

# GENDERED DESIGN IN STEAM (GDS) - PROJECT TEAM POSTERS

GDS, Carleton University

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GENDERED  
DESIGN IN  
STEAM



ID50

# Designing mobile services for ageing women in Malaysia



Malaysia reached its demographic trajectory to become an aging society in 2020, and the aged population remains low in adopting mobile technologies. To improve the participation of this user group and align them with technological development, this project aims to explore mobile usage behaviour, and expenditure on telecommunication among female elderly in Malaysia and propose a framework to better design mobile services for them. To achieve this objective, the research team conducted quantitative studies and a qualitative study involving female elderly participants to explore their use of mobile services through the lens of intersectionality.



The elderly population in Malaysia is adopting mobile technologies

## Team

**Ah Choo Koo**

Principal Investigator  
Associate Professor, MMU

**Chui Yin Wong**

Co-principal Investigator  
UX Architect, Intel Corporation

**Yvonne Lee**

Project Member  
Lecturer, MMU

**Wan Teng Lai**

Project Member  
Senior Lecturer, MMU

**Hazwan Mat Din**

Project Member  
Research Officer, Universiti Putra

**Jia Yue TAN**

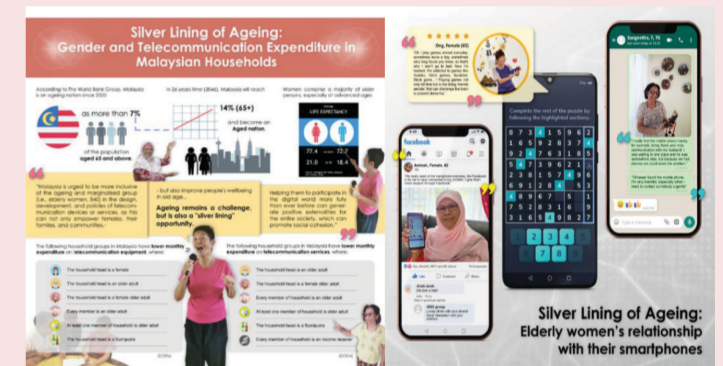
Project Member  
Graduate Research Assistant, MMU

## Institution

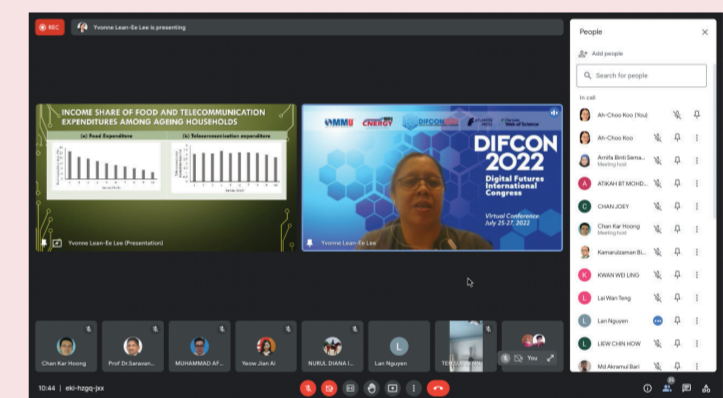
Multimedia University (MMU),  
Malaysia

## Findings and Outcomes

- Through the intersectionality approach, the study identified how the mobile use preferences, behavioural patterns, and expenditure on telecommunication among female elderly in Malaysia.
- The quantitative studies of microdata revealed that the access to telecommunication services and equipment is generally lesser for older adults, especially for female older groups. Ability to access and affordability are the key factors for equal opportunity to access the Internet, mobile technology and services to these user groups.
- The qualitative studies explore the relationship of aging women with their use of smartphones and mobile services in their everyday lives, along with their learning ability and motivation to improve their digital literacy.
- The team submitted an infographic work to Multimedia University - Faculty of Creative Multimedia's exhibition event series, "bisik" and "laung" (which means "whisper" and "shout") in June 2022.
- The team authored and presented two papers at Digital Futures International Congress (DIFCON 2022) conference organized by Multimedia University (MMU), dated 25-27 July 2022. Phase 2 study was accepted in an indexed journal (International Journal of Technology, Scopus Q2).



Submitted creative work for "bisik" / "whisper" exhibition event



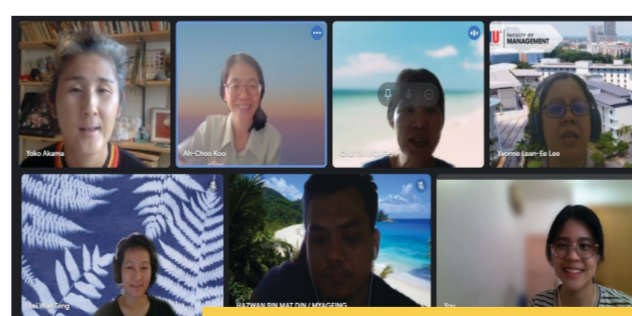
One of the papers is being presented by Dr. Yvonne Lee

**"Everybody is moving or transforming into digitalisations. And it has become more of a challenge for the elderly. How can they access internet and the digital tools and all those things for them to get information?"**

— Chui Yin Wong

## Methods

- Microdata acquired from the Department of Statistics Malaysia's Household Income, Expenditure, and Basic Amenities Survey (HIES), which occurs once in five years, was used in Phase 1 as a Quantitative data study.
- Qualitative methodology was used in Phase 2. The team conducted nine case studies via Zoom video sessions to gather information from elderly women participants.



Meeting and discussion with regional expert, Dr. Yoko Akama from RMIT, Australia

## Lessons & Future Directions

- Achievements from this project include the collaborative effort working across different institutions and knowledge sharing with multidisciplinary experts such as gerontechnology, user experience, gender study, and creative multimedia that benefited this study and will benefit future endeavours.
- The project team was exposed to the intersectionality approach through this research project that broadened their perspectives.
- The research outcomes will be used to inform policy makers, technology innovators and designers for greater impact in regard to societal and gender development.

Learn more



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