A Collaborative Digital Platform for Charity Thrift Store Workers

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Boishakhi Ghosh Mukta

Boishakhi Ghosh Mukta is currently attending Østfold University College as a Master's student. Currently she is in 2nd year, doing her master's thesis titled "Development and Assessment of Gamified Learning Management System Targeted at Higher Education".

Her research interest lies in User Experience(UX) Design, Information System Security, and Educational Technologies.

Aims and contribution of our study

In our paper we aimed at

- Creating a collaborative digital platform specifically designed for charity thrift store employees.
- "How can a collaborative digital platform improve the efficiency and effectiveness of communication and task coordination among workers in a charity thrift store?"

Contribution of our study

- We came up with the idea of a digital platform, which resulted in two promising solutions, a digital dashboard display with a stylus and a mobile application.
- Low-Fidelity prototypes of mobile application.

Background of our study

- Creation of a collaborative digital platform for charity thrift store for improving the efficiency and effectiveness of the store's operations by leveraging the principles of PD and CSCW.
- Our study is based on a Clothing Center, which has provided free clothing to more than 1,600 people since May of 2022.
- The clothing center exemplifies how charitable organizations can have a significant impact on the community.
- Our proposed digital platform, which will help similar organizations by streamlining the donation and inventory management processes by improving communication and coordination among employees.

<u>Methods</u>

Observation

- □ First Session
- Second Session
- Interview
- Workshop
 - □ First session focused on ideation of the artifact
 - Second session about implementation of the ideation from the first session

Charity Thrift Store



Figure 1: Different part of Thrift Store

Observation

First session

- Day to day activities
- Collaboration patterns
- □ Interaction among staff members
- Interaction of customers with staff members.

Second session

- □ Visit to warehouse to observe activities
- Collaboration and cooperation inside the warehouse
- Overall setup of the store and warehouse



Figure 2: Manual Dashboard inside warehouse.

Interview

- The interview was conducted to gain a deeper understanding of the thrift store's daily work processes and communication patterns among staff members.
- Semi-structured interview with the founder of the thrift store.
- Pre-prepared open-ended questions facilitated discussions on topics including tasks, workloads, and communication systems used within the store.
- Throughout the interview note was taken and audio recording were made due to accuracy of data.

<u>Workshop</u>



Figure 3: Photos from workshop activities

<u>Result</u>



Figure 4: Designed Application Interface

<u>Result</u>



Figure: Homepage

Figure: To-do list

Figure: Work Schedule

Figure: Hold Items

Future Work

- As next step, we will conduct separate evaluations both for the application and digital dashboard.
- Create a high fidelity prototype and provide them.
- Gather feedback and insights to improve applications performance and user interface.
- Evaluate the efficiency metrics comparison between existing method and proposed platform.

Conclusion

- Our study revealed valuable insights into the daily work process, communication patterns and needs of the staff which brings potential opportunities for technological intervention.
- Highlights the importance of PD in developing technological solutions that meet the needs of users and contribute to their success and productivity.