A Case Study on Accessibility of Document Scanning Apps

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Introduction

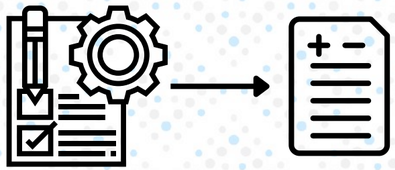
Mobile document scanning apps enable greater access to printed information for **blind and low-vision (BLV) users,** but are often blocked from using them due to their inherent visual nature and other accessibility problems

Methodology

Application Selection

User Testing & Interviews

Accessibility Heuristic Evaluation



Analysis & Redesigns

Evaluation of Redesigns

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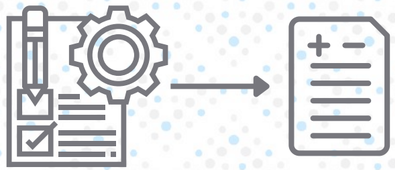

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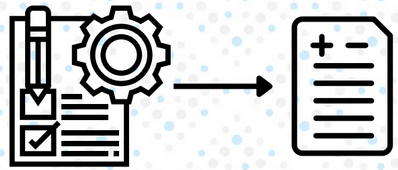


Analysis & Redesigns

Evaluation of Redesigns

Redesign Proposals & Mockups

Camera & Audiovisual alts

Visual-based & confusing session handling

Difficult text extraction

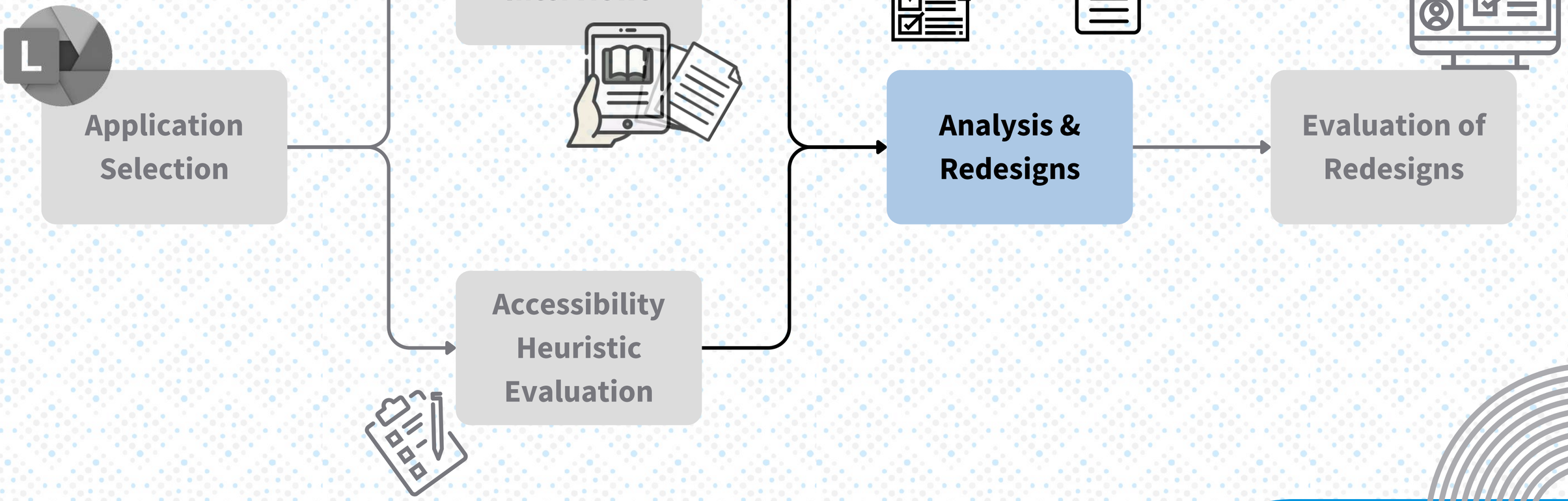
Inefficient content sharing

Guided Mode

Screen-reader friendly streamlining

Multi-page functionality

Methodology



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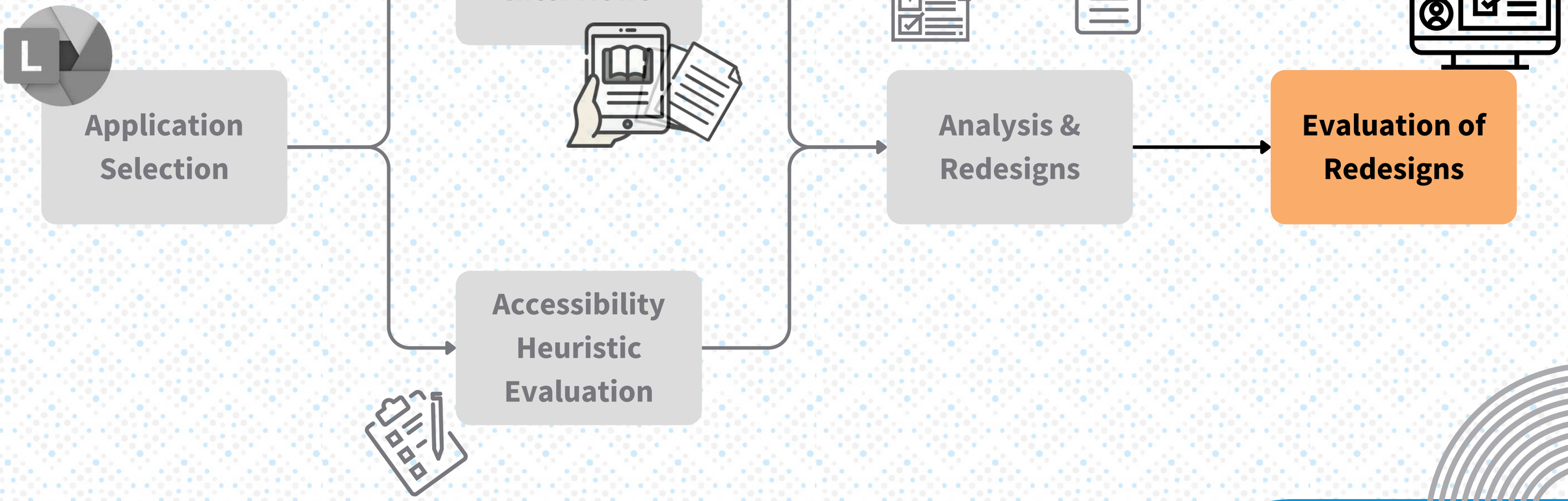
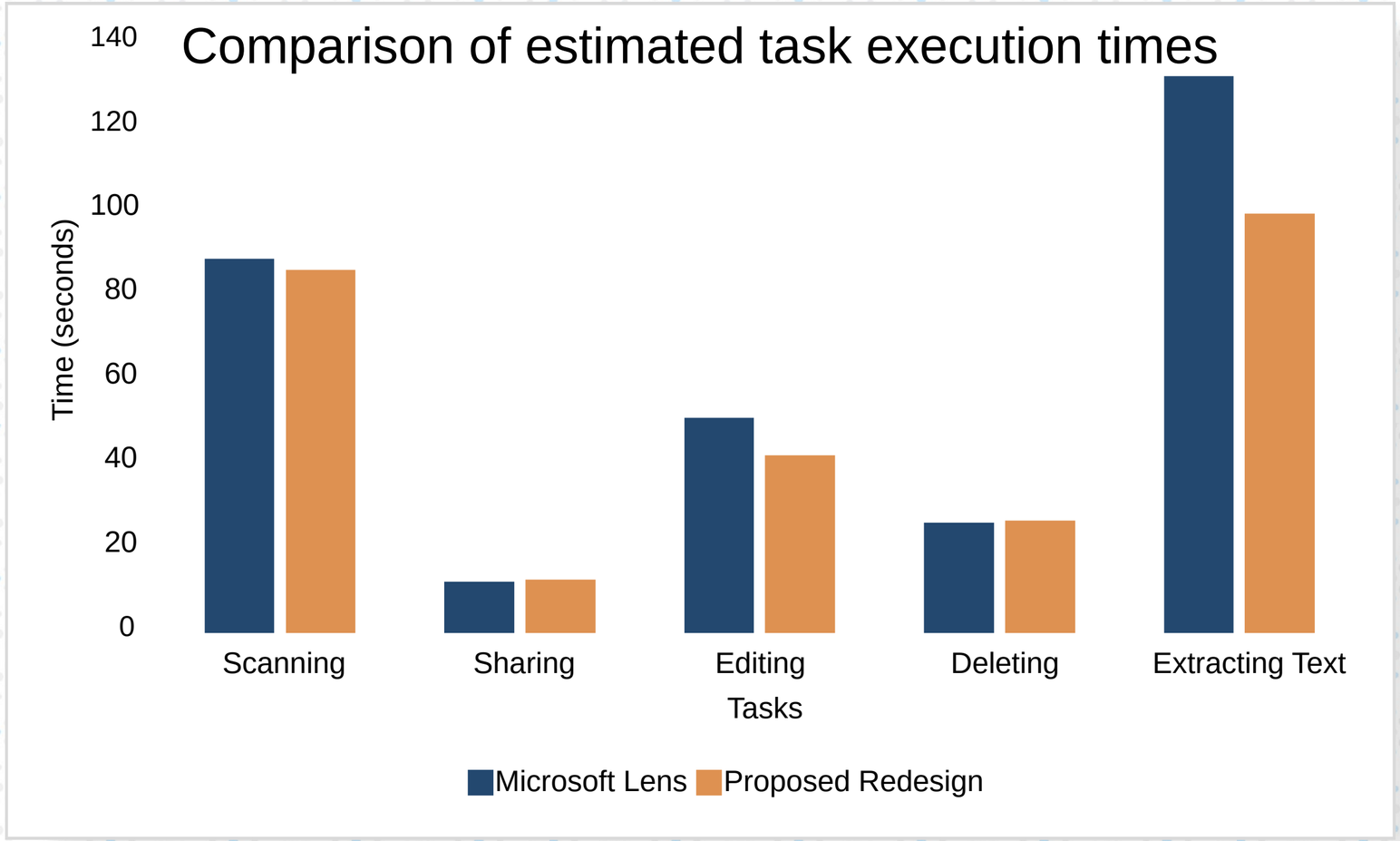


Results

Blind FLM + GLM Evaluation



We applied Blind FLM, an extension of the Fingerstroke-Level Model tailored for smartphone screen readers. To improve accuracy, we substituted its gaming-based time values with those from the Gesture-Level Model (GLM), to better reflect typical smartphone use.

CONCLUSION

- Ordinary usability barriers force **BLV people** to rely on **sighted help.**
- **Combined** user & expert evaluations uncovered wide range of issues.
- Modified **GLM models** for screen readers show **improvements** in task time completion.

THANK YOU