Online Learning
— Define Phase

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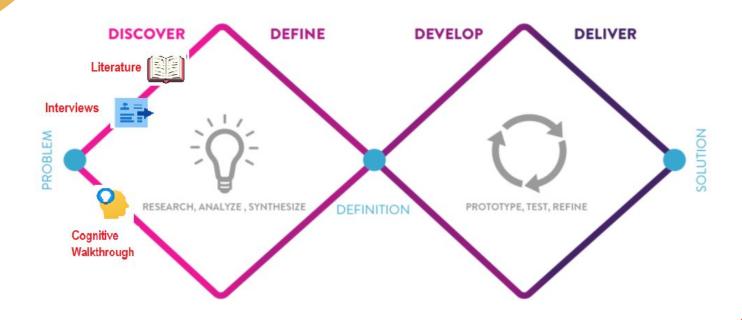
OUTLINE

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01

Discovery Phase Summary

Background Research Methodologies

1. **Interviews**
   - Interviews with informants (teachers)
   - 7 Interviewees varies in age 30-80 years.
   - Teaching Experience (2-31 years)
   - Academics (College and University)

2. **Secondary sources of Data**
   - Online groups on Facebook (Teachers teaching during Covid-19, Teachers using zoom and distance learning resources)
   - Discussion forums on blended learning
   - Scholarly articles, journals and academic publications on Lockdown and Online Teaching.

3. **Media walkthrough**
   - Engaging participants directly with an app's interface.
   - Observation and documentation in a step-by-step manner
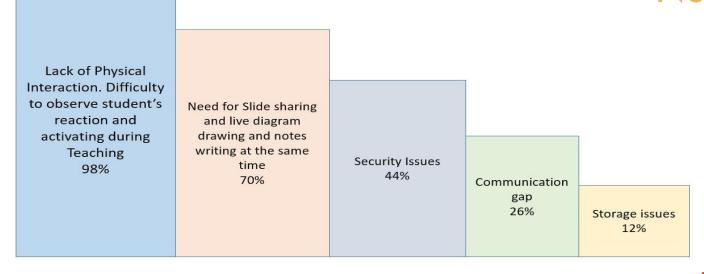
02

User Goals

Teachers' Issues and Challenges

1. Security Issues. (ZoomBombing)
2. No multiple cameras or multiple screen share.
3. Communication Gap.
4. Screen layout could be better suited for interactions.
5. Bandwidth requirement issues & connectivity issues.
6. Missing functions such as polls and whiteboards/drawing.
7. Chats are hard to handle and can't be recorded.
8. Can't monitor all breakout rooms at once.

User Goals for online teaching apps –Teachers' feedback

1. Prefer face-to-face interactions with students.

2. Reassurance and feedback from students in real-time.

3. Link sharing for article, videos, journals, etc.

4. Multiple cameras and shared screens.

5. Whiteboard functions and Overlay.

6. Stable internet connection and audio/video quality.

7. Adaptation to exercises, lab work, animations and simulations

03

Design Challenges & Requirements

Problem Analysis and User Need

Lack of Physical Interaction. Difficulty to observe student's reaction and activating during Teaching
98%

Need for Slide sharing and live diagram drawing and notes writing at the same time
70%

Security Issues
44%

Communication gap
26%

Storage issues
12%

Design Challenges

- User interviews might not cover enough user groups.
- It's challenging to add new features to an interface while still keeping it simple and concise.
- Target user group might be too large and still needs to be narrowed down.

Design Requirements

Improve the existing Service or Function experience rather than introducing any new function.

1. Increase Interaction between teachers and students

2. Security Vulnerabilities

3. Writing on slides as overlay

4. Storage as Real-time recording and delivering

5. Increase students' Feedback (Chat and Contacts Management)

6. Calendar Routine

04

Personas and Scenarios

Primary Persona

1. **Age Range -** 37 to 80 years

2. **Teaching Experience-** 12 to 33 years

3. **Student Type-** Undergraduates and Graduates

4. **Specific-** Teachers who use Board and PPT both in class teaching

Secondary Persona

1. **Age Range -** 27 to 35 years

2. **Teaching Experience-** 2 to 15 years

3. **Student Type-** Graduate and Post-Graduate Research Students

4. **Specific-** Teachers who mainly use PPT for classroom teaching

Next Plan

1. BrainStorming and Analysis

2. Prototyping (interactive web experience with partial functioning implementations)

THANKS