TECH WITH ME

more accessible tech support system for elderly

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Abstract

[Background] With an ageing society and the rapid evolution of technology, older people's **increasing demand** on digital skills learning stands in contrast to the **declining learning and cognitive abilities** that often come with age.

[Problem] The development of accessible IT learning tools is significant for older individuals seeking IT training support, ensuring they **receive timely and comprehensive assistance.**

[Purpose] This research aims to **overcome challenges** encountered by older individuals during their IT learning process, while also introducing **a solution encompassing both an online app and offline service design.**

[Methodology] The insights and the prototype are founded upon the research methodology involving **literature reviews, field studies, interviews, usability tests**, etc.

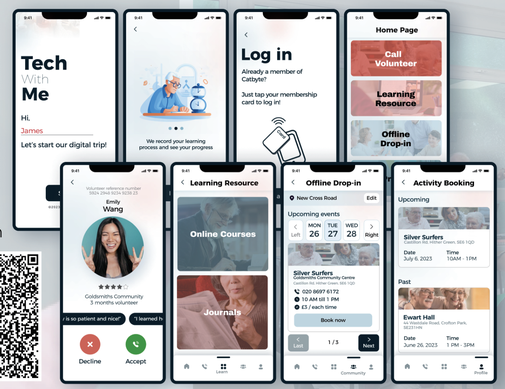
Introduction & Background

- The growth of the **aging population** and corresponding market expansion
- The **mounting need** to enhance IT skills among older individuals, juxtaposed with **challenges** they encounter
- The **shortcomings in accessibility and engagement** prevalent within existing solutions

Design

The project offers an integrated solution comprising an **easy-to-use mobile app** and specialized **subsidiary cards with NFC technology.**

Application Design

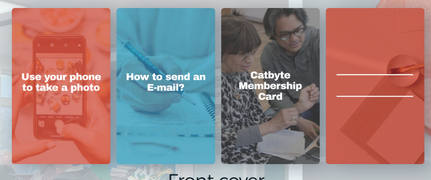


Prototype presentation

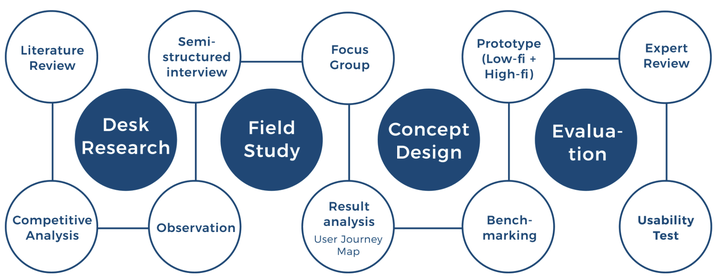
Onboarding & Log-in pages

Main features
- Call A Volunteer
- Learning Resources
- Offline Drop-in
- Profile

Tech Card



Methodology



During the primary research, the study involved the **participation** from

3 experts **5+** volunteers **10+** older learners

Test & Evaluation

- **[Usability Test]**
  - **Task 1 :** Go through the **"Call A Volunteer"**
  - **Task 2:** Go through the **"Learning resources"**
  - **Task 3:** Go through the **"Community"**
- **[Interview & Questionnaire]**

Usability measurement index:
(a) ease of use
(b) satisfaction

Demographic information:
(a) age
(b) device usage frequency

Result

Participant cohort demonstrated remarkable **enthusiasm for engaging with this design**, the **"Calling a Volunteer" and "Community"** features gained equal preference.

The easiness of "Volunteer"	The easiness of "Learning Resource"	The easiness of "Community"	Satisfaction
3.67 / 5	3.67 / 5	4.33 / 5	4.67 / 5

Conclusion & Future work

The proposed prototype is **satisfying and accessible** for most older individuals, effectively **addressing issues** like limited drop-in availability, inadequate access to senior-oriented digital resources, and visual accessibility gaps in existing solutions.
In the future, to enhance the validation of the **service design aspect (including the Tech Card)**, collaborating with certain communities for **pilot implementations** would provide a more comprehensive assessment of the **design's feasibility.**