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A comparison Study on User Acceptance of Digital Healthcare Services Among M40 and B40 Community in Selangor: A Study on SELangkah Application

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ABSTRACT

Over time, the global digital healthcare industry has started to take shape with the aim of offering benefits to all residents. Much effort has been put into improving the effectiveness and accessibility of the healthcare system in Malaysia for the benefit of its people. The Selangor state government is working to make all communities safer and healthier places, and one of its initiatives is the SELangkah application. Nonetheless, there are still concern over the take up of digital healthcare services among citizens especially those in the low-income and middle-income communities; B40 and M40. Previous study has shown that different economic status has an impact towards the acceptance level in technology services. Therefore, this study utilises qualitative research method to investigate the state of user acceptance in digital healthcare services among B40 and M40 users in Selangor through the case study of SELangkah application. Focus group discussion was conducted with over 10 participants from Selangor to evaluate and compare the acceptance level of digital healthcare services between both income group with the instrument development were guided by the Extended Technology Acceptance Model (ETAM). The area of group discussion covers users' perceived usefulness, perceived ease of use, attitude, behaviour, external challenges, and actual use. The findings show that both M40 and B40 group find the application to be beneficial; in addition, they believe there should be more awareness campaign to promote the application to the public. A few clear differences between the acceptance level of the two groups would be the simplicity of the language used in the application, the recommended features, and future needs between the two groups. M40 group find no difficulties to navigate the application but B40 group mention that the used words can be simplify. While M40 group recommended for gamification and high engagement features; the B40 group is looking more at practicality such as more information or linkages to nearby clinic. Nevertheless, both groups did not find major difficulties and they see a lot of benefit of the application. This will form the fundamental basis for future research efforts aimed at closing the technology acceptance gap and enabling a wider population to use technology as a tool to have a healthier life.

Keywords:

SELangkah application; digital healthcare; focus group discussion; M40; B40; user acceptance

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1. Introduction

The global digital healthcare landscape has seen significant changes in recent years, driven by the overarching goal of extending social benefits to every citizen [1, 2]. The emergent technologies are undergoing fast and unpredictable evolution [3]. During the COVID-19 pandemic, the adoption of digital transformations across various industries and within society [4]. Digital technologies offer significant potential and possess the capacity to revolutionize healthcare by transforming the methods through which we gather, analyze, and present health information. Digital healthcare encompasses the utilization of digital technology, including mobile devices, wearable sensors, and cloud computing, for the enhancement of healthcare service delivery and management. The incorporation of digital technologies in healthcare has the potential to enhance the accessibility and adaptability of public healthcare services [2]. Nonetheless, owing to the absence of formal regulations and guidance, corporations and governments, which are significant stakeholders, encounter challenges when verifying and endorsing novel digital health solutions. Therefore, thorough scientific research is imperative before implementing a digital product in the healthcare sector. Digital technology has opened numerous avenues for shaping the future of healthcare and ensuring the effectiveness of public health initiatives [5].

Prior research found that digital healthcare services among citizens low-income and middle-income communities' different economic status has an impact towards the acceptance level [6, 7]. The disparities in economic conditions have been identified as influential factors affecting the extent to which individuals in these communities embrace digital healthcare services. The intricate relationship between economic status and the acceptance of such services underscores the need for a nuanced understanding of the barriers and facilitators that shape the adoption patterns within these diverse demographic groups [7].

Low-income communities often face unique challenges in accessing and utilizing digital healthcare services, which may stem from limited financial resources, inadequate digital infrastructure, or a lack of technological literacy. On the other hand, middle-income communities might encounter different barriers related to socio-economic factors, education levels, or perceptions about the efficacy and relevance of digital health tools [6]. These findings will emphasize the importance of tailoring digital healthcare interventions to address the specific needs and circumstances of individuals in varying economic brackets. Access to high-quality health information is crucial for enhancing overall population health, particularly among lower-income demographics such as the less educated, unemployed, and widowed individuals [5]. Strategies aimed at fostering acceptance and utilization should consider socio-economic disparities, promoting inclusivity, and offering targeted support to enhance accessibility and awareness among populations with diverse economic backgrounds. Such nuanced insights can contribute to the development of more effective and equitable digital healthcare solutions that resonate with the unique challenges and preferences of individuals across different economic strata [8].

In Malaysia, there is a growing trend of utilizing mobile devices for the provision of healthcare services and dissemination of health-related information [9]. In Malaysia, the field of digital healthcare has witnessed a swift expansion in recent years. This growth can be attributed to advancements in technology, escalating healthcare expenses, and a mounting demand for healthcare services that are more accessible and convenient. According to the research conducted by Wong & Hazley [10] digital healthcare in Malaysia is experiencing an upward trend and is anticipated to expand further in the upcoming years. Nevertheless, some challenges need attention, such as safeguarding data privacy and security, and bridging the digital gap in rural regions. Despite these challenges, Malaysia holds the capacity to revolutionize its healthcare system, enhancing accessibility

to medical care, decreasing costs, and consequently improving health outcomes for its citizens [11, 12].

The Ministry of Health Malaysia (MOH) serves as a facilitator in advocating for the integration of systems and applications in Malaysia's healthcare services. In partnership with stakeholders from both the public and private sectors, MOH has formulated numerous initiatives. According to Jembai *et al.*, [13] these initiatives include the implementation of the Telemedicine Act in 2018, the Malaysia Health Data Warehouse, the development of Electronic Medical Records (EMRs), the launch of a national Health Information Exchange (HIE), and the advancement of mobile health applications like MySejahtera, MyUBAT, BookDoc, Naluri, Doctor Anywhere, Doc2Us, DoctorOnCall, and SELangkah.

According to Ang *et al.*, [14], The Selangor State Government launched the SELangkah mobile application, initially as a supplementary tool to control the spread of Covid-19 in the state. Since its introduction, the application has continuously expanded its features to offer improved digital healthcare services to the public [15]. The SELangkah app has introduced key features that are widely utilized by users in Selangor state, including senior citizens [16]. SELangkah application with the motto 'Enhance Safety with Us,' aiming to promote digitalization among Selangor citizens. Beyond its primary focus on Covid-19 tracking, the application has been enriched with additional features. These include a lifelong health record, SELangkah cashless wallet, health screening, vaccination programs, Covid-19 home assessment tools, monitoring of dependent vaccinations, and the identification of high-risk Covid-19 areas [14, 17]. Rekod Hayat Selangor program provides various benefits to Malaysian citizens. This is achieved through the integration of electronic medical information and lifelong health records, offering convenient access to private health records and medication.

Furthermore, the application can be utilized at numerous clinics and hospitals. Notably, SELangkah also brings substantial advantages to citizens of Selangor by simplifying health screenings. It plays a crucial role in the Saring Selangor initiative, which aims to provide complimentary health screening services. This facilitates the identification of individuals' health history and potential risk factors [18]. An additional advantage of the SELangkah application is the Easy Access to Digital Health Records. This feature enables individuals to effortlessly access their digital health records, providing them the opportunity to examine their health data, monitor their health progress, and gain a detailed understanding of their medical history. Furthermore, the Selangor Saring program encourages free registration and offers redemption of screening coupons, along with maintaining a comprehensive health record for subsequent treatment [19].

Past studies findings highlighted the user's utilization rate of digital healthcare among Malaysians in various perspectives. However, the discussion on different household income groups is still lacking [20]. This study is vital in that it could aid in better understanding the level of technology adoption and usage of two main groups of users namely M40 and B40 [6]. Middle 40% (M40), and Bottom 40% (B40) represent two different household income groups [21]. DOSM defines household income as the entire income received by household members on a regular and accrual basis, whether weekly, monthly, or annually, and that can be used to cover current living expenses.

M40 (Middle 40% income) represented middle-class income individuals. The household income is between RM5,251 and RM11,819. Meanwhile, B40 (Bottom 40% income) group is low-income individuals, with household incomes less than RM5,250. Comparison analysis plays a pivotal role in understanding and differentiating between two distinct income groups, providing valuable insights that contribute to informed decision-making, policy formulation, and the development of targeted interventions. It serves as a powerful tool for unraveling the complexities of differences between income groups, offering a foundation for creating targeted, equitable, and effective strategies that contribute to societal well-being and progress [7]. A study examining the B40 income groups in the Klang Valley, Malaysia, revealed that from March to May 2020, which aligned with the enforcement

of MCO 1.0, a mere 19.5% of individuals from low-income backgrounds accessed healthcare services. This rate was 13.6% less than the usage recorded in the period after the MCO. The results from the previous study suggested that healthcare engagement among the B40 income group in Selangor was significantly more efficient during the MCO [22]. In Malaysia, 81% of the population relies on their personal income to cover escalating healthcare expenses, and only 22% have health insurance. This scenario poses a substantial financial strain on individuals in the M40 group, particularly considering that in 2019, 48% of M40 households sought outpatient healthcare services in private medical facilities [23]. The gap is not knowing the actual comparison when it comes to digital acceptance between M40 and B40 group which is significantly in line with the Malaysian Health Transformation Initiative by the Ministry of Health. Due to the above reason, this study conducts comparison research in the context of different income groups by formulating the following research objective:

- i. To determine Selangor M40 and B40 group of users' initial feedback and perceived usefulness of the SELangkah application.
- ii. To examine Selangor M40 and B40 group of users' attitudes and behaviour in using the SELangkah application.
- iii. To investigate challenges faced and the external factors that could affect the use of the SELangkah application among M40 and B40 groups of users.
- iv. To study the current and future needs of users to improve their health and daily lifestyle.

In this context of study SELangkah application, Selangor M40 and B40 group of users are the subjects of the study. The qualitative measure of the usage of this application from the two groups of participants is highly focused. Thus, in line with the above research objectives this study is guided by the following research questions:

- i. What are initial feedback and perceived usefulness of the SELangkah application among B40 and M40 users in Selangor?
- ii. What are the differences of attitude and behaviour in using the SELangkah application among B40 and M40 users in Selangor?
- iii. What are the differences in the challenges and external factors that could affect the use of the SELangkah application among B40 and M40 users in Selangor?
- iv. What are users' current and future needs to improve their health and daily lifestyle through the SELangkah application?

2. Methodology

2.1 Research Design

The research adopted a qualitative exploratory approach which are focus group discussion to investigate the user's experience using SELangkah mobile health application. The researcher examines the comparison on adoption of digital healthcare services among Selangor citizens with a different household income category. Focus group discussions, serve to elicit the perspectives of participants, which are influenced by their distinct social contexts, so providing a more nuanced understanding [24]. The objective of this approach is to offer an extensive dataset obtained through a focus group discussion conducted with two groups based on the household income, enabling researchers to delve deeper into the matters of the acceptability of SELangkah mobile application digital healthcare services by users.

ETAM was developed to illustrate how individuals' adoption of technology is influenced by their perceptions of its usefulness, ease of use, and actual usage of the system (Figure 1). The Extended Technology Acceptance Model (ETAM) is the most suitable theoretical framework for assessing user perceptions of usefulness, ease of use, acceptance, and technology adoption, alongside the actual utilization of the application [25, 26].

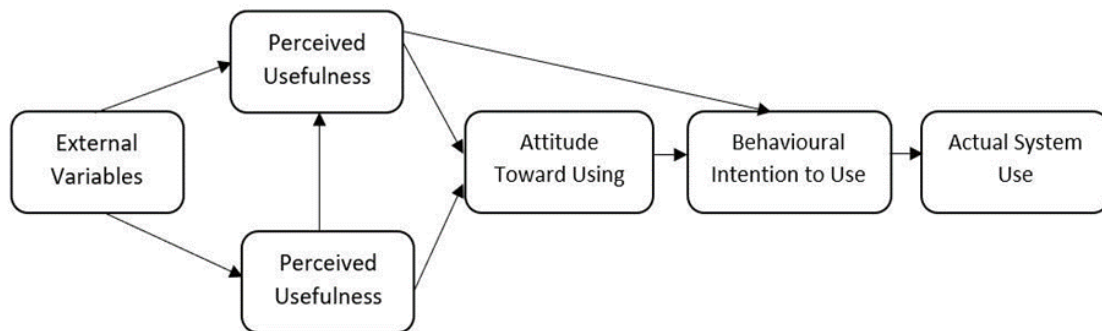


Fig. 1. Extension of Technology Acceptance Model (eTAM) developed by Venkatesh and Davis in 2000

2.2 Data Collection Procedure

Focus group discussions were conducted with a total of five participants in each group. The present study involves the deliberate selection of individuals or groups of individuals that satisfy specified criteria that are pertinent to the research being conducted [27]. Purposive sampling, a form of non-probability selection, is employed in this study to select participants who meet specific criteria. The criteria include being a resident of Selangor for at least five years, having prior experience utilizing digital healthcare services, specifically the SELangkah mobile application and falling under the classified group as shown in Table 1.

Table 1
 Household income classification in Malaysia

Household group	Income range (RM)
B40	Less than RM2,500 – RM4,849
M40	RM4,850 – RM10, 959

Prior to the commencement of the interview session, consent to participate in the discussion is obtained from the participants. The conversations are conducted using a semi-structured interview methodology, which was developed based on the Extension Technology Acceptance Model (eTAM) as presented in Table 2.

Table 2
 Focus group discussion protocol

Items	Questions
Engagement with participants	What do you think about the SELangkah application?
Users initial feedback and perceived usefulness	Do you find the SELangkah app to be useful?
Attitude and behaviour towards the application	i. Do you find the SELangkah app to be suitable for you to use? ii. When do you use the SELangkah application? for what purpose? iii. How often do you think you should use the SELangkah application? iv. Which features are most useful or relevant for you?
Challenges and difficulties using the application	i. Are there any difficulties in using the application?

Table 2. Continued

Focus group discussion protocol	
Items	Questions
	ii. Are there any parts in the application that you find it hard to understand? iii. Could you describe the quality of information provided inside the SELangkah application? iv. Do you feel secure when you use the SELangkah application? v. Do you trust the information that you see in the SELangkah application?
Users current and future needs	i. What are your current needs when it comes to improving your healthcare and daily lifestyle? ii. In the future, how do you think the SELangkah application can be utilised to improve your healthcare and daily lifestyle?
Exit questions	Any suggestion to improve digital healthcare services in Malaysia?

Focus group discussions were conducted separately for both groups from 5th to 12th July 2023. Participation in the discussion is voluntary. Four researchers attended both focus groups to record and facilitate the session and overall discussion were audio-recorded and transcribed verbatim.

2.3 Data Analysis

The researchers independently examined and transcribed the transcripts, using content analysis as a method to find recurring themes in the data. Each transcript was evaluated in turn, leading to the insertion of themes by the researchers to create a coherent coding framework regarding the participants' acceptance of the SELangkah application based on the comparison of the two groups. Codes were applied to the transcripts in order to distinguish distinct responses and limit the number of times a participant might be tagged for the same sentiment [28]. The researchers carefully considered each code till consensus was ultimately achieved.

3. Results

3.1 Focus Group Findings

The findings were gathered from the results of the focus group discussion with a total of 10 participants from B40 and M40 group who resides in Selangor. The presentation of results will be based on the four research questions; comparison of users' initial feedback and perceived usefulness, attitude and behaviour, challenges and difficulties, and current and future needs. The observed findings were based on collective and comparison of opinions that were gathered across the discussion. The results can be seen in Tables 3 to 6.

3.1.1 What are initial feedback and perceived usefulness of the SELangkah application among B40 and M40 users in Selangor?

From the findings as stated in Figure 2 and Table 3, there are differences in the comprehension level between M40 and B40 when it understands of digital healthcare. M40 group do understand rather well and in fact, they are not only familiar with digital healthcare, but also other type of healthcare services. As for the B40 group, their understanding is not strong as they do have misconception such as they perceive digital healthcare having a similar service like TouchNGo.

Nevertheless, both groups found the application to be useful, functional and beneficial. The B40 group however, acknowledge that they do not fully utilise the features provided in the application. As stated by Suhaimi *et al.*, [6] and Marzo *et al.*, [7] emphasized the crucial requirement for educational support for lower income group of users to improve their comprehension and bridge existing disparities. Their studies proposed further investigation strategies to enhance digital literacy and recommend interventions to empower individuals in lower-income demographics with the necessary skills for better technological understanding.

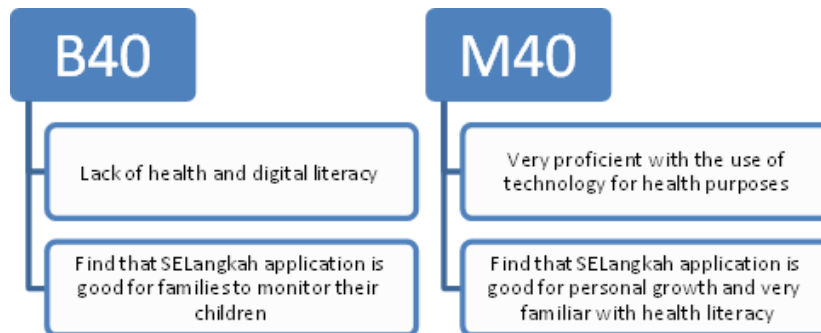


Fig. 2. Initial feedback comparison between B40 and M40

Table 3

B40 and M40 comparison: Users’ initial feedback and perceived usefulness

Focus group	Category of discussion	Observed findings	Quote
M40	Initial feedback	Participants are well educated, and they do know a lot about digital healthcare. In addition to just digital healthcare, they are also familiar with other types of healthcare such as primary care or urgent care.	(P1) It is how a person uses technology for healthcare purposes such as mental health, financial health, or any other types that are related to one’s health and lifestyle.
	Perceived usefulness	Participants found the application to be useful, functional and beneficial.	(P4) The application can track my health status. They also have other helpful function such as e-wallet, which is good and convenient.
B40	Initial feedback	Participants understanding is only at surface level and in fact, some have a misconception or inaccurate opinion about digital healthcare.	(P6) I think from what I know, digital healthcare is like Touch-N-Go and useful for people doing business.
	Perceived usefulness	Participants do find the application to be useful and beneficial however, they acknowledge that they do not fully utilise the available features.	(P9) SELangkah is easy to use and very convenient. However, I only use some of the basic features from the application.

3.1.2 What are the differences of attitude and behaviour in using the SELangkah application among B40 and M40 users in Selangor?

As stated in Figure 3 and Table 4, the M40 group were found to have a more positive response towards the application as they believe they might be using the application at least once a month. Their use of the application will depend as and when they find some of the features to be relevant of useful in the future. Features like mental health for instant, they find it to be possible for them to use it at least once a month. As for the B40 group, two features that they respond positively were the Mental Sihat (mental health effort) and Selvax. However, they only use the SELangkah application

during Covid and there was no continuation after that. Nevertheless, upon participating in the discussion, they do see a potential that they might use it again as now they are more exposed with other features.

This is in parallel with Marzo *et al.*, [7] findings that individuals with higher and middle incomes generally enjoy more favourable access to technology and healthcare facilities compared to the lower-income B40 group. The majority of M40 users are well-educated and exhibit a higher level of digital literacy, a factor that has been demonstrated to contribute to improved health outcomes.

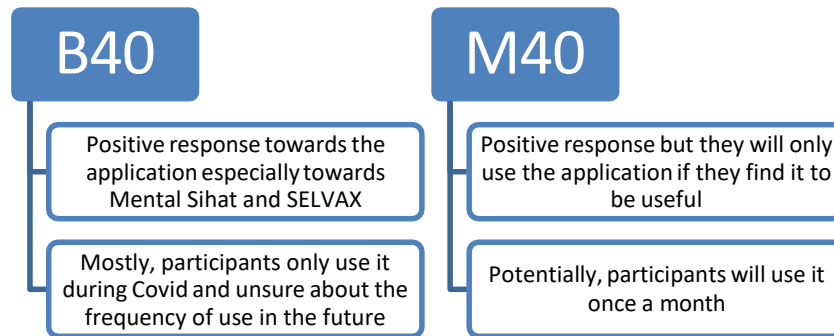


Fig. 3. Attitude and behaviour comparison between B40 and M40

Table 4

B40 & M40 comparison: Attitude and behaviour in using the application

FGD	Category of discussion	Observed findings	Quote
M40	Attitude and behaviour	Because of the usefulness, they will utilise the application when they find it to be necessary. They will explore the features that are found to be relevant from time to time.	(P2) I will use the application in the future but only when it is relevant to my needs such as if I need to like to check my health condition or for potential screening.
	Actual use	The participants believe they will use it around once a month especially on useful features such as the monthly mental health check.	(P4) If the e-wallet is better than other application, I will certainly use the application more in the future (P1) Now that I am more aware of the function especially for mental health screening, I may use it once a month (P7) We can check our mental health and vaccine matters and we can even navigate to nearby clinic for us to seek appropriate treatment.
B40	Attitude and behaviour	Participants react positively towards two of the features in the application; Mental Sihat and Selvax.	(P7) We can check our mental health and vaccine matters and we can even navigate to nearby clinic for us to seek appropriate treatment.
	Actual use	Despite the available features, they only use it during Covid, and they are uncertain if there would be any continuation afterwards.	(P8) Now that I know there are more features inside the application, I may use it again but not very sure about it. It depends.

3.1.3 What are the differences in the challenges and external factors that could affect the use of the SELangkah application among B40 and M40 users in Selangor?

From the results shown in Figure 4 and Table 5, both groups do not find any major difficulties in using the application and they are of similar opinion that the information provided are relevant and sufficient. However, for the B40 group, they do find the use of words in some parts of the application are too lengthy. Similarly, both M40 and B40 group do not have any difficulties when it comes to privacy and security as they to feel save when they use the application. Nevertheless, even though they trust the information inside the application, the M40 users are of the opinion that they will still

seek expert verification of any diagnose and the B40 group will still seek for face-to-face discussion with an expert as well.

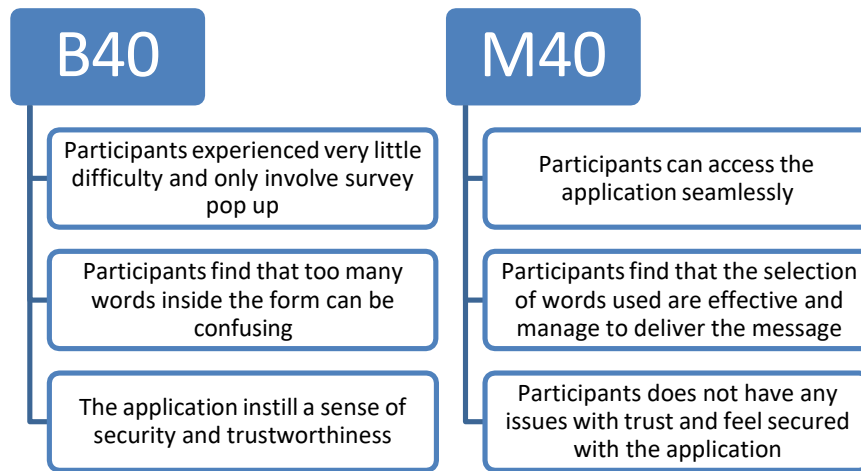


Fig. 4. Challenges and external factor comparison between B40 and M40

Table 5

B40 & M40 comparison: Challenges and difficulties while using the application

FGD	Category of discussion	Observed findings	Quote
M40	Difficulties	Participants can access the application seamlessly and they do not find any major issues with the app	(P2) So far, I did not face any issue or challenges while using the application. Perhaps just some problem with the internet connection but that is external issue.
	Information quality	The information stated inside the application were found to be relevant and sufficient. Participants do express suggestion to include WHO updates information inside the application.	(P1) All of the information is good and clear. Perhaps it would be good to have a section on WHO update though. (P3) The information is sufficient, but the service provided can include or utilise chat BOT like other application.
	Privacy and security	Participants do feel secure to use the application and they are able to use it confidently.	(P4) I feel secure while using the application and I have no worries over it
	Trust issues	Despite their trust with the information, they still find it necessary to look for professional expert verification for any health diagnostic results.	(P1) If it is a serious mental health condition, I will need to get second verification from professional. The information is sufficient but professional expert will give the confirmation.
B40	Difficulties	Participants do not experience any difficulties except for a mild annoyance when a pop-up survey appear, and they were asked to complete it frequently.	(P5) So far it is not difficult to use the application except for the pop-up survey that constantly appear.
	Information quality	Participants also find the information to be sufficient however, some words are too lengthy. They suggested to include information about special need children.	(P6) I prefer to read short and simple words so that it is easy to understand (P7) As a parent of special need children, I will be appreciative to have further information inside the application on how to monitor my kids. This will be useful.

Table 5. Continued

B40 & M40 comparison: Challenges and difficulties while using the application

FGD	Category of discussion	Observed findings	Quote
	Privacy and security	Participants do not have problem with privacy or security as they feel secure with the application, and they use it confidently.	(P8) I feel safe and secure and therefore, I am confident to fill in my data inside the application.
	Trust issues	They found the application to be trustworthy, but they still prefer face-to-face confirmation from a doctor.	(P8) I have full trust in this application, but it will be better if the application has the function to do live chat with expert for verification.

3.1.4 What are users' current and future needs to improve their health and daily lifestyle through the SELangkah application?

From the findings in Figure 5 and Table 6, the M40 and B40 groups have different focus when it comes to their current and future needs. The M40 group is looking for a more engaging features in the application such as gamification, dietary guideline, health tracker, or to have a point system to increase usage. The M40 group also mentioned the need for the application to link to medical insurance services for their ease of use in digital healthcare services. The B40 group however, is not exactly looking at engagement or immersive features but more towards the content and contact details. For instant, they find it important to have links that lead straight to contact number for all list of clinics and hospitals in the application specially to have a direct line to the emergency contact. Both M40 and B40 group do have common needs and suggestion such as to have live chat with doctor, chatbot, and health tracker.

In addition to that, both group of users do find the lack of awareness about the application is the main reason of the lack of use from their part. They recommend for the service provider to conduct more workshop, advertisement, roadshow or any other promotional effort so the application will be exposed not only in Selangor but for the whole of Malaysia.

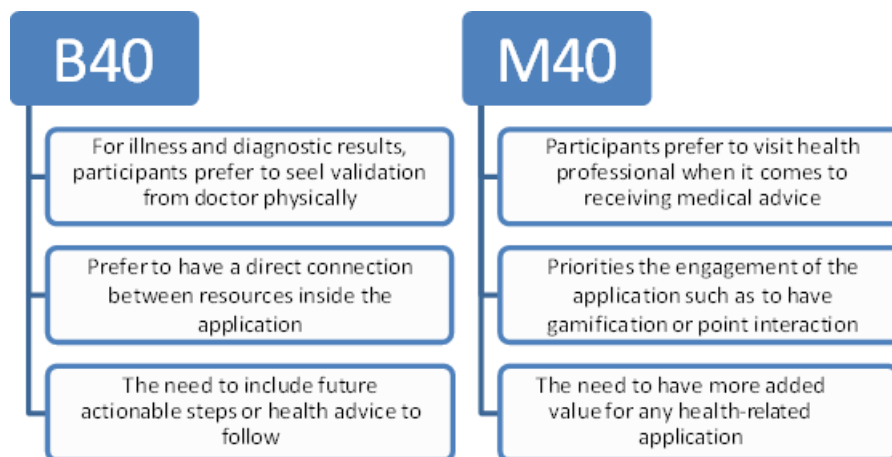


Fig. 5. Current and future needs of B40 and M40 for health improvement

Table 6
 B40 & M40 comparison: Users' current and future needs

FGD	Category of discussion	Observed findings	Quote
M40	Current needs	The application needs more awareness to the public. As for the function, it can have engaging features such as point system, dietary guideline, health tracker, or other engaging elements.	(P3) It will be good to have guideline that can help people to stay healthy and use it like a point system activity. (P1) To have categorisation will be good such as which clinic has physiotherapy, paediatrician, etc. Gamification like point system will be good too so users will be more engaged.
	Future needs	It will be useful to link the application to insurance services. In addition to that, I hope citizens outside of Selangor can also enjoy this service.	(P4) I use MyMed for insurance and Apple health tracker. So maybe both can be combined inside the application. (P2) If I was not invited to share my opinion about this application, I will not know much about SELangkah so it is good for those outside of Selangor to also be able to use this.
	Suggestions	Participants believe there should be more awareness campaign as not many are aware about the application. Especially the beneficial features and functions that needs to be promoted more. They also find that some who live in Selangor themselves are not aware about the application.	(P2) If I was not of this discussion, I will not have known about this application. Therefore, there should be more promotional effort, workshop, roadshows, or anything relevant.
B40	Current needs	For their current needs, what would benefit them more would be to have a live chat or love consultation with expert and a feature to monitor heartbeat tracker.	(P5) It is good if I can do a two-way live consultation inside the application itself. (P7) If it can track bad reading then the app can alert emergency contact just like Apple Watch, this will certainly be beneficial.
	Future needs	It will be useful for participants' future needs to have the link to actual contact number or emergency contact number to all the listed clinics and hospitals inside the application so that if anything were to happen, they can do a direct phone call from the application.	(P8) Perhaps it is good to have phone number or even emergency unit contact for the hospitals and clinics. Anything bad happen, I know where to retrieve the contact number and I can click, and the call will be made directly.
	Suggestions	Participants propose for the service provider to organise more awareness campaign about this app and to extend the benefits to other state.	(P7) I often watch TV3 "Helo Doctor" and this type of application should be featured and promoted on platform like this or any other relevant platform. (P5) SELangkah should also expand the awareness throughout Malaysia and not only for Selangorian. They might already do that, but the awareness can be more.

4. Conclusions

The primary objective of this study is to conduct a comprehensive comparative analysis of the user acceptance of digital healthcare services within the M40 and B40 communities in Selangor, with a specific focus on the SELangkah application as concluded in Figure 6. The study is driven by the intention to discern the diverse levels of acceptance exhibited by distinct income groups and to pinpoint the challenges and requirements inherent in each group's adoption of digital healthcare services. Employing a qualitative methodology, the research engaged participants from both income categories through focus group discussions. The investigation was guided by the Extended Technology Acceptance Model (eTAM), influencing both instrument development and analysis processes.

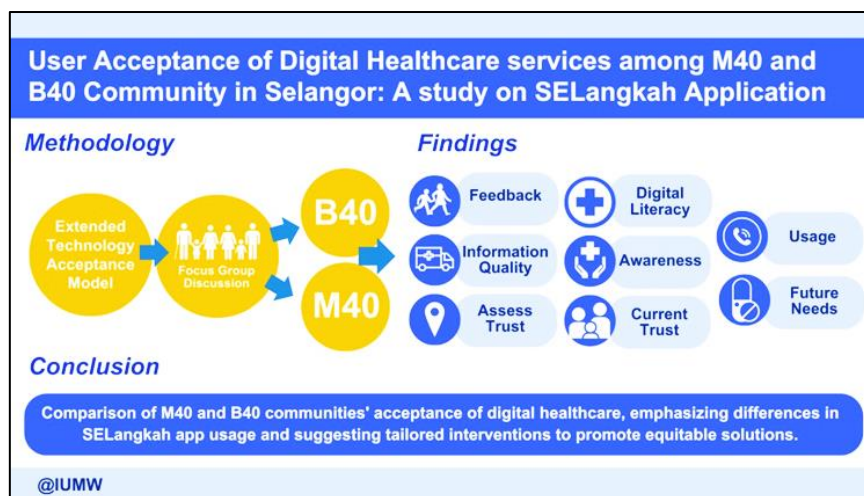


Fig. 6. Summary of user acceptance of digital healthcare services among M40 and B40 community in Selangor: A study on SELangkah Application

Noteworthy differences surfaced between the M40 and B40 groups across various dimensions, including initial feedback, perceived usefulness, attitudes, behavior, challenges, and future needs concerning the SELangkah application. Findings underscored that the M40 group demonstrated a more profound understanding and acceptance of digital healthcare services compared to the B40 group. While both groups acknowledged the benefits of the SELangkah application, the M40 cohort displayed greater familiarity with digital healthcare and expressed a more positive attitude toward the application's utility. The study underscored the imperative for enhanced educational support targeting the B40 group, aiming to bridge existing gaps in the acceptance of digital healthcare.

Moving forward, the research uncovered distinctive future needs for each group. As previous study has stated that technology and mobile application could enhance the quality of human life [29], the M40 participants expressed a desire for engaging features such as gamification, dietary guidelines, health trackers, and integration with medical insurance services. Conversely, the B40 group emphasized the significance of direct contact details for clinics and hospitals, alongside a need for heightened awareness campaigns to promote the SELangkah application. In essence, the research not only elucidates the disparities in digital healthcare acceptance between M40 and B40 income groups but also stresses the necessity for tailored interventions to address the distinct needs and circumstances prevailing within these economic brackets. The insights gleaned from this study hold promise in steering the development of more effective and equitable digital healthcare solutions that align with the unique challenges and preferences of individuals across varying economic strata.

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