

26<sup>th</sup> International Symposium

# ETD 2023

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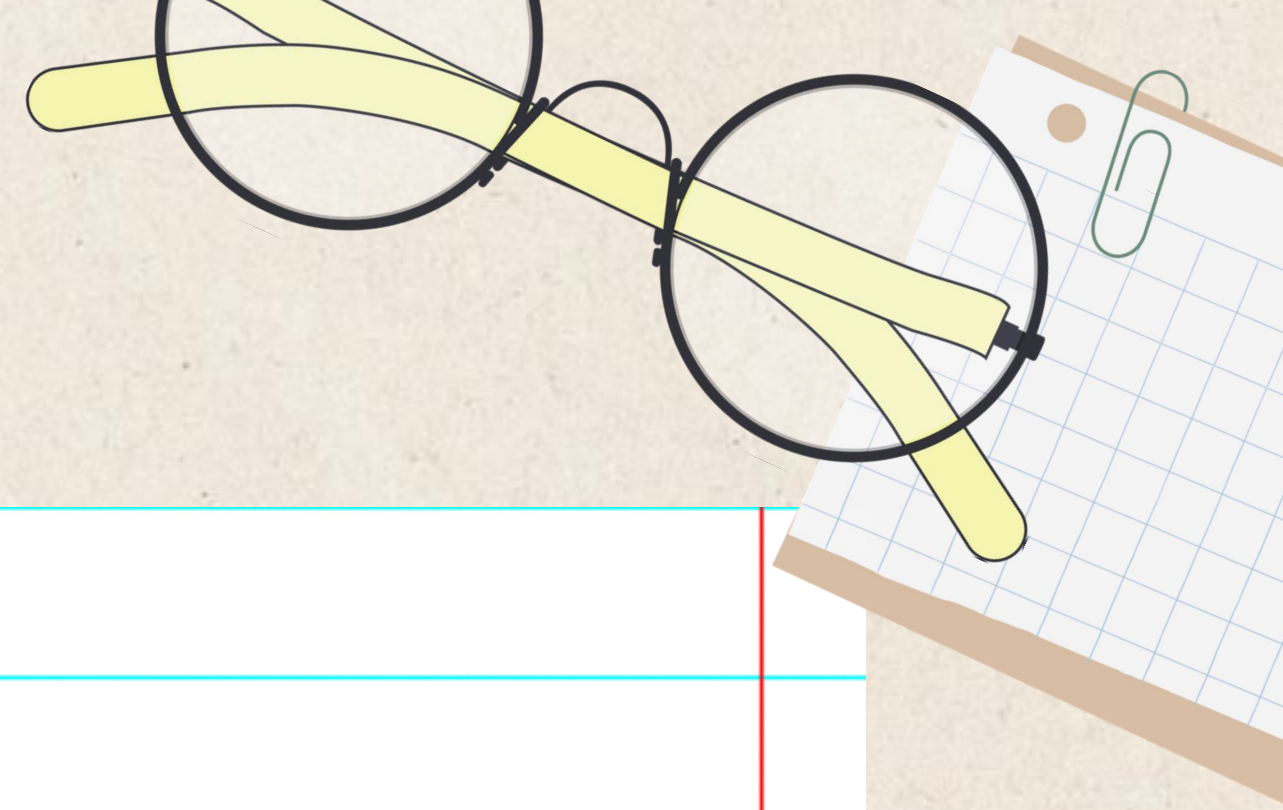
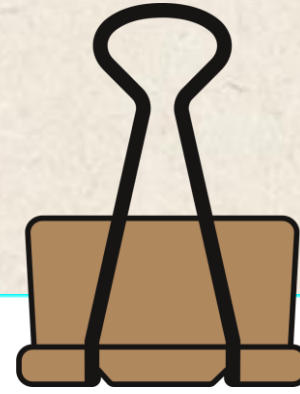
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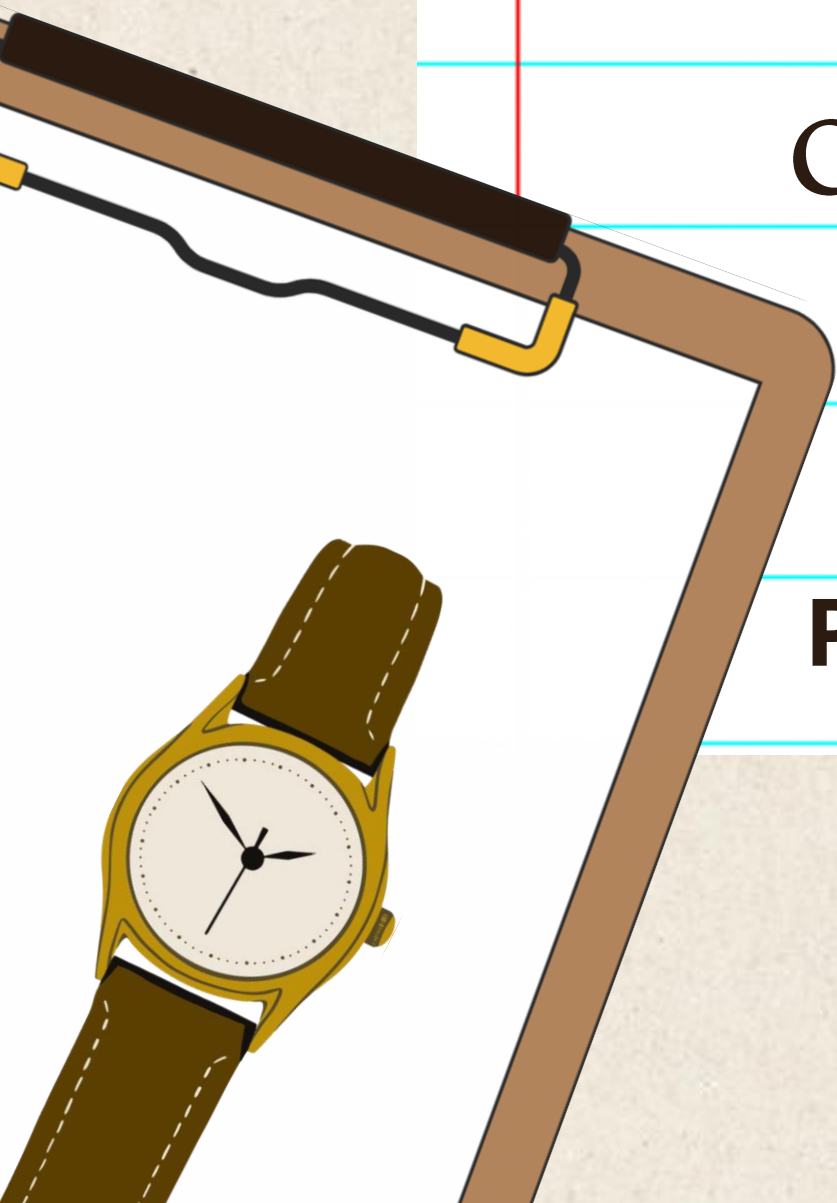
26-28 October, 2023





**USER EXPERIENCE AND ACCESSIBILITY  
CHALLENGES OF ELECTRONIC THESES AND  
DISSERTATIONS**

**Presented by Parmar Bhavini L. & Saurabh Patel**

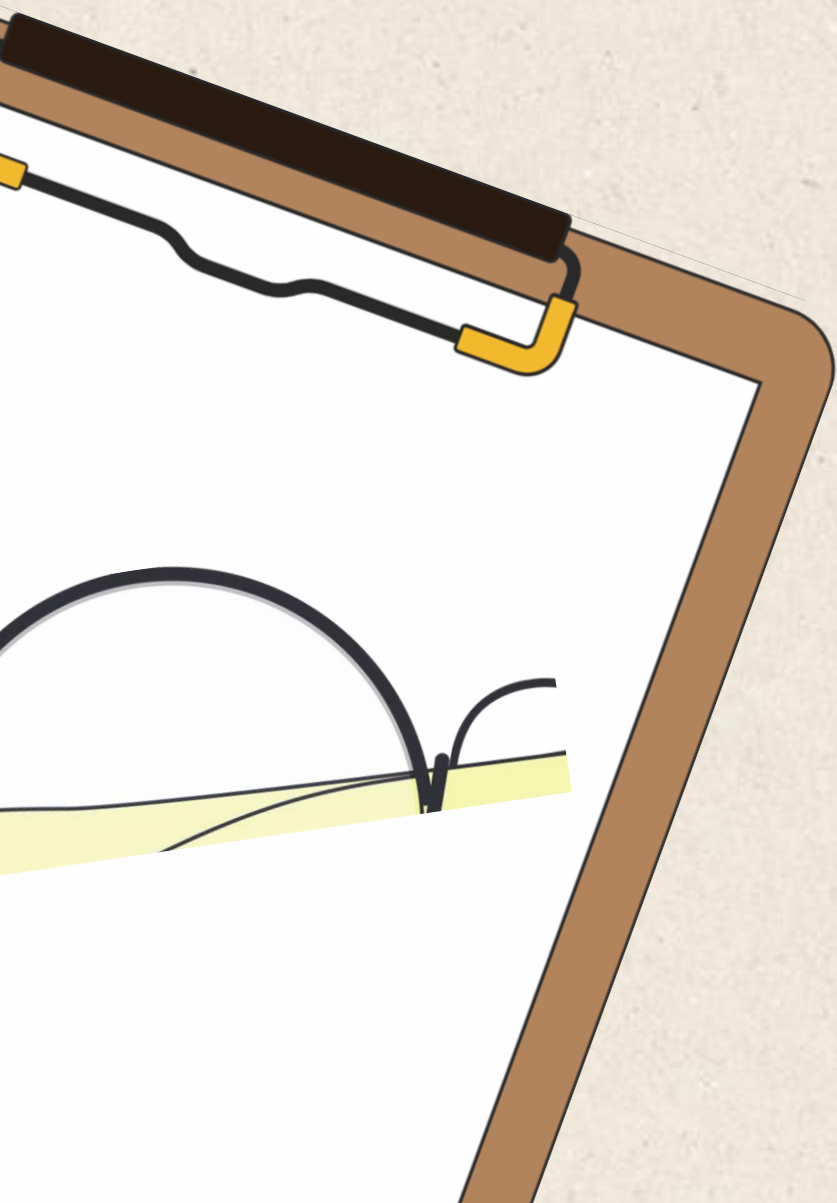


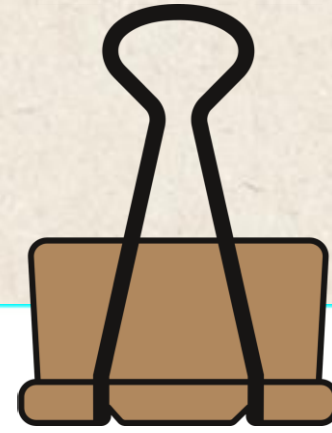




# INTRODUCTION

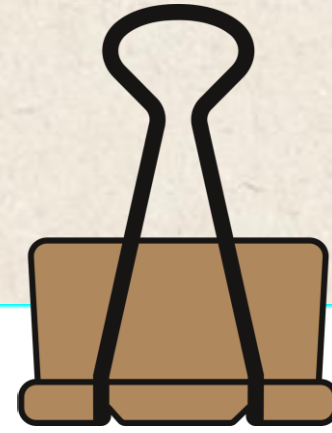
The digitization of scholarly resources has significantly transformed the academic landscape, with Electronic Theses and Dissertations (ETDs) emerging as crucial components of this evolution. ETDs offer a digital avenue for students, researchers, and the academic community to access and contribute to a wealth of scholarly knowledge. As the reliance on these digital platforms grows, ensuring an optimal user experience (UX) and addressing accessibility concerns becomes paramount. This research seeks to delve into the intricate realm of ETDs, specifically focusing on the UX and accessibility challenges faced by users.



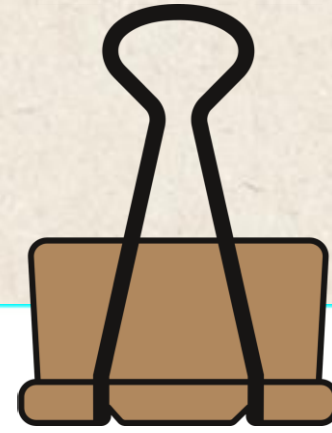


In recent years, ETDs have become not only repositories of academic knowledge but also gateways to expanded learning experiences. However, alongside their potential, various challenges have surfaced, impeding the seamless discovery and utilization of ETDs. These challenges encompass issues related to user interface design, information architecture, searchability, readability, and the integration of multimedia elements. Additionally, the accessibility of ETDs for individuals with disabilities is a critical concern that necessitates comprehensive attention.





The overarching goal of this research is to identify, understand, and address these multifaceted challenges. By conducting a survey-based investigation, this study aims to gather insights directly from ETD users, encompassing students, researchers, and academics. The focus extends beyond identifying problems; it also endeavours to uncover the factors influencing these challenges and their consequential impact on effective ETD discovery and utilization.



By comprehensively exploring the UX and accessibility landscape of ETDs, this research intends to contribute to the enhancement of these platforms. The ultimate objective is to provide actionable recommendations that bridge the gap between existing challenges and optimal user experiences. This research stands as a crucial step toward fostering an environment where ETDs are not only repositories of knowledge but also platforms that seamlessly connect users with valuable scholarly content, irrespective of their diverse needs and abilities.





# OBJECTIVES



**1**

To identify and understand the user experience (UX) and accessibility challenges faced by users of Electronic Theses and Dissertations (ETDs) through a survey-based approach.



**2**

To explore the factors influencing UX and accessibility in the context of ETDs, specifically focusing on user interface design, information architecture, searchability, readability, and multimedia integration.



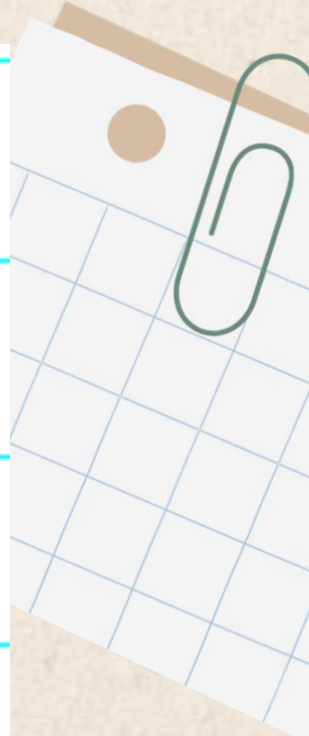
**3**

To assess the impact of these challenges on the effective discovery and utilization of ETDs based on survey responses.



**4**

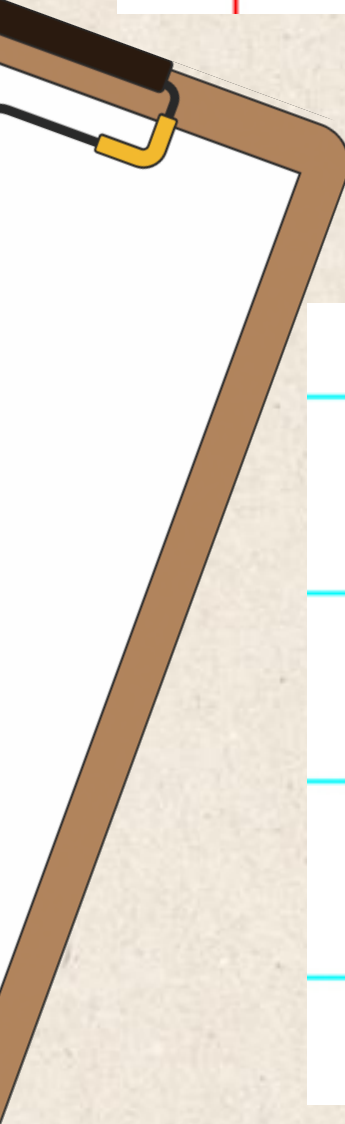
To provide actionable recommendations for enhancing UX and accessibility in ETD platforms based on survey findings.



**This research utilized a survey-based research method to gather data and insights regarding UX and accessibility challenges in the context of ETDs. The researcher has developed a survey questionnaire tailored to capture data related to the UX and accessibility challenges faced by users of ETDs from students and researchers of various fields.**

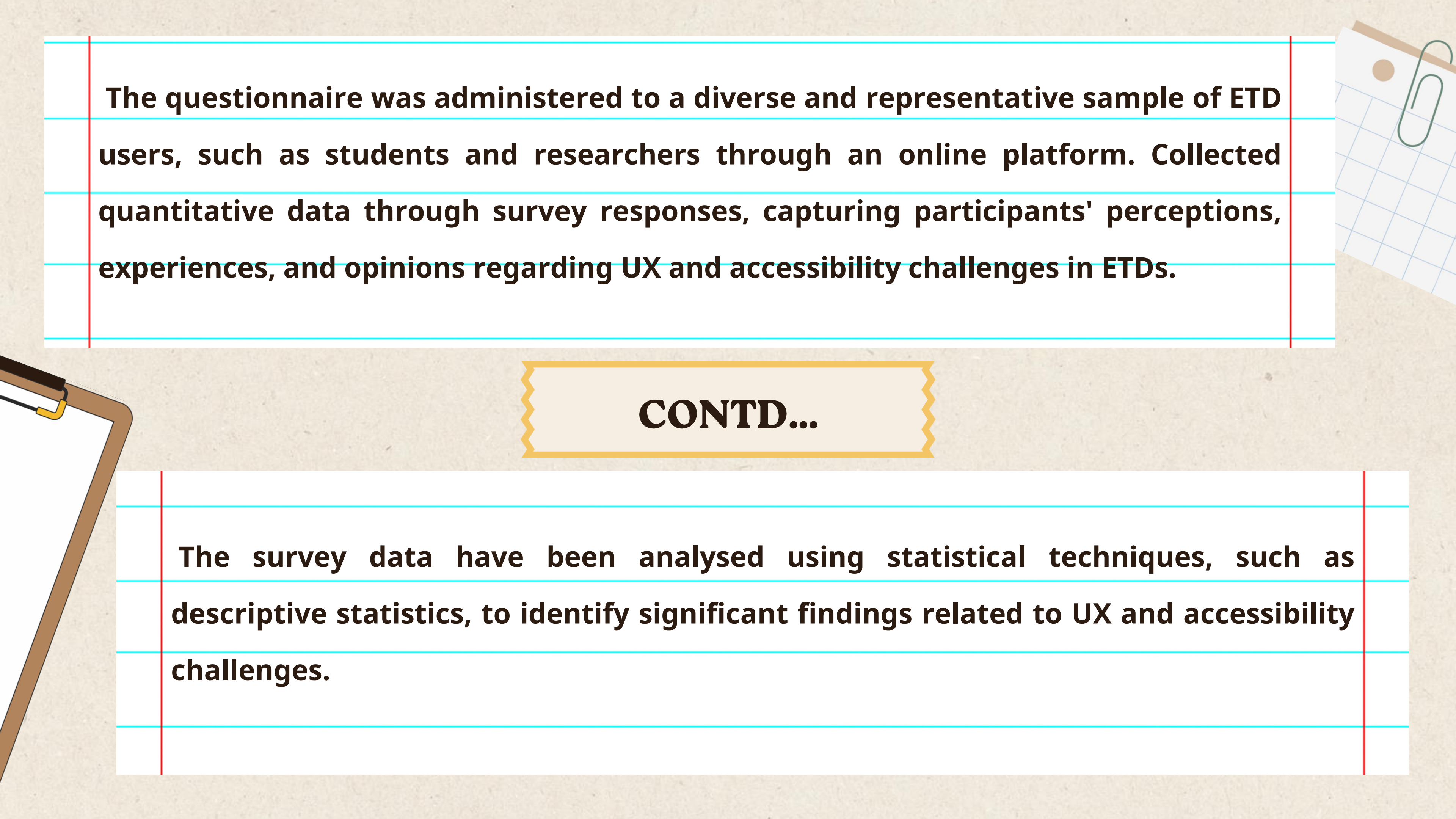


## **METHODOLOGY**



**The survey included questions addressing user interface design, information architecture, searchability, readability, multimedia integration, and overall user satisfaction.**



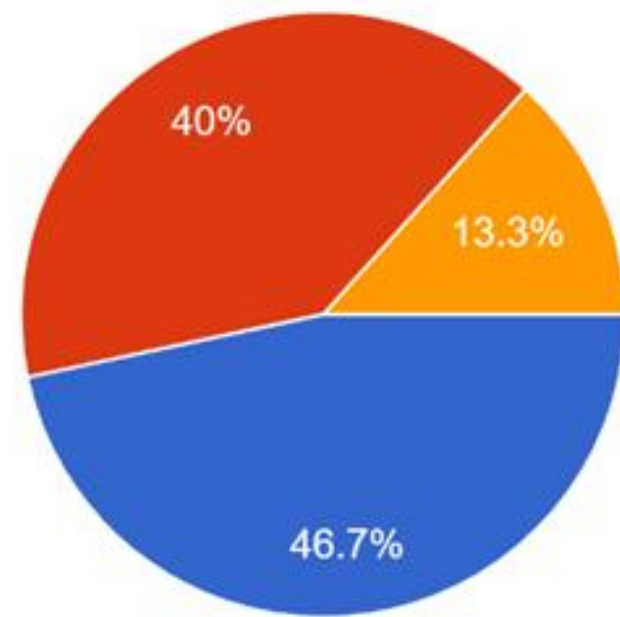
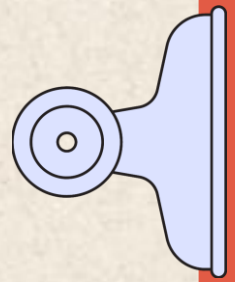


**The questionnaire was administered to a diverse and representative sample of ETD users, such as students and researchers through an online platform. Collected quantitative data through survey responses, capturing participants' perceptions, experiences, and opinions regarding UX and accessibility challenges in ETDs.**

**CONTD...**

**The survey data have been analysed using statistical techniques, such as descriptive statistics, to identify significant findings related to UX and accessibility challenges.**

# RESULTS

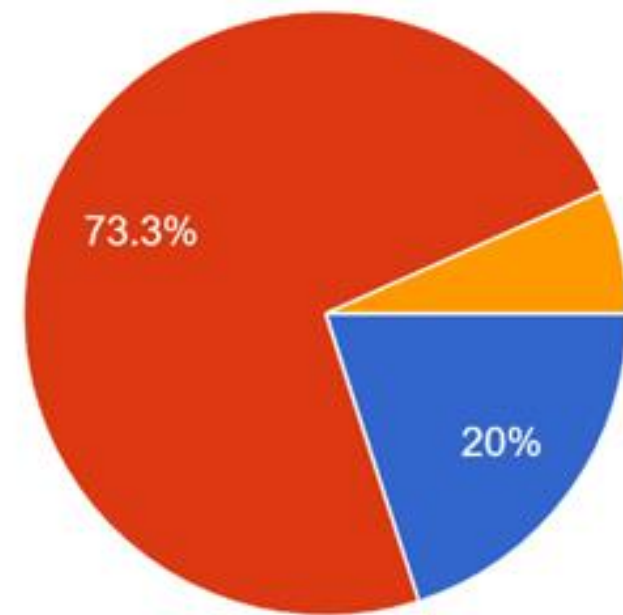


- Very frequently
- Frequently
- Occasionally
- Rarely
- Never

**Frequency of Using ETDs**

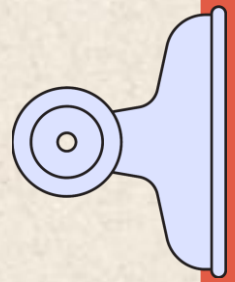


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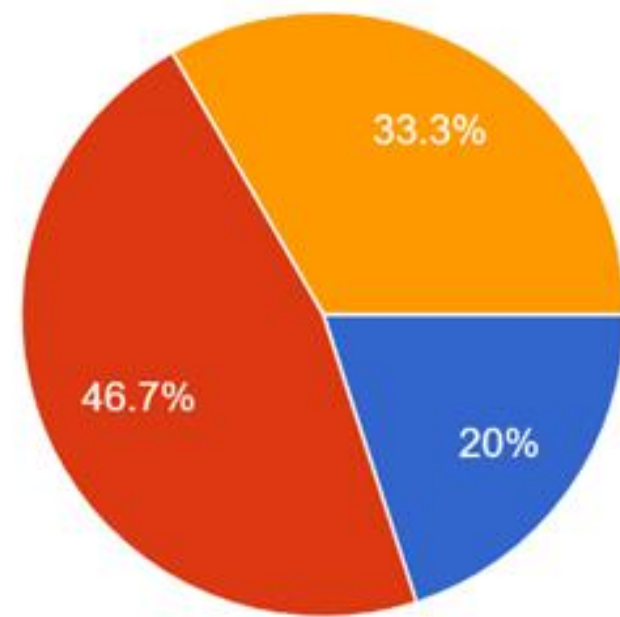
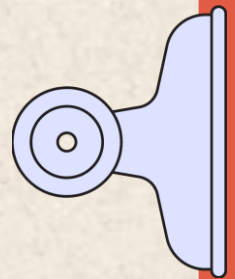
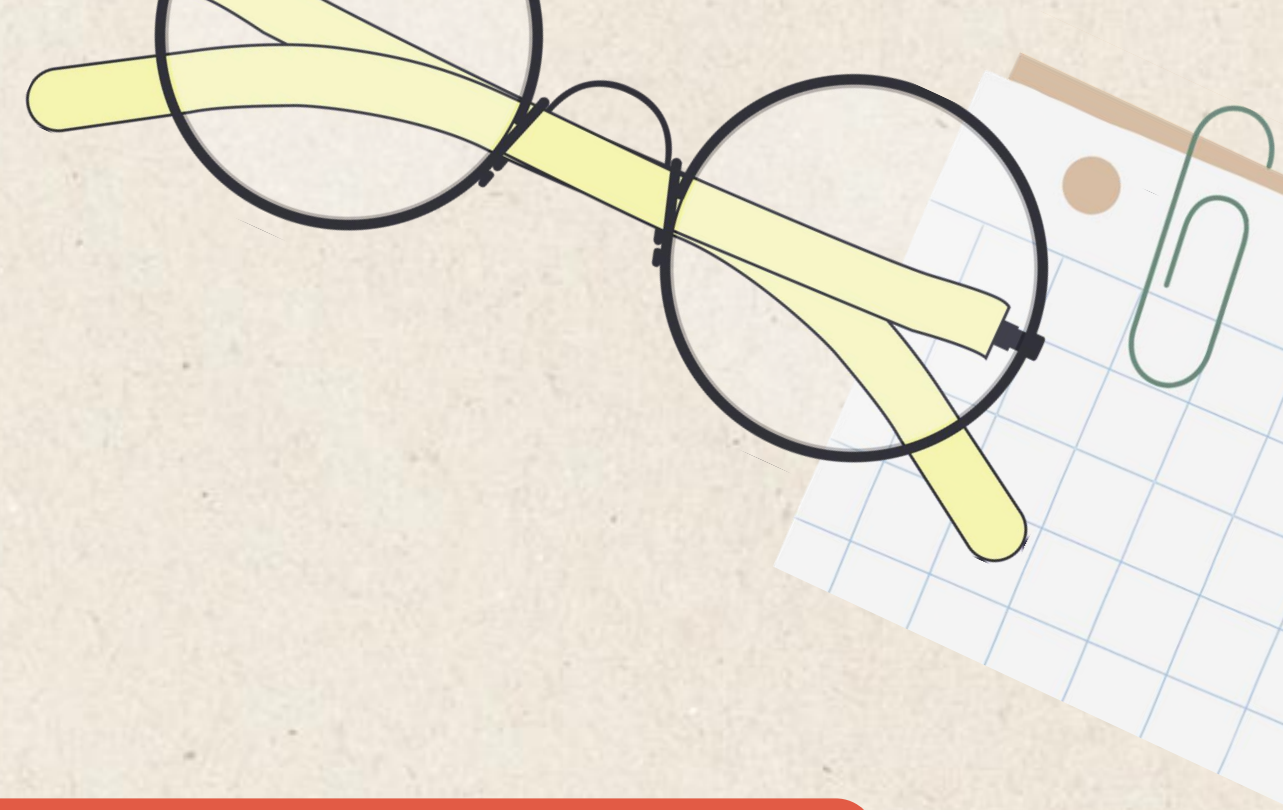
- Desktop
- Laptop
- Tablet
- Cell Phone

**Device used to  
access ETDs**





**CONTD...**

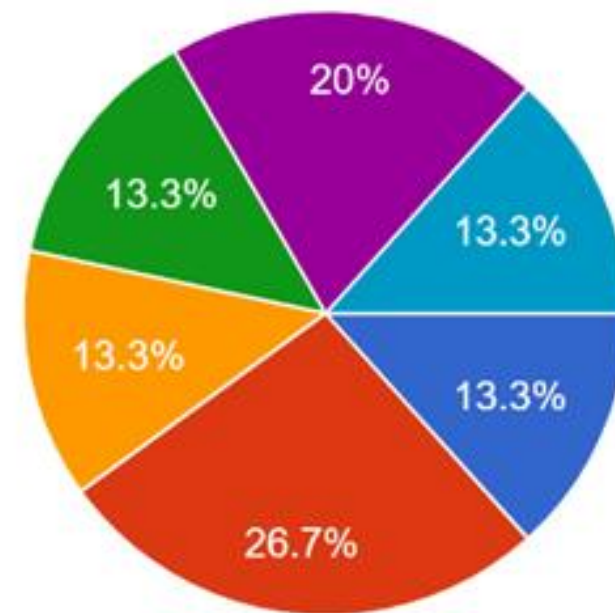
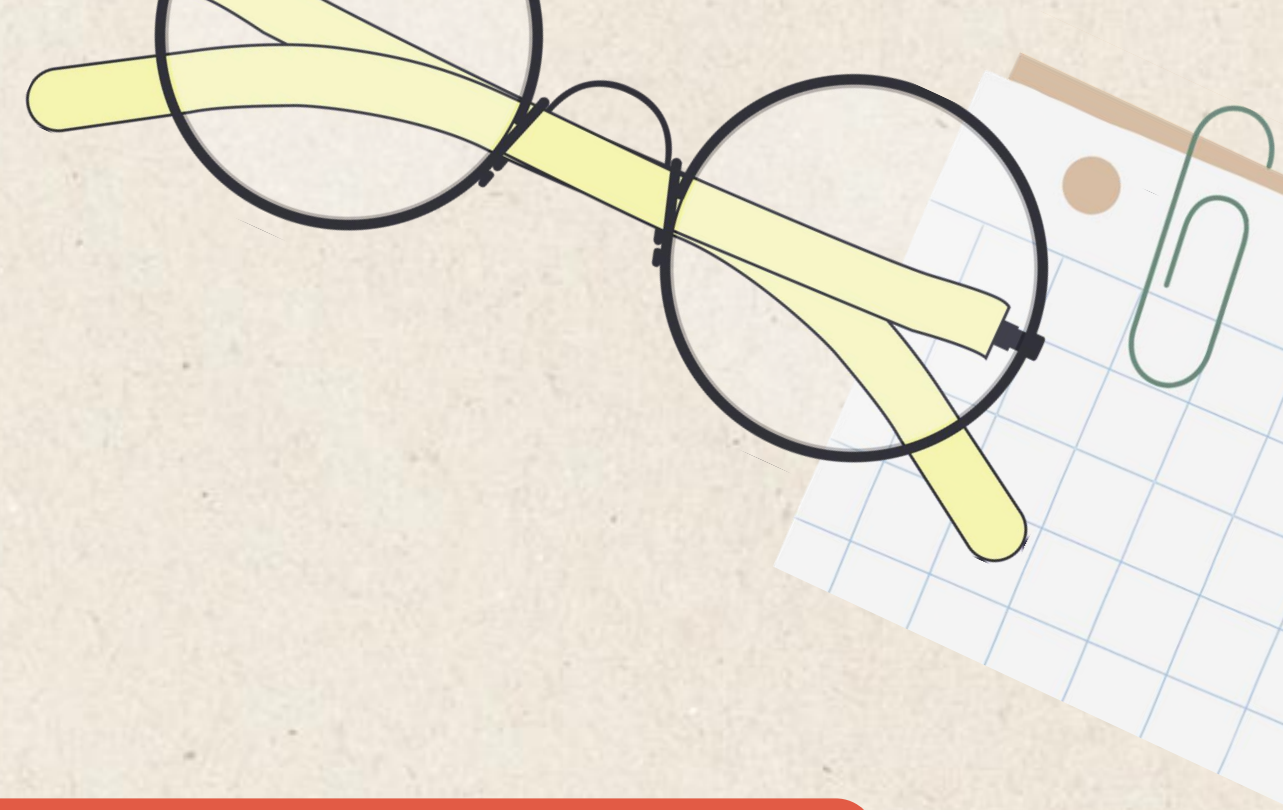


- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied

### **Satisfaction with User Experience**

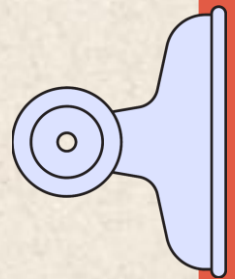


**CONTD...**



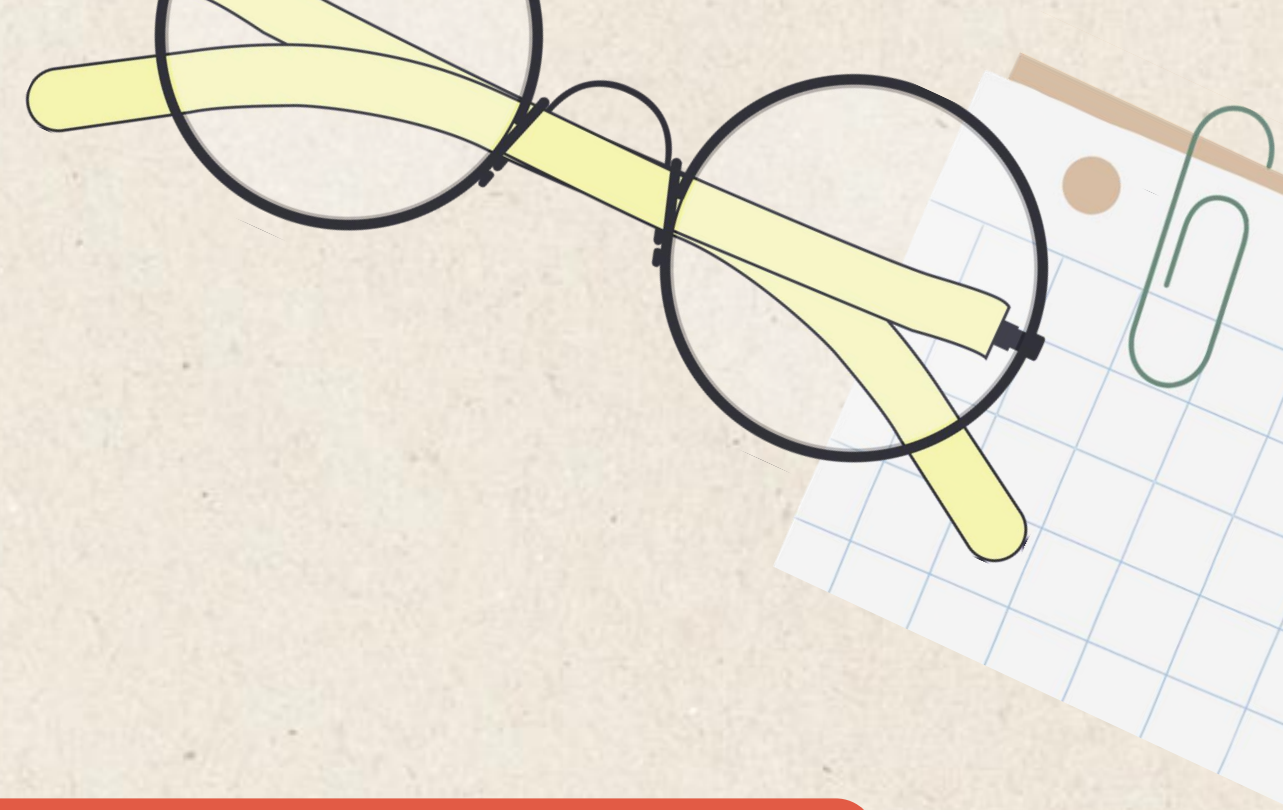
- Complex navigation
- Inconsistent layout
- Limited search functionality
- Difficulty accessing multimedia content
- Issues with text readability
- Lack of alternative formats for accessibility

## **Challenges Encountered using ETD Platforms**

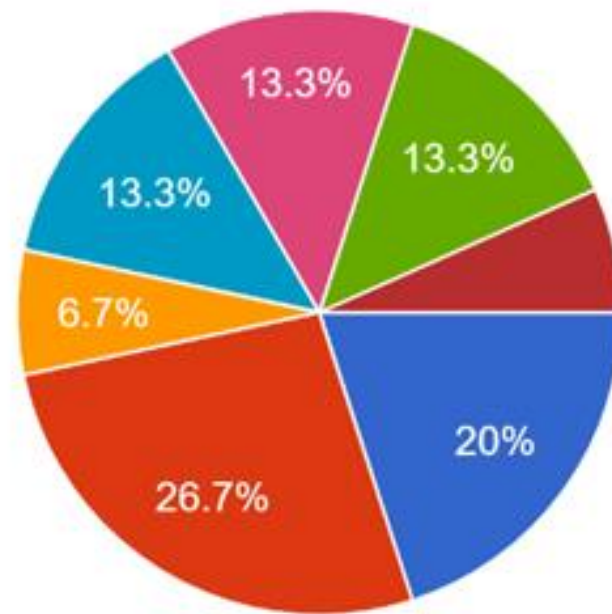




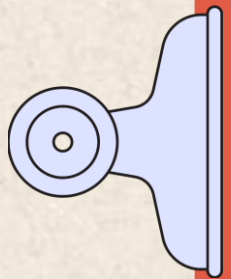
**CONTD...**



## Accessibility Challenges

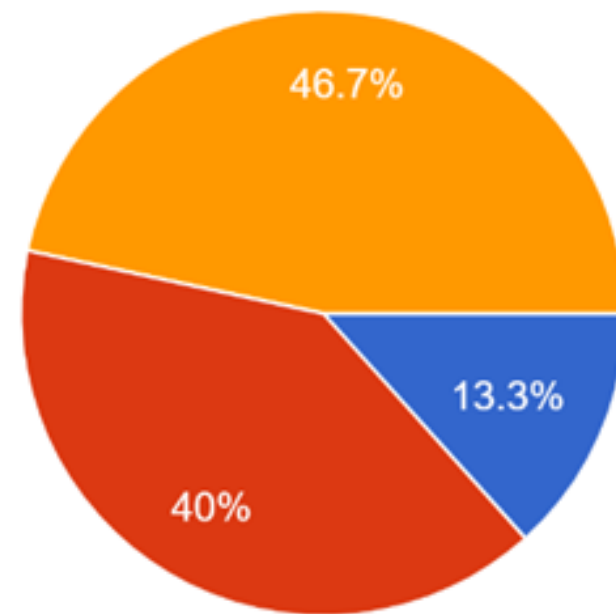
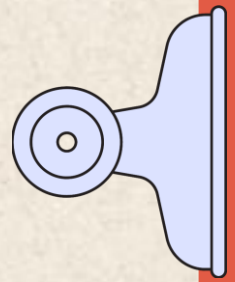
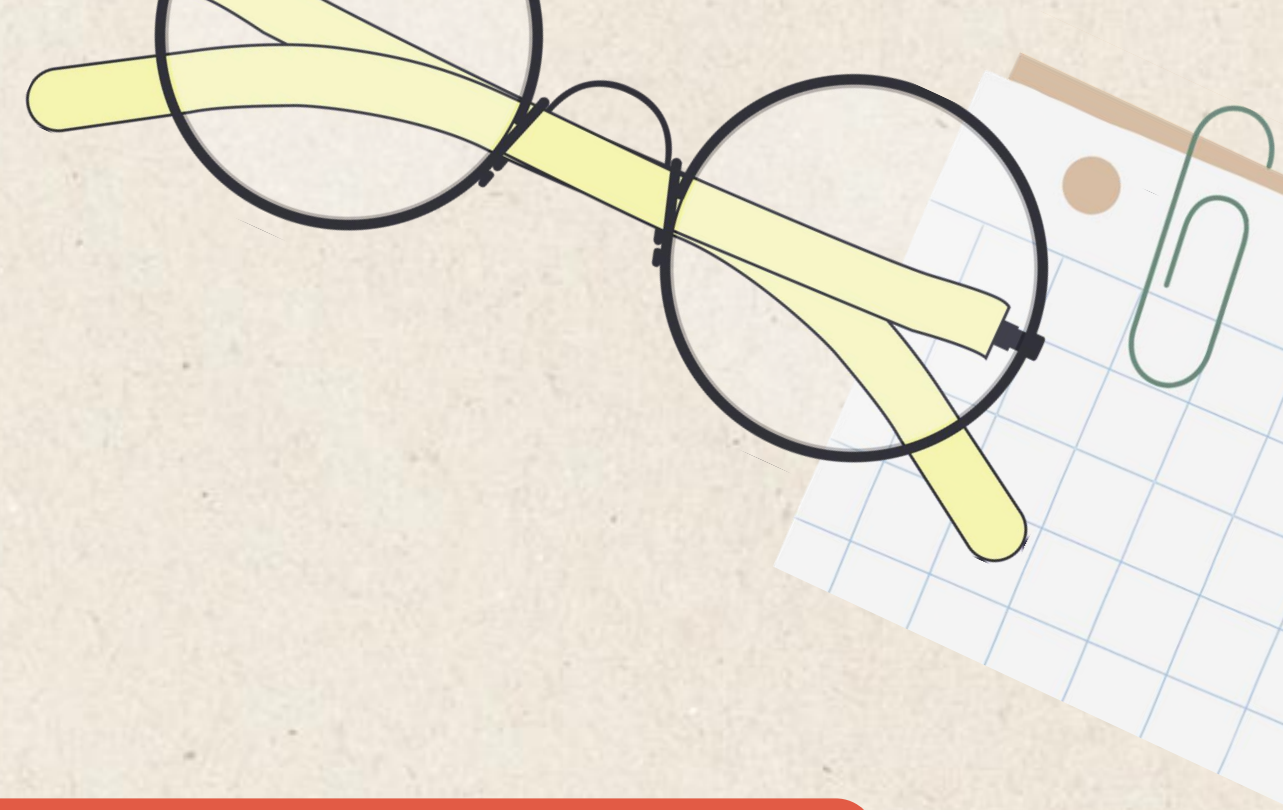


- No challenges faced
- Insufficient support for screen readers
- Inadequate keyboard navigation options
- Poor color contrast affecting readability
- Lack of alternative text for images
- Inaccessible multimedia content (videos, audio)
- Difficulty resizing text or adjusting font...
- Incompatibility with assistive technolo...
- Slow searching





**CONTD...**

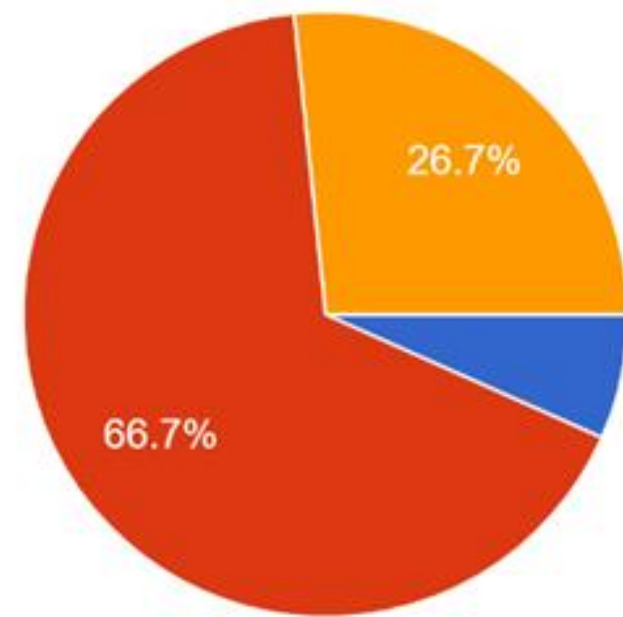
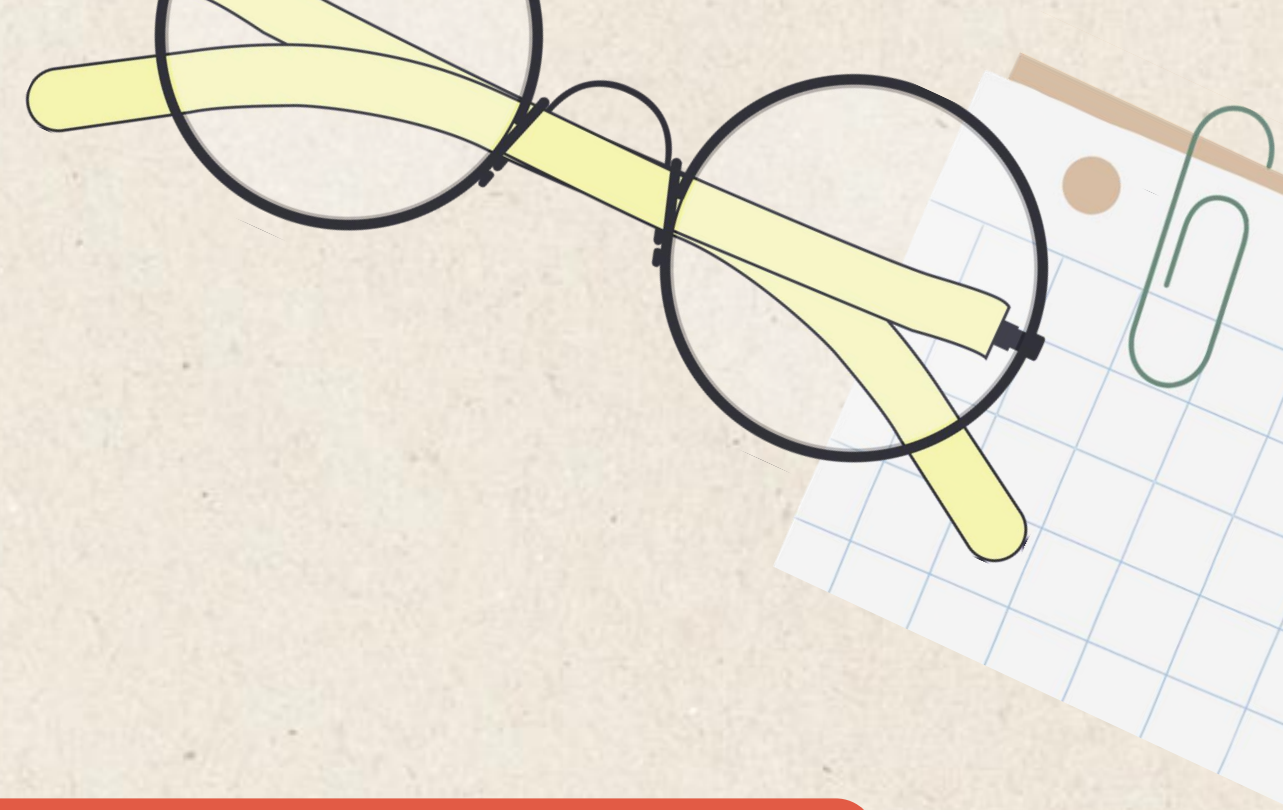


- No Difficulty
- Minimal Difficulty
- Moderate Difficulty
- Considerable Difficulty
- Extreme Difficulty

### **Rate of Navigation Difficulties**

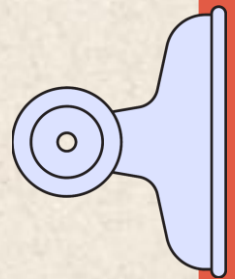


**CONTD...**



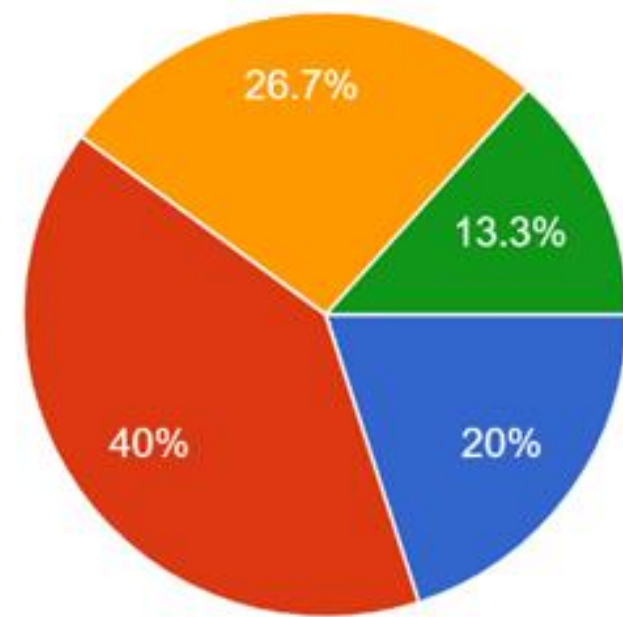
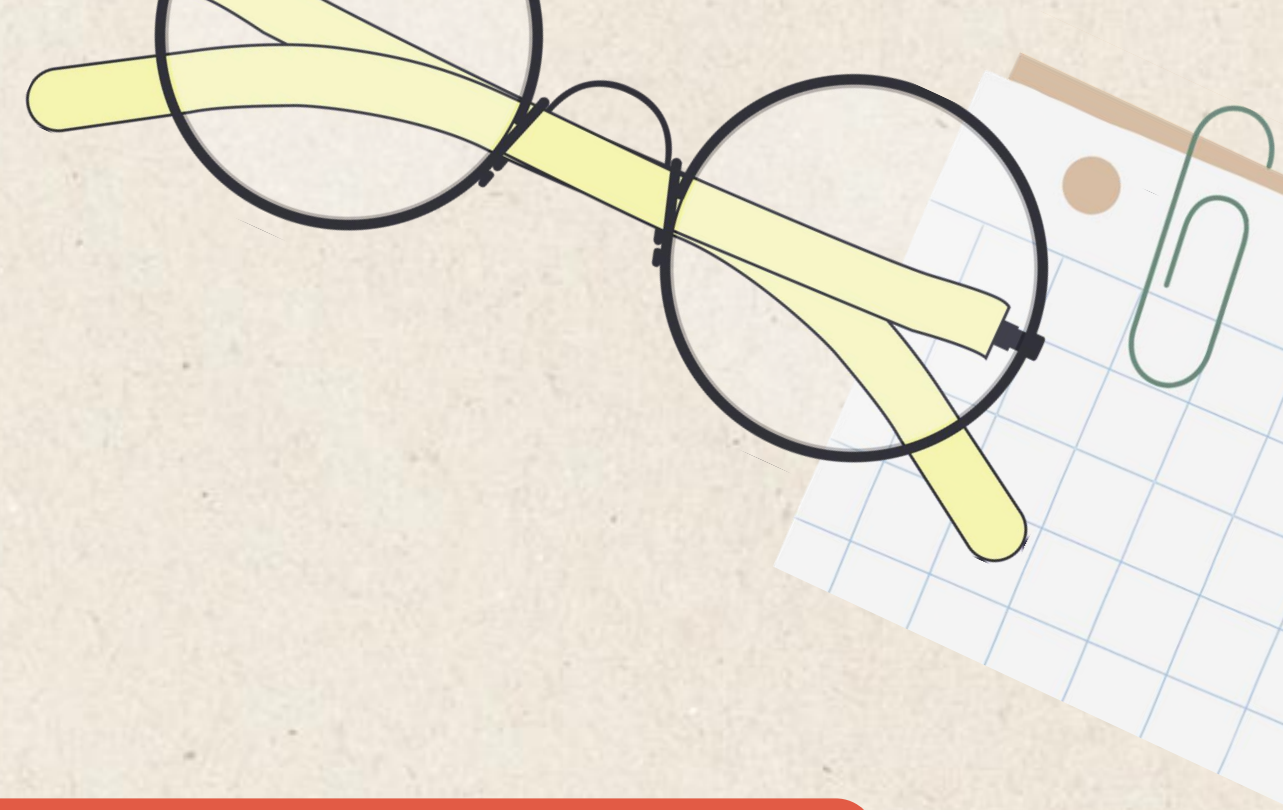
- Very Effective
- Effective
- Neutral
- Ineffective
- Very Ineffective

### **Search Functionality in ETD platforms**



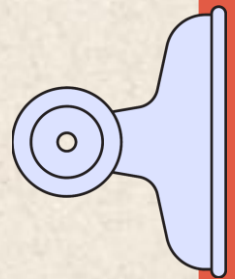


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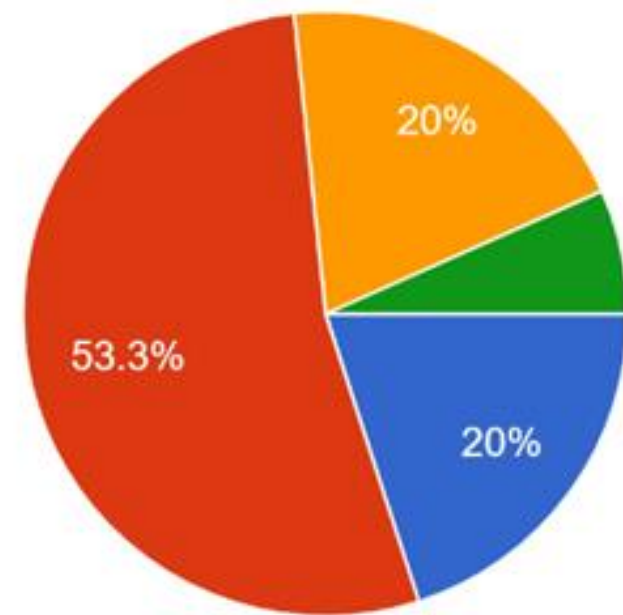
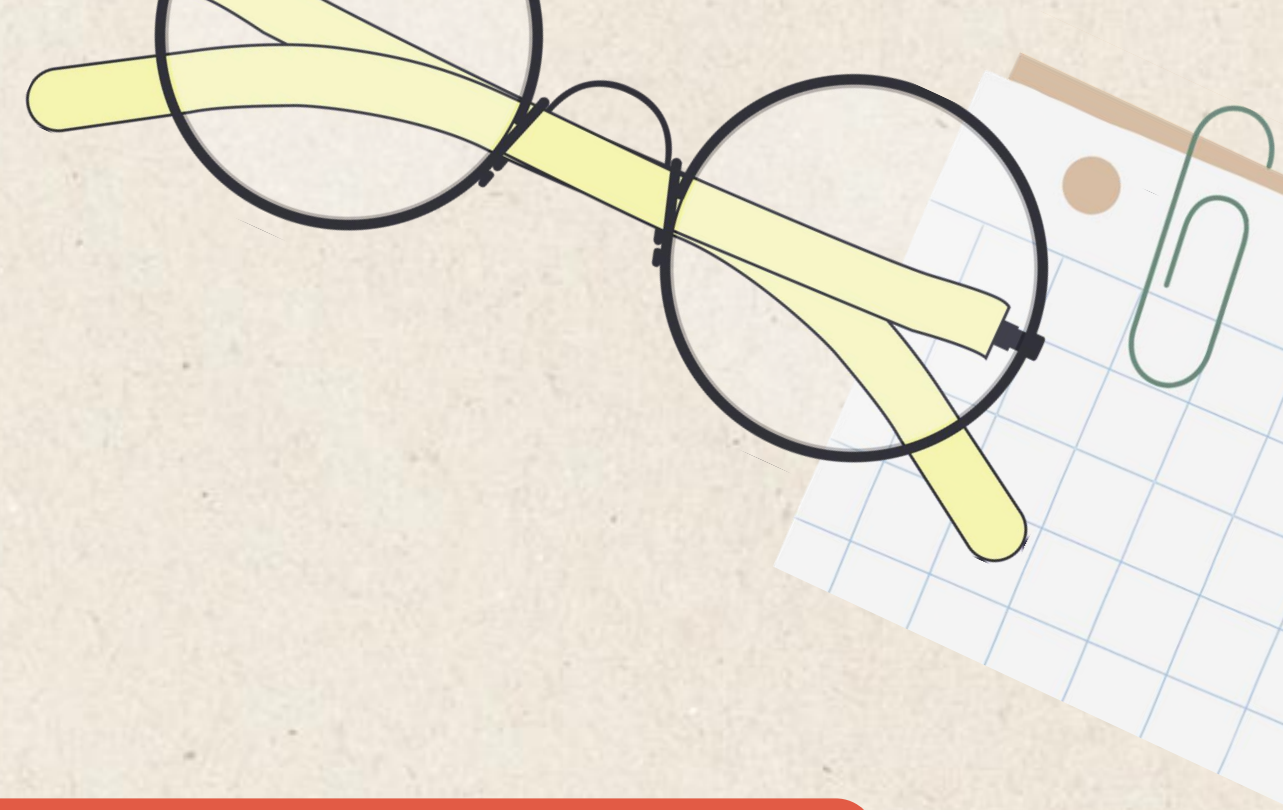
- Very frequently
- Frequently
- Occasionally
- Rarely
- Never

**Multimedia Content  
within ETDs**



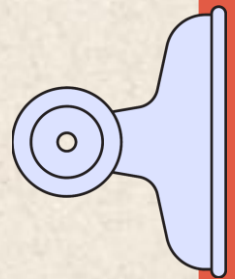


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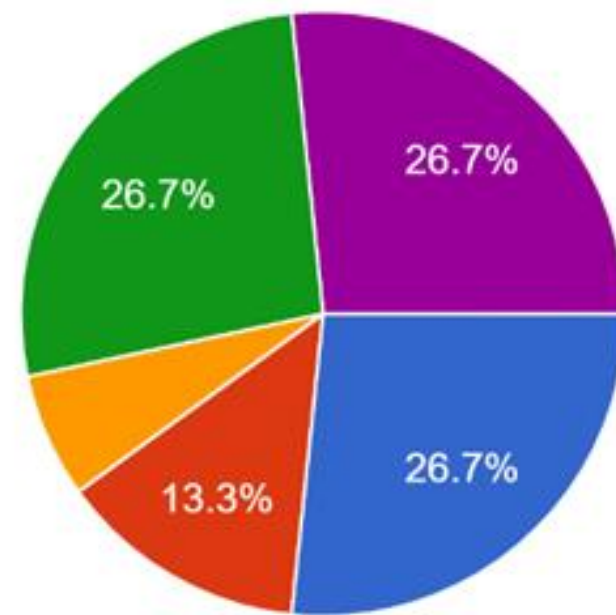
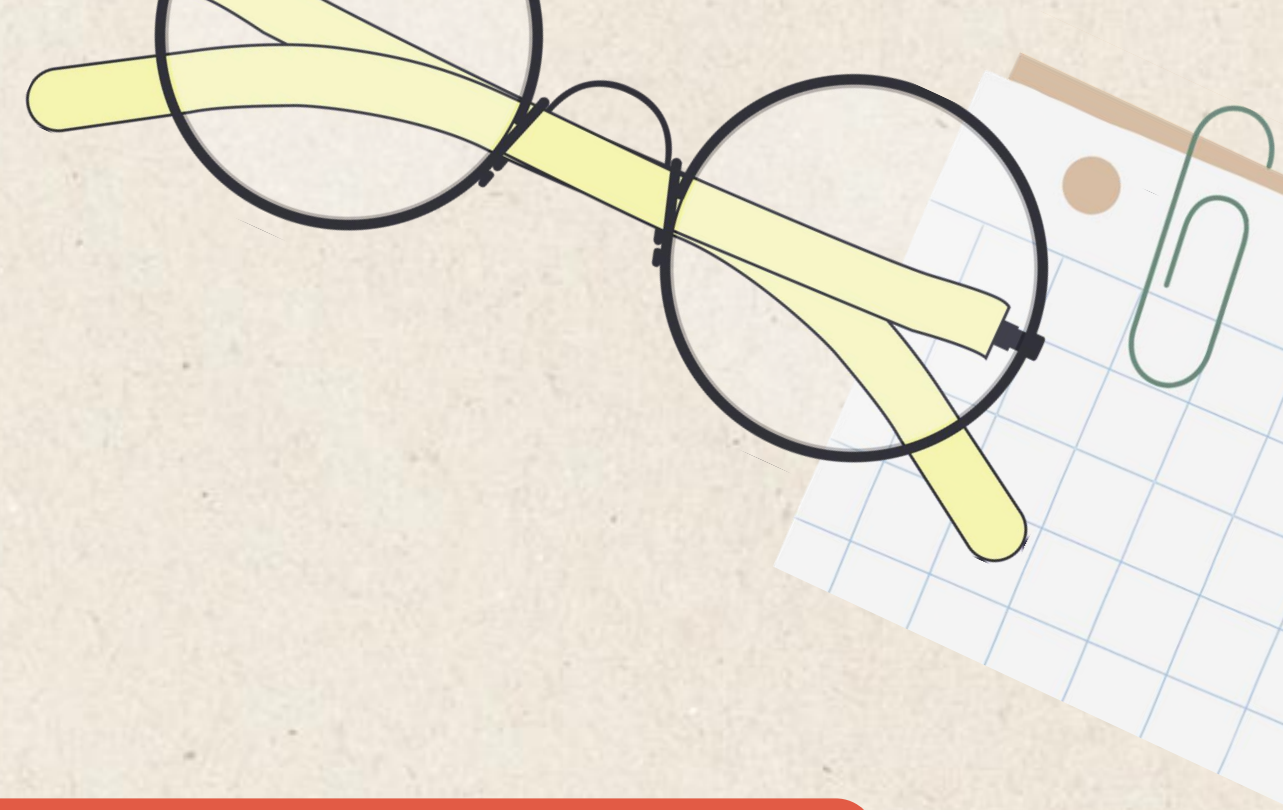
- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied

**Satisfaction with Readability  
of Text-based Content in ETD**



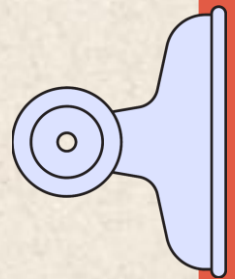


**CONTD...**



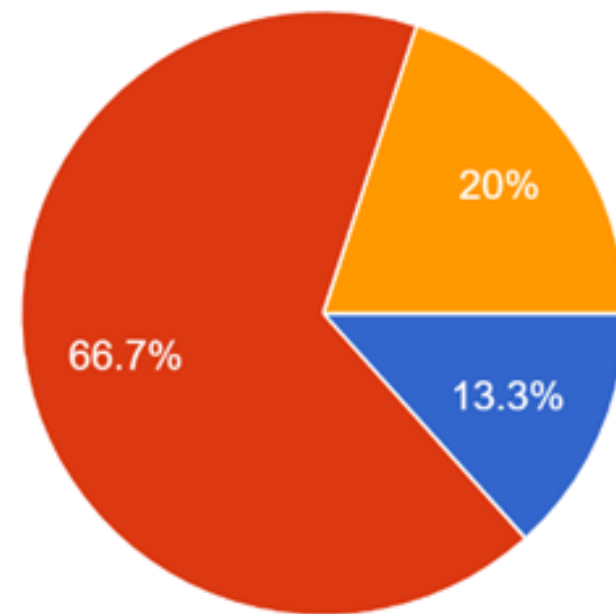
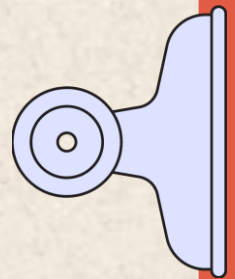
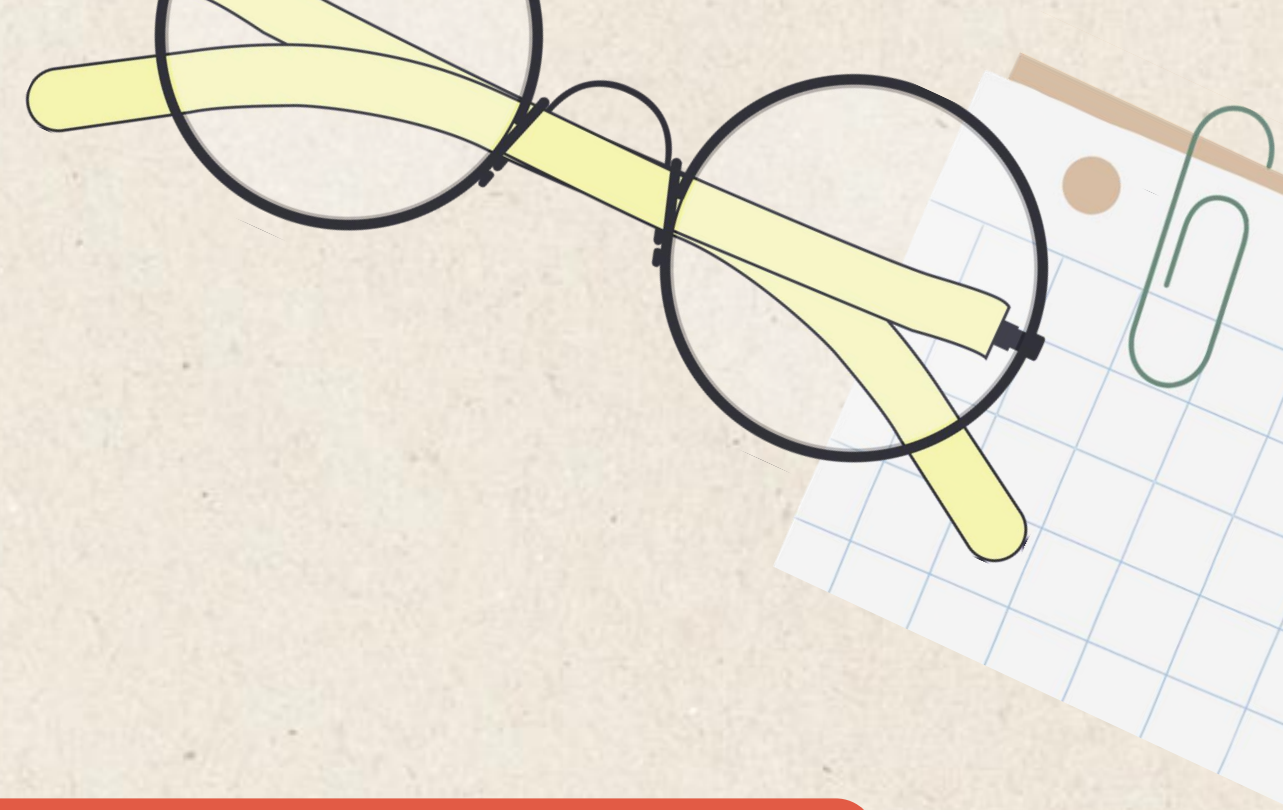
- No specific readability challenges faced
- Font size too small
- Font style difficult to read
- Insufficient spacing between lines or paragraphs
- Text layout and formatting issues affecting readability

## **Readability Challenges**





**CONTD...**

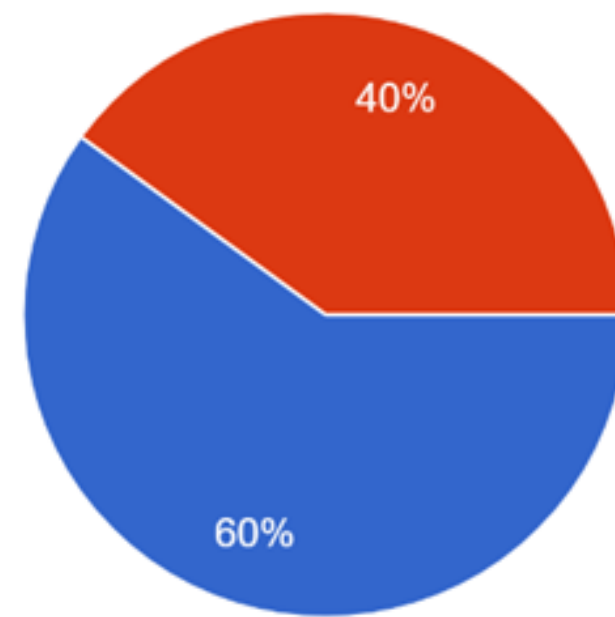
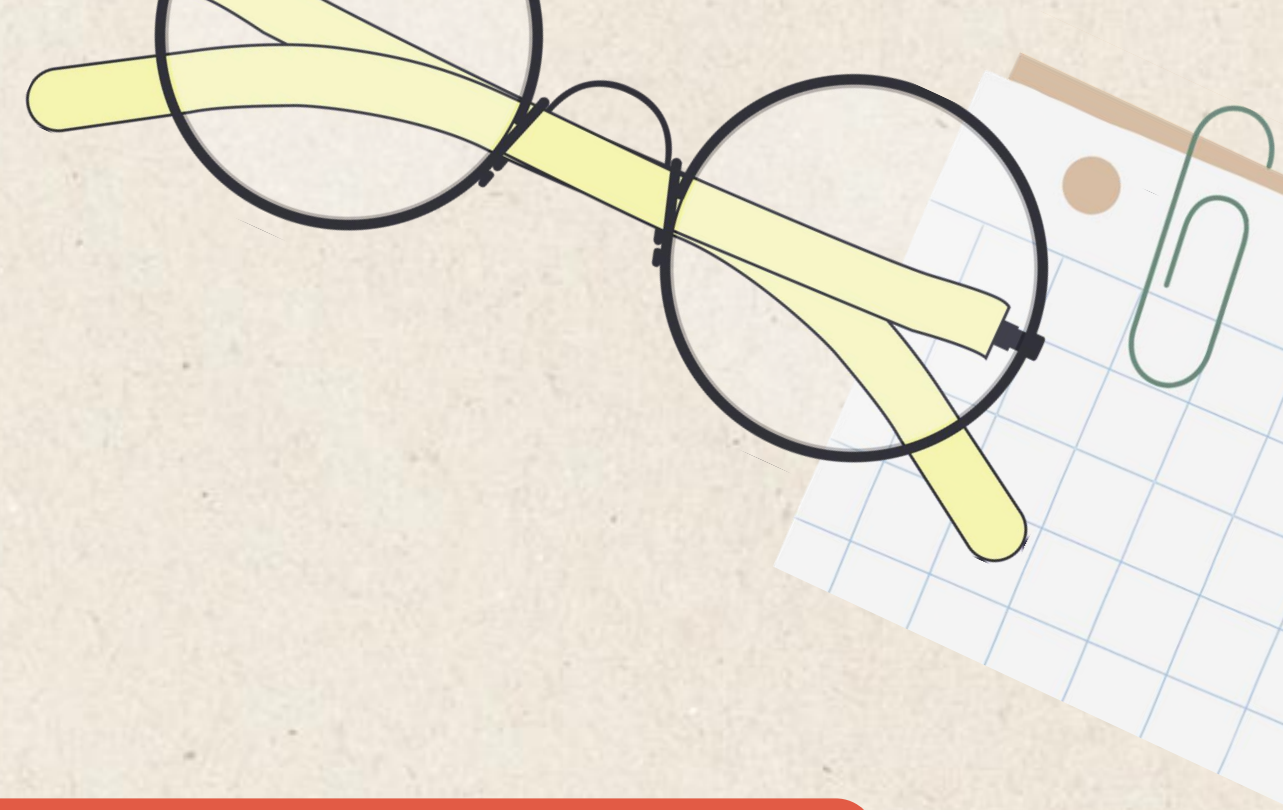


- Very satisfied
- Satisfied
- Neutral
- Unsatisfied
- Very Unsatisfied

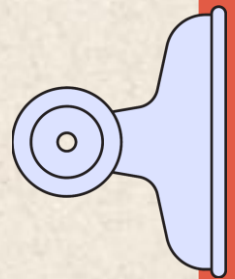
### **Satisfaction with structure of ETD Platforms**



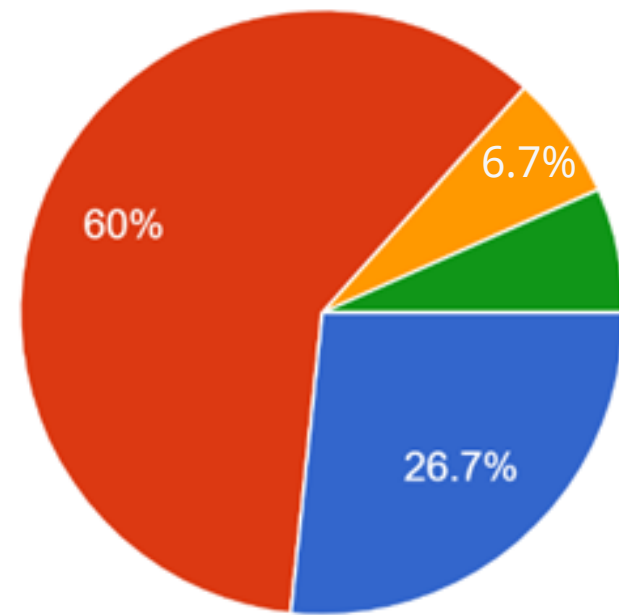
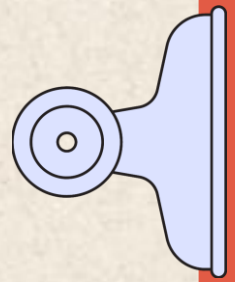
**CONTD...**



**Satisfaction with Availability  
of Alternative formats of ETDs**



**CONTD...**

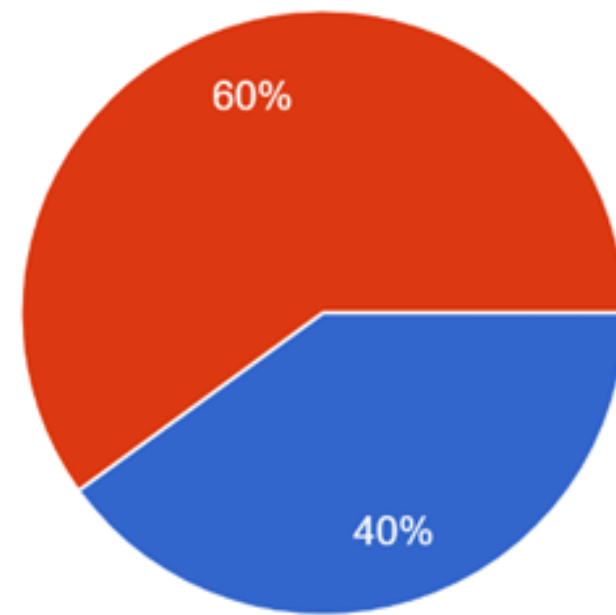
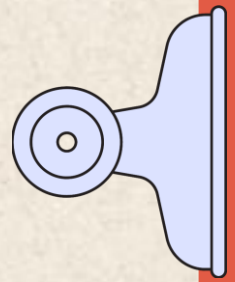
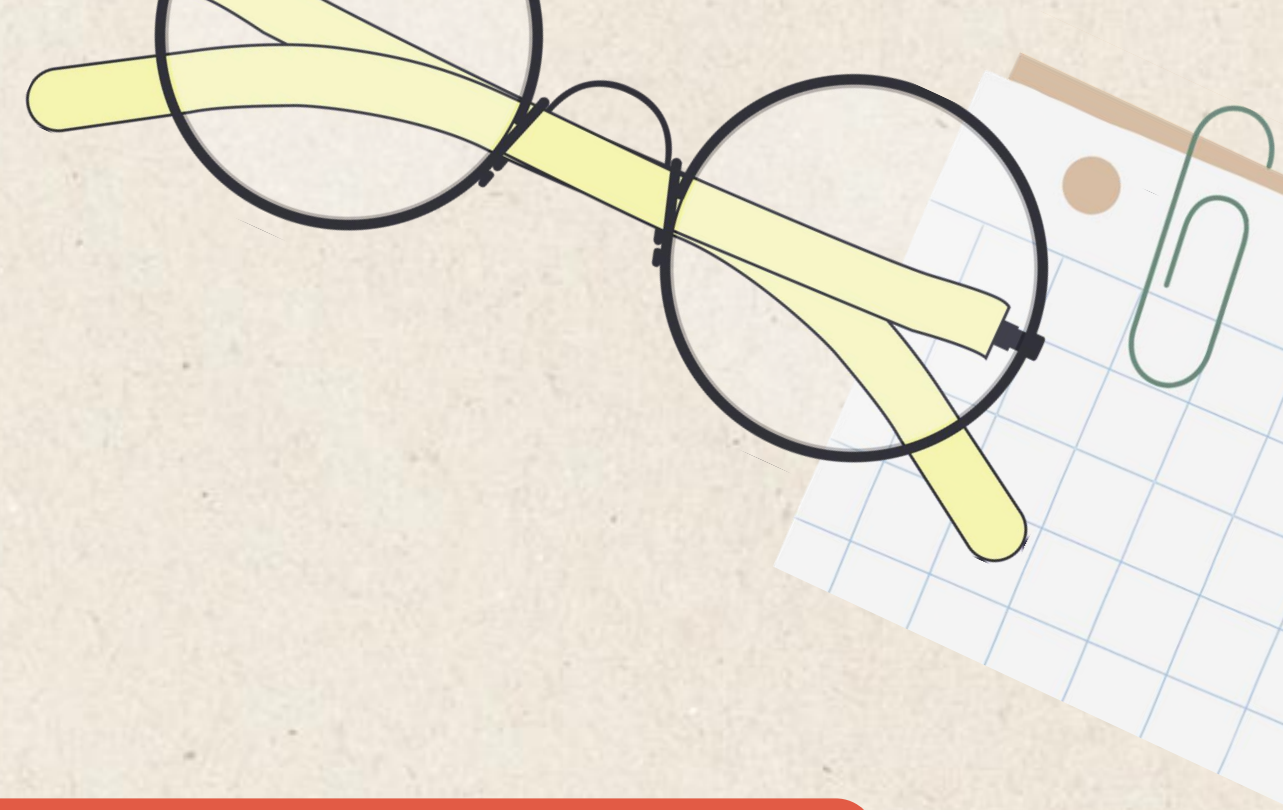


- Very confident
- Confident
- Somewhat confident
- Not very confident
- Not confident at all

### **Confidence in ETDs Usage**



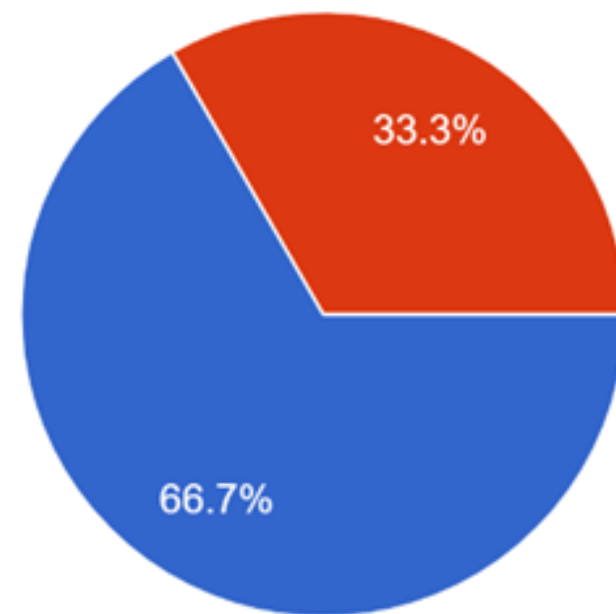
**CONTD...**



- Yes
- No

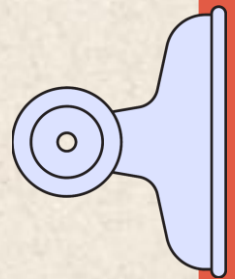
**User Continuity**

**CONTD...**



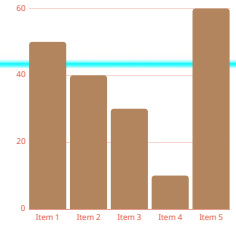
● Yes  
● No

**Effect of User Challenges  
on productivity and  
learning experience**





## MAJOR FINDINGS



- Through the survey-based approach, we gained valuable insights into the challenges faced by users of Electronic Theses and Dissertations (ETDs). Participants highlighted a range of difficulties encompassing navigation complexities, readability issues, and accessibility barriers. These challenges collectively impact the overall user experience and hinder effective engagement with ETD platforms.

2. By investigating factors that influence user experience and accessibility in the context of ETDs, we discovered that user interface design, information architecture, searchability, readability, and multimedia integration play pivotal roles. Findings revealed that suboptimal user interface design, lack of clear information organization, limited search functionality, and readability concerns contribute to user frustration and hamper the accessibility of ETD platforms.



3. The survey responses shed light on the impact of the identified challenges on the discovery and utilization of ETDs. Participants who reported moderate to considerable difficulties in navigation and finding information expressed decreased satisfaction and efficiency when interacting with ETD platforms. Additionally, challenges related to readability and accessibility hindered the effective utilization of multimedia content, limiting its educational potential.



## **RECOMMENDATION**

**Navigation and  
Information Discovery**

**Readability  
Optimization**

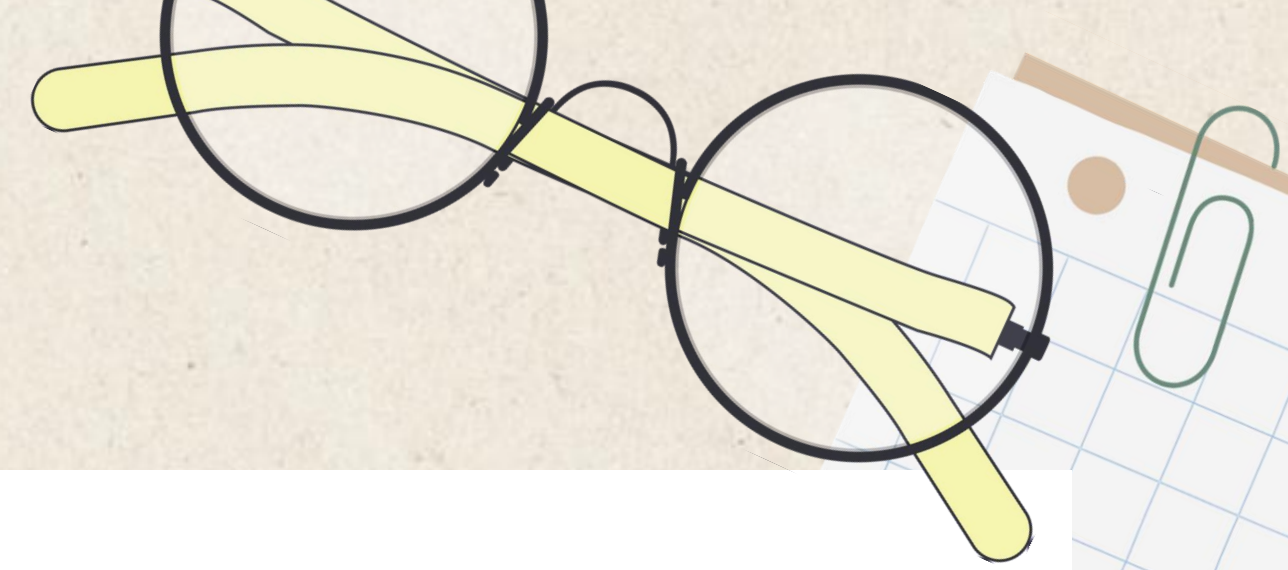
**Search Functionality  
Enhancement**

**Multimedia  
Accessibility**

**Enhancing  
Accessibility**

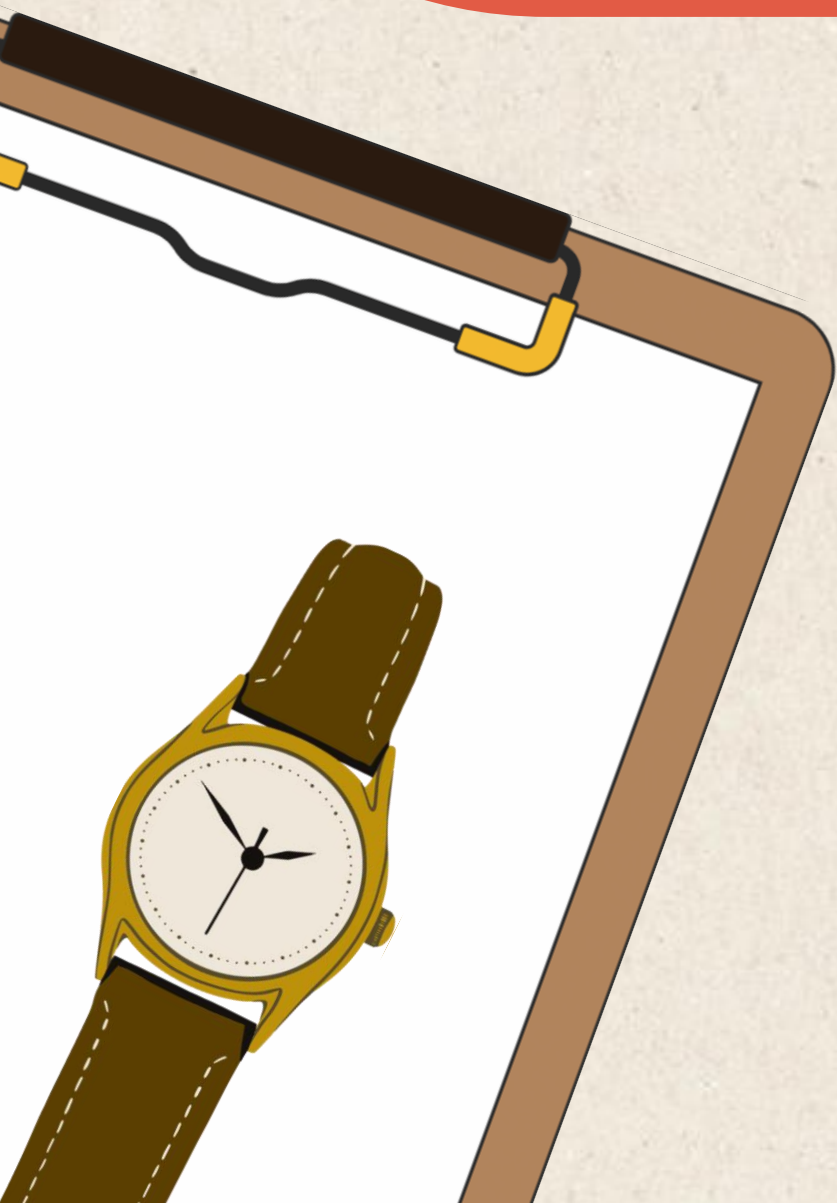
**User Feedback and  
Continuous Improvement**





## CONCLUSION

This research has unveiled the multifaceted challenges affecting the user experience and accessibility of Electronic Theses and Dissertations (ETDs). Through survey insights, we identified navigation complexities, readability issues, and accessibility barriers as significant hindrances. These findings stress the urgency of optimizing ETD platforms, enhancing navigation, readability, and accessibility features. By bridging these gaps, we can create an environment where ETDs serve as seamlessly accessible repositories of knowledge, fostering inclusive academic engagement for users of all backgrounds and abilities.





Thank  
you!

