.lib.jnu.ac.in/">http://etd.lib.jnu.ac.in/</a> , [Accessible only on the Intranet]
2	Jamia Millia Islamia	<a href="https://jmi.ac.in/ACADEMICS/University-Library">https://jmi.ac.in/ACADEMICS/University-Library</a>	NA, [Limited list is available]
3	Banaras Hindu University	<a href="https://www.bhu.ac.in/Site/UnitHomeTemplate/1_3240_4531_Main-Site-Central-Library">https://www.bhu.ac.in/Site/UnitHomeTemplate/1_3240_4531_Main-Site-Central-Library</a>	<a href="https://dl.bhu.ac.in/">https://dl.bhu.ac.in/</a> [No ETD listed in IR]
4	Aligarh Muslim University	<a href="https://amu.ac.in/libraries/maulana-azad-library">https://amu.ac.in/libraries/maulana-azad-library</a>	<a href="https://ir.amu.ac.in/">https://ir.amu.ac.in/</a> [Disfunctional]
5	University of Hyderabad	<a href="http://igmlnet.uohyd.ac.in:8000/">http://igmlnet.uohyd.ac.in:8000/</a>	NA, [List is available]
6	University of Delhi	<a href="https://crl.du.ac.in/">https://crl.du.ac.in/</a>	NA, [Only bibliography is available]
7	Babasaheb Bhimrao Ambedkar University	<a href="https://www.gbl.bbau.ac.in/">https://www.gbl.bbau.ac.in/</a>	<a href="https://www.gbl.bbau.ac.in/index.php/institutional-repository">https://www.gbl.bbau.ac.in/index.php/institutional-repository</a> [Accessible only on the Intranet]
8	Tezpur University, Assam	<a href="https://www.tezu.ernet.in/Library/">https://www.tezu.ernet.in/Library/</a>	<a href="http://agnee.tezu.ernet.in:8082/jspui/">http://agnee.tezu.ernet.in:8082/jspui/</a>
9	Mizoram University, Aizwal	<a href="https://lib.mzu.edu.in/">https://lib.mzu.edu.in/</a>	<a href="http://mzuir.inflibnet.ac.in/">http://mzuir.inflibnet.ac.in/</a>
10	North-Eastern Hill University, Shillong		NA [Main Website is not Accessible]



# UX Aspects to look for (First Three)

Navigation and Information Architecture				
Ease of Navigation	Logical Category	Search Functions	Labels & Menu	Browsing Experience
Rating(1-5)	Yes(1)/No(0)	Yes(1)/No(0)	Yes(1)/No(0)	Rating(1-5)

Content Discovery and Access		
Internet Browser Experience	Robust Search	Efficient Access
Rating(1-5)	Yes(1)/No(0)	Rating(1-5)

Accessibility and Compatibility		
Compatibility	Screen Reader Support	Keyboard Navigation
Rating(1-5)	Yes(1)/No(0)	Rating(1-5)

# Results

IR Website: <http://etd.lib.jnu.ac.in/>

## Navigation and Information Architecture:

- **Ease of Navigation:** The website has a minimalistic design a single click to browse and access theses. However, It does not serves the purpose as it directs to OPAC only, we would rate it a **3/5**.
- **Logical Categories:** The landing page does not display any categories. on exploration, it takes to the OPAC of the Library. we would rate it as **No(0)**.
- **Search Functionality:** The landing page does not display a search bar or any search functionality. but it redirects to an OPAC. Therefore, we would rate it as **Yes(1)**.
- **Labels & Menu:** The website does not have visible labels or a menu on the landing page. Therefore, I would rate it as **No(0)**.
- **Browsing Experience:** The landing page provides a direct link to browse and access theses. However, It takes us to an OPAC and full text are accessible on Intranet only therefore, the overall browsing experience. Based on the landing page, we would rate it a **3/5**.

# Results



IR Website: <https://dl.bhu.ac.in/>

## Navigation and Information Architecture:

- **Ease of Navigation:** The website provides clear sections for browsing, help, and signing in. The main content is focused on the Institutional Repository of Banaras Hindu University. The site is structured and user-friendly. we rate it a **4/5**.
- **Logical Categories:** The website displays various communities or departments, allowing users to browse specific collections. This categorization seems logical and user-centric. we can rate it as **Yes(1)**.
- **Search Functionality:** While the landing page content provided does not explicitly show a search bar, the typical structure of such repositories suggests there might be one. so we rate it as **Yes(1)**.
- **Labels & Menu:** The website has clear labels for different sections and a menu at the top for navigation. Therefore, rate it as **Yes(1)**.
- **Browsing Experience:** The website offers a list of communities and collections, making it easier for users to browse specific topics or departments. Based on the landing page and the structure, we can rate it a **4/5**.

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# Results



IR Website: <https://www.gbl.bbau.ac.in/index.php/institutional-repository>

## Navigation and Information Architecture:

- **Ease of Navigation:** The website provides a clear menu at the top, allowing users to navigate to different sections such as e-Journals, e-Books, and more. The layout seems structured and user-friendly. But it is not IR it is an OPAC, we should rate it a **3/5**.
- **Logical Categories:** The website displays various services and resources, including e-Journals, e-Books, and an Institutional Repository. This categorization seems logical and user-centric. We can it as **Yes(1)**.
- **Search Functionality:** The website offers an "Online Public Access Catalogue (OPAC)" search functionality where users can search by keyword, title, author, and more. Therefore, we rate it as **Yes(1)**.
- **Labels & Menu:** The website has clear labels for different sections and a menu at the top for navigation. Therefore, we rate it as **Yes(1)**.
- **Browsing Experience:** The website provides a list of services, resources, and other relevant information, making it easier for users to browse and find what they need. Based on this it can be rated as **4/5**.

# Results

IR Website: <http://agnee.tezu.ernet.in:8082/jspui/>

## Navigation and Information Architecture:

- **Ease of Navigation:** A clear menu at the top, allowing users to navigate to different sections such as browsing and signing in. The main content focuses on the ETD Repository of Tezpur University. The layout appears structured and user-friendly. we can rate it a **5/5**.
- **Logical Categories:** Displays various schools, allowing users to browse specific collections. This categorization seems logical and user-centric. we can rate it as **Yes(1)**.
- **Search Functionality:** While the landing page content provided does not explicitly show a search bar, the typical structure of such repositories suggests there might be one. we can rate it as **Yes(1)**.
- **Labels & Menu:** The website has clear labels for different sections and a menu at the top for navigation. Therefore, we rate it as **Yes(1)**.
- **Browsing Experience:** The website offers a list of schools, making it easier for users to browse specific topics or departments. We rate it a **4/5**.

# Results

IR Website: <http://mzuir.inflibnet.ac.in/>

## Navigation and Information Architecture:

- **Ease of Navigation:** The website provides a clear menu at the top, allowing users to navigate to different sections such as browsing and help. The main content focuses on the Digital Repository of Mizoram University. The layout is structured and user-friendly. we can rate it a **4/5**.
- **Logical Categories:** The website displays various communities, allowing users to browse specific collections such as Annual Reports, M. Phil Dissertations, and Ph.D Theses. This categorization seems logical and user-centric. we rate it as **Yes(1)**.
- **Search Functionality:** While the landing page content provided does not explicitly show a search bar, the typical structure of such repositories suggests there might be one. Without further exploration, we rate it as **Yes(1)**.
- **Labels & Menu:** The website has clear labels for different sections and a menu at the top for navigation. Therefore, we rate it as **Yes(1)**.
- **Browsing Experience:** The website offers a list of communities, making it easier for users to browse specific topics or departments. Based on the content it can be rated a **4/5**.

# Results

Website: <https://shodhganga.inflibnet.ac.in/>

## Navigation and Information Architecture:

- **Ease of Navigation:** The website provides a clear menu bar at the top, allowing users to navigate to different sections such as advanced search, subject search, and Google search. The layout appears structured and user-friendly. we should rate it a **5/5**.
- **Logical Categories:** The website displays various sections like theses, synopses, MRPs/PDFs/Fellowships reports, and more. This categorization seems logical and user-centric. We can rate it as **Yes(1)**.
- **Search Functionality:** The website offers multiple search functionalities, including advanced search, subject search, and Google search. Therefore, we rate it as **Yes(1)**.
- **Labels & Menu:** In structured way it is there, so we can rate it as **Yes(1)**.
- **Browsing Experience:** The website provides a list of theses, synopses, and other relevant information, making it easier for users to browse and find what they need. Based on the content provided, we rate it a **4/5**.

# Conclusion

SI No	Website	Ease of Navigation	Logical Categories	Search Functionality	Labels & Menu	Browsing Experience
JNU	<a href="http://etd.lib.jnu.ac.in/">http://etd.lib.jnu.ac.in/</a>	3/5	No(0)	Yes(1)	No(0)	3/5
BHU*	<a href="https://dl.bhu.ac.in/">https://dl.bhu.ac.in/</a>	4/5	Yes(1)	Yes(1)	Yes(1)	4/5
BBAU	<a href="https://www.gbl.bbau.ac.in/index.php/institutional-repository">https://www.gbl.bbau.ac.in/index.php/institutional-repository</a>	3/5	Yes(1)	Yes(1)	Yes(1)	4/5
TEZU	<a href="http://agnee.tezu.ernet.in:8082/jspui/">http://agnee.tezu.ernet.in:8082/jspui/</a>	5/5	Yes(1)	Yes(1)	Yes(1)	4/5
MZU	<a href="http://mzuir.inflibnet.ac.in/">http://mzuir.inflibnet.ac.in/</a>	4/5	Yes(1)	Yes(1)	Yes(1)	4/5
SDHGNG	<a href="https://shodhganga.inflibnet.ac.in/">https://shodhganga.inflibnet.ac.in/</a>	5/5	Yes(1)	Yes(1)	Yes(1)	4/5

#Only **Tezpur University** and **Mizoram University** have Proper Navigation and Information Architecture at par with ShodhGanga

#BHU's IR is at par but there is no ETD's in the Repository, therefore assessment doesn't matter in the context.

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# Work In Progress

Content Discovery and Access		
Int. Brws. Exp.	Robust Search	Effcnt. Access
Rating(1-5)	Yes(1)/No(0)	Rating(1-5)

Performance	
Loading Times	Stability
Rating(1-5)	Rating(1-5)

Downloads and Usage Metrics	
Dwnld Options	Usage Statist.
Yes(1)/No(0)	Yes(1)/No(0)

Accessibility and Compatibility		
Compatibility	Screen reader Sup.	Keybo. Nav.
Rating(1-5)	Yes(1)/No(0)	Rating(1-5)

User Feedback & Interactivity			
User Rev./Rat.	Comments/Annotations	Sharing/Social Interaction	Interactive Feat.
Yes(1)/No(0)	Yes(1)/No(0)	Yes(1)/No(0)	Yes(1)/No(0)

Search Functionality		
Relv. of Result	Adv. Srch Opt.	Search Speed
Yes(1)/No(0)	Yes(1)/No(0)	Rating(1-5)

User Support and Documentation	
Help Resources.	Contact Info.
Yes(1)/No(0)	Yes(1)/No(0)

Security and Privacy	
Data Protection	Access Contr.
Yes(1)/No(0)	Yes(1)/No(0)

Content Presentation		
Readable Format	Multimedia. Support	Download Options
Yes(1)/No(0)	Yes(1)/No(0)	Yes(1)/No(0)

User Testing and Feedback	
Usability Test.	Feedback Mech.
	Yes(1)/No(0)

Design and Branding
Visual Appeal
Rating(1-5)

**Thank you!**