Journal of Information System and Technology Management
JISTM
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

JOURNAL OF INFORMATION SYSTEM AND TECHNOLOGY MANAGEMENT
(JISTM)
www.jistm.com

USER EVALUATION ON ONLINE TRANSPORTATION SERVICE APP FOR UUM STUDENTS: SenangCar

Loh Qiao Way[1], Yap Houng Ying[2], Yap Houng Minn[3], Thu Yue Hen[4], Azliza Othman[5], Sobihatun Nur Abdul Salam[6]

[1] Aii Develop Pte. Ltd
Email: qiaoway0917@gmail.com
[2,3] Ink Integrated Sdn Bhd
Email: houngying99@hotmail.com, houngminn99@hotmail.com
[4] GSD Land (M) Sdn. Bhd
Email: thuyuehen1999@hotmail.com
[5] School of Multimedia Technology and Communication, Universiti Utara Malaysia
Email: azliza@uum.edu.my
[4] Digital Humanities, Research Unit, School of Multimedia Technology and Communication, Universiti Utara Malaysia
Email: sobihatun@uum.edu.my
[*] Corresponding Author

Article Info:

Article history:
Received date: 16.10.2022
Revised date: 07.11.2022
Accepted date: 22.12.2022
Published date: 31.12.2022

To cite this document:

Loh, Q. W., Yap, H. Y., Yap, H. M., Thu, Y. H., Othman, A., & Abdul Salam, S. N. (2022). User Evaluation on Online Transportation Service App for UUM Students: SenangCar. *Journal of Information System and Technology Management, 7* (29), 195-211.

DOI: 10.35631/JISTM.729018

Abstract:

Nowadays, transportation is a major need for people in managing their daily activities such as going to work, school and vacation. Current technology has brought changes in transportation service in many countries. Online transportation services through web and mobile applications are able to attract people's interest. They can rent or grab a car easily with their fingertips anywhere. However, in Universiti Utara Malaysia (UUM), students faced problems booking and using the existing service. Because UUM is located quite far from the centre and this can cause high cost. Realising this problem, SenangCar, a transportation service application was developed for bringing convenience to the UUM students to book a car service in the UUM area. Agile methodology was adopted to develop the application. This methodology consists of six phases which are requirements, designing, developing, testing, deployment and review. This paper discusses feedback from user evaluation on SenangCar app among UUM students. The findings reveal that this application was easy to understand, easy to use and very satisfied the students. Majority of participants strongly agree that the SenangCar application is convenient, saves time, is user friendly and meets their expectations and requirements.

Journal of Information System and Technology Management
EISSN: 0128-1666
JISTM
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

Keywords:

User Evaluation, Online Transportation, Application, Students

Introduction

Online transportation platforms have become a phenomenon in an attempt to produce a way convenient for people to gain access to transportation. Transportation service online is known as one of the latest innovations of service in the world of mobile commerce also called m-commerce (Silalahi, Handayani & Munajat, 2017). Ride-sharing or online transportation service is a transportation service individually where a passenger is allowed to book a ride. For instance, cars, motorcycles, vans and more are able to order through the mobile application while the driver can answer to the order by using the application (Putri, Amin & Warjio, 2019). "E-hailing" is a process of ordering a car, taxi, limousine, or any other form of transportation picked up via a tablet or mobile device. With the 'e- hailing' apps, customers do not need to hail the empty taxi on the street, which may offer uncomfortable and inefficiency during the rush hours and rainy days (Siti & Ameera, 2022).

People can rent or grab a car easily with their fingertips anywhere. Universiti Utara Malaysia (UUM) is a university in Malaysia which is located in Sintok, Kedah. However, UUM's location which is far from the service center makes it quite difficult for students to book the transport using existing online transportation service to go to any place in the UUM area. In addition, booking from existing applications will make costs become high because they have to cover the cost to come to UUM. This situation will cause UUM students to face inconvenience using existing transportation services. In order to solve this problem, a specific transportation service application was developed for bringing convenience to the UUM students to book transportation service from the UUM area.

Senang Car Apps

SenangCar is a Malaysian mobility service provider based in Universiti Utara Malaysia (UUM), Sintok, which operates over 200 kilometers in Kedah. Its services mainly include the mobility service for the students in UUM and car rental. The pricing for every mobility service was counted from the demand at the time of booking and the time duration of the service. Besides that, Car Rental in SenangCar provided rental services for the students in UUM. The pricing for every car rental is based on car type and the duration of the rental. It is convenient if the app provides a fixed price for the users in UUM to rent cars as it provides a stable system to allocate the pricing and evidence.

SenangCar focused on doing business with students in the Universiti as UUM is located in a location that is quite difficult to rent or to grab a car for a ride. The rise of SenangCar applications that would have helped a lot on the student's transportation. Not only helping the transportation, it could help in saving students time to produce a more efficient lifestyle in Universiti Utara Malaysia.

To develop SenangCar, Agile methodology which involved six phases which are requirement, designing, developing, testing, deployment and review has been adopted. Quantitative method using survey technique utilized in collecting data from respondents. The survey was conducted with 30 students in Universiti Utara Malaysia, Sintok, Kedah.

Journal of Information System and Technology Management
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

This paper is report on the result and discussion of user experience evaluation using SenangCar app.

Related Study

This section covers the existing studies about online transportation services and application and online transportation/e -hailing user's satisfaction.

Online Transportation Services and Application

Transportation is a major need for people in managing their daily activities. People need a transport to go to work, school and for their vacation (Putri, Amin & Warjio, 2019). In the globe of transportation, there are also internet-based innovations or also defined as online transportation. Online transportation service can be combined directly by using smartphones through the applications (Wijayanto et al., 2018). Mon et al. (2019) develop a secure prototype of a mobile car rental system that enable users to reserve the vehicle they wanted. The app facilitate users to view rental car available, choose car they want and proceed for payment. Another car rental mobile application develop by Sriram Narayanan et al. (2020) aimed for ensure safety for both the renter and the renter's automobile. The application using score allocation method generated from data recorded over years. This is will help car renter make tours in a simple and easy modern way to contact with customers. In the era of globalization, humans demand speed of time, security, ease of transportation, and a friendly environment all integrated into one system.

E-transportation helped to raise a business and is currently developing, namely the business of transportation services with motorbikes commonly known as motorcycle taxis (Sukmasetya & Shalahuddin, 2020). A vehicle that is used to transfer from one location to a new location is referred to as online transportation (Novitasyari & Widiastuti, 2019). Online transportation service is defined as E-hailing. E-hailing connects drivers with passengers by using applications in smartphones (Jais & Marzuki, 2020). E-hailing included carpooling or car-sharing concepts such as Grab and Uber (Salim, Salman & Salman, 2021). E-hailing is a public transportation system that allows users to hail and pay for a journey from a driver using mobile applications (Jais & Marzuki, 2020; Ooi & Nazar, 2022).

Several related online transportation applications have been developed because of their effectiveness and efficiency. Grab is an alternative travel service in several countries in Southeast Asia (Putri, Amin & Warjio, 2019). Recently, the number of drivers is growing corresponding to the number of passengers. According to the report of the drivers, the evolution of online transportation such as GrabBike is a modernization from a traditional mode of transportation service, which continues to mature into a process of change. This modernization also provided opportunities for someone who is seeking jobs. The rating system provided for the drivers from the passengers is also known as a form of passenger satisfaction assessment for the services provided by drivers.

Online Transportation (E-hailing) User's Satisfaction

Several studies have investigated online transportation user's satisfaction (Hamdan et al., 2022, Rahmat et al., 2022, Siti & Ameera (2022) and Nurasyiqin et al. (2022).

Hamdan et al. (2022) has discussed the role of service quality (perceived ease of use, security, and perceived value) in affecting customer satisfaction among Malaysia e-hailing users. E-

Journal of Information System and Technology Management
EISSN: 0128-1666
JISTM
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

hailing services have become almost inseparable in today's transportation sector. This growth is stimulated by a variety of factors including social distancing, affordable price, trending lifestyle, more usage of e-hailing service capabilities, and robust business strategies by e-hailing providers. They suggest that all the service quality variables, namely perceived ease of use, security, and perceived value, have a positive significant effect on customer satisfaction specifically among e-hailing users in Malaysia.

Meanwhile, Rahmat et al. (2022) have investigated the factors affecting customer satisfaction with e-hailing among the population of Klang Valley, Selangor, Malaysia. A total of 156 completed questionnaires were analyzed using SPSS. The research found a significant relationship between perceived safety, reliability, and word of mouth. However, they found inconsistent results for price, app function and timeliness and are critical to customer satisfaction.

Nurasyiqin et al. (2022) have also discussed the identification in determining factors influencing the user to choose an e-hailing service as an urban mobility choice in the urban city of Kuala Lumpur (KL). The result found that the price has become the major influencing variable that affects users' satisfaction with e-hailing services. The findings provide benefits to the related service provider mainly on identifying the most influencing factor on the passenger's satisfaction and for the service improvement in future

Method

This part would be describing material and methods involved in conducting user evaluation in this study. Two phases as illustrated in Figure 1 encompassed in conducting this study.

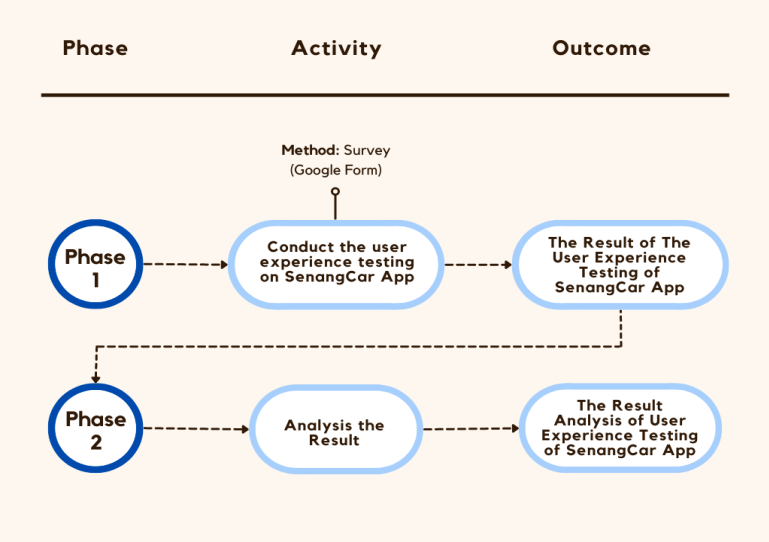

Figure 1: Research Methodology

In the first phase, user experience testing was conducted on the SenangCar application. At the beginning, respondents were given sufficient time to explore the SenangCar application. Then, they were given a link of Google Form-generated questionnaires and each participant allowed to complete a set of an online questionnaire. They needed to look through the SenangCar

Journal of Information System and Technology Management
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018
application and respond to all of the evaluation questions based on their experience and understanding.

Online survey was chosen as a data collection method since it can readily reach a huge number of people in a short period of time. Google form was chosen as a tool to design the questionnaire because the researchers can collect the data online from different platforms. The questions in the survey was a closed-end questionnaire. The respondents engaged in the survey were the UUM students and selected as convenience sampling. There are 30 university's students from UUM who have volunteered to be the respondents in order to assist the researcher in completing this survey.

Then, the second phase involved analyzing user experience results on the SenangCar application collected in phase 1. The data collected then were checked for completeness and analyzed to gain useful information.

Materials

In this study, the questionnaire were adapted from Questionnaires for User Interface Satisfaction (QUIS), Usefulness, Satisfaction, and Ease of use (USE) and Perceived Usefulness and Ease of Use (PUEU) (Hinderks et al, 2020). A total of 17 questions have been developed. Demography, application interface, effectiveness and ease of use and satisfaction are the four dimensions examined using Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree) in the survey.

Demography

Gender, age, and race were all queried in this section. Respondents are required to select their gender, age group, and races to proceed into the next section of the questionnaire.

Application Interface

This section is the second section of the questionnaire, respondents must answer the questions based on their impressions of our prototype application interface. This dimension is presented in three questions.

Effectiveness and Ease of Use

Respondents have to answer questions based on their perceptions of the effectiveness and ease of use of our prototype in this area. Question of ease of use will be asking about the functionality, usability and control. This dimension consists of nine questions.

Satisfaction

In the last section, respondents are asked to answer questions based on their thoughts of our satisfaction with our prototype application. There are 5 questions in this dimension which are concerned with satisfaction, overall experience, and recommendation.

Participants

This study was carried out among UUM students. The students were randomly picked to participate in this survey. After the data gathering technique was processed, the researchers received completed surveys from 30 students.

Journal of Information System and Technology Management
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

Results and Discussion

In this part, the results analyzed using descriptive statistical analysis were presented and discussed that researchers had collected through the survey and also had the discussion based on the result.

Result

Their reaction and opinions to the prototype, SenangCar, was studied and shown in a table and graph. There were 4 parts in this statement of results that would be analyzed: demography, application interface, the effectiveness and ease of use, user satisfaction as below.

Demography

In this demography part, there were a total of 3 statements which are gender, age and race. The data would be analyzed and presented in tables 1.

Table 1: Demographic of Respondents

Background of respondents		Frequency (N)	Percent (%)
Gender	Male	17	56.7
	Female	13	43.3
Age	18-21	1	3.3
	22-25	23	76.7
	26-29	2	6.7
	30-33	2	6.7
	>33	2	6.7
Nationality	Malay	4	13.3
	Chinese	22	73.3
	Indian	4	13.3

According to Table 1, most of the respondents were males which were 17 respondents with 56.7%. Meanwhile, only 13 respondents (43.3%) were females. The majority of the respondents were aged between 22 to 25 years old (76.7%) (N=23). The age group 26-29 years old, 30-33 years old and >33 years old shared the same percentage 6.7%. There was only one respondent 3.3% who was aged below 18-21 years old. From Table 1, the majority of respondents were Chinese with 73.3% (N=22). Meanwhile, the Malay and Indian races were at the same percentage 13.3% (N=4) respectively.

Application Interface

In this part, there were a total of 3 statements which are the character on the screen is easy to read, the information is organized well and the design of the application is easy to understand. The data would be analyzed and presented in tables and bar charts to be viewed easily.

Journal of Information System and Technology Management
JISTM
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

- ***The Character On The Screen Is Easy To Read***

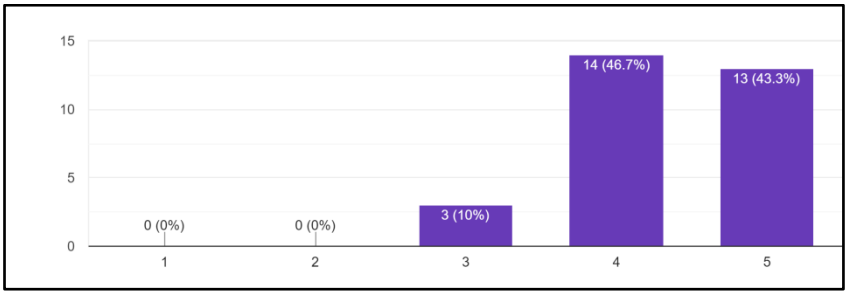

Figure 2: The Character On The Screen Is Easy To Read

Figure 2 showed the number and percentage of respondents based on their responses to the character on the screen that is easy to read. From the information above, 13 out of 30 respondents (43.3%) strongly agreed that the character on the screen was easy to read followed by 14 respondents out of 30 respondents (46.7%) agreed with the statement. 3 out of 30 respondents (10%) stayed neutral to the statement and no respondents disagreed with the statement. Almost all of the respondents (90%) voted "Strongly Agree" and "Agree" about this statement due to the fact that the type of font and the font size gave a better reading to them and it was more suitable for users to get the information in a short time. As such, they were able to concentrate more on using the SenangCar. Thus, it was reasonable that the font and font size was acceptable for those who stayed neutral.

- ***The Information Is Organized Well***

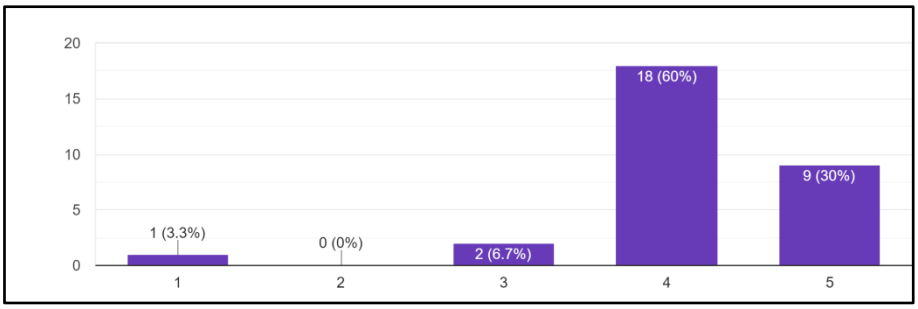

Figure 3: The Information Is Organized Well

Figure 3 showed the number and percentage of respondents based on their responses on the information is organized well. According to the data collected, there were 9 respondents out of 30 respondents (30%) strongly agreed that the information is organized well in the manner followed by 18 respondents out of 30 respondents (60%) agreed with the statement. 2 out of 30 respondents (6.7%) stayed neutral to the statement. 1 respondent voted "Strongly Disagree" with this statement and not any disagreed with this statement. Majority of the respondents, which was 90% strongly agreed and agreed to the statement due to the fact that the information of SenangCar is organized in a structured way. Users were able to perform the tasks without confusion since the information was clear enough. One of the respondents disagreed with this statement because he or she might find it difficult to perform the task in SenangCar. It could be concluded that most of the users were able to perform all tasks well since the information was organized.

Journal of Information System and Technology Management
JISTM
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

- ***The Design Of The Application Is Easy To Understand***

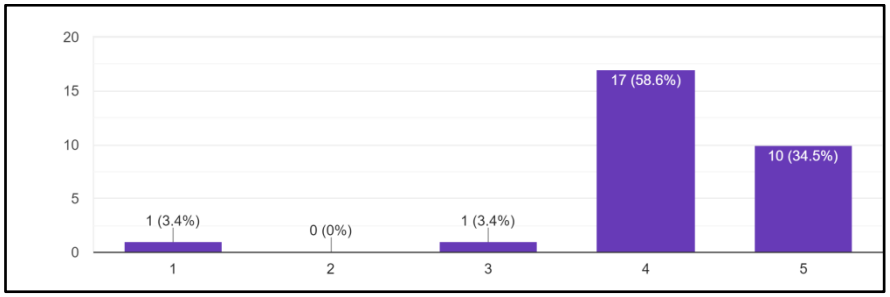

Figure 4: The Design Of SenangCar App Is Easy To Understand

Figure 4 depicted the number and percentage of respondents based on their responses on the interface design. From the data collected, 10 respondents out of 30 respondents (34.5%) strongly agreed that the interface design of SenangCar app was easy to understand followed by 17 respondents of them (58.6%) agreeing with the statement. 1 out of 30 respondents (3.4%) stayed neutral to the statement. Unfortunately, there was 1 respondent (3.4%) strongly disagreed that the design of SSenangCar app is easy to understand and nobody disagrees with this statement. Almost all of the respondents (93.1%) strongly agreed and agreed to the statement because the design of the SenangCar tried to normalize the location of elements so that users could quickly learn where to find key interface elements based on a high-quality visual interface. The researchers believed that the respondents who gave 'Neutral' responses were also pleased with the interface layout also. Since there were respondents opposed to this statement, it could be concluded that the interface design should be modified to satisfy all the respondents as much as possible to increase their experience while using the application.

Effectiveness & Ease of Use

In this part, there were a total of 9 statements that stated below. The data would be analyzed and presented in tables and pie charts to be viewed easily.

- ***Ease of Use***

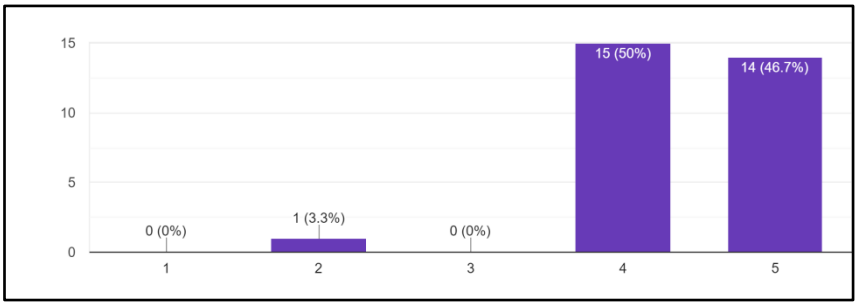

Figure 5: It Is Easy To Use

Figure 5 demonstrated the number of respondents and the percentage based on their responses on the ease of using SenangCar. From the statistical information above, 14 out of 30 respondents (46.7%) strongly agreed that they did not meet any difficulties while using the app. Apart from that, 15 respondents out of 30 respondents (50%) agreed with the statement. However, there was 1 respondent out of 40 respondents (3.3%) who disagreed with the statement. Mostly (96.7%) voted "Strongly Agree" and "Agree" with the statement. Meanwhile

Journal of Information System and Technology Management
JISTM
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

the minority respondents (3.3%) opposed the statement. This was because the app is very simple to use and they were able to find any function they wanted within 3 seconds. So, most of them did not encounter any problems. Thus, it could be concluded that most of the users do not meet any difficulties while using the SenangCar application.

- ***Functionality***

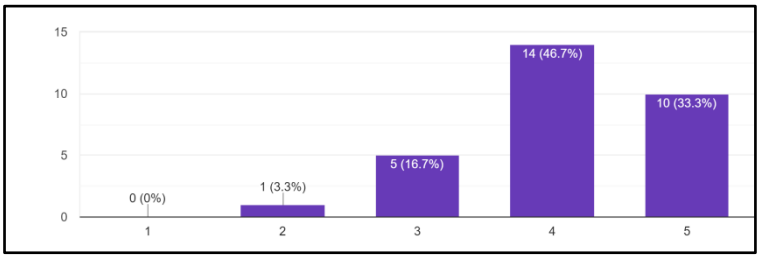

Figure 6: Does It Make The Function That You Expected?

Figure 6 depicted the number of respondents and the percentage based on their response on this application to the function that they expected while figure 8 showed. According to the data collection, 5 out of 30 respondents (33.3%) agreed that SenangCar was having the function they expected followed by 14 respondents (46.7%). 3 of the respondents were neutral, only 1 respondent did not agree and there were no respondents who strongly disagreed with the statement.

It could be concluded that the function provided in the apps such as car-hailing makes the application function. There were also some extra elements such as paying by using cash or credit card made the payment become more convenient.

- ***Usability***

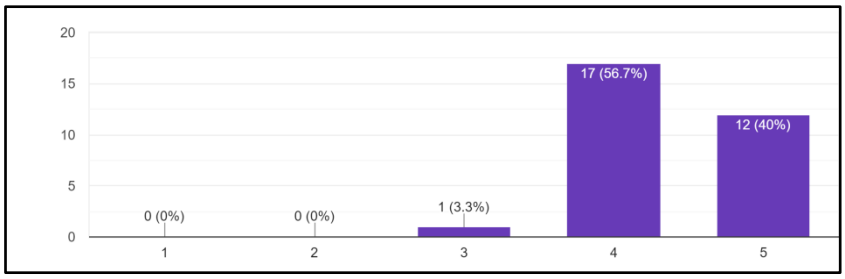

Figure 7: Do You Think That SenangCar App Is Useful?

Figure 7 demonstrated the number of respondents and the percentage based on their responses on usability of SenangCar. From the statistical information above, 12 out of 30 respondents (40%) strongly agreed that the application is useful. Apart from that, 17 out of 30 respondents which was 56.7% agreed with the statement. However, only a respondent which was 3.3% stayed neutral and none of them disagreed with the statement.

Total 96.7% respondents strongly agreed and agreed with the statement. This was due to the application that helped the transportation of UUM students become easier especially during the urgent time. The application was able to solve the problems faced by the students and the driver before as the students no need to find the drivers by spamming in the NEW SEED Facebook

Journal of Information System and Technology Management
JISTM
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

group (UUM Facebook group) in Facebook and the driver is able to plan their own time for doing the car hailing service.

- ***Fulfil The Need***

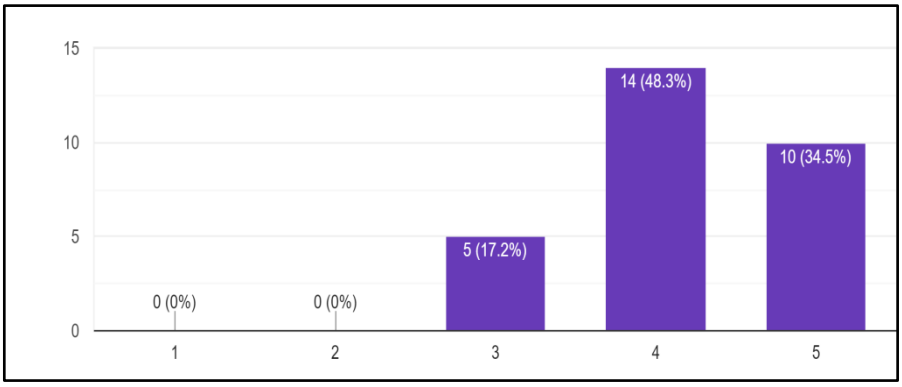

Figure 8. Does SenangCar App Reach What You Need?

Figure 8 demonstrated the number of respondents and the percentage based on their responses on fulfilling the need of SenangCar. From the statistical information above, 10 out of 30 respondents (34.5%) strongly agreed that the application fulfilled the need. Apart from that, 14 out of 30 respondents (48.3%) agreed with the statement. However, 5 respondents (17.2%) stayed neutral and none of them disagreed with the statement. It could be concluded that the function of this application fulfilled the needs of the user and the drivers.

- ***Easy to Control***

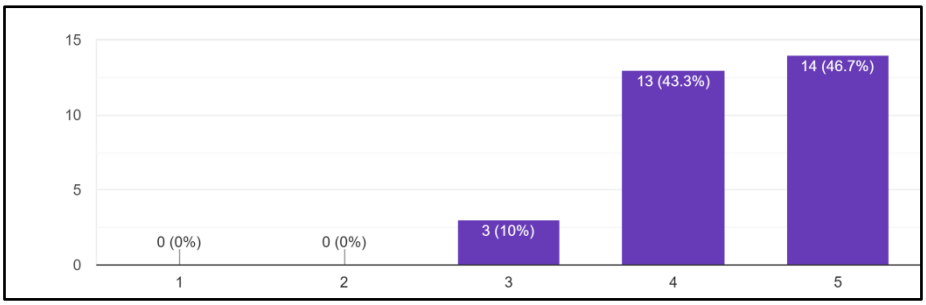

Figure 9: Do You Think SenangCar App Easy To Control?

Figure 9 demonstrated the number of respondents and the percentage based on their responses on easy to control SenangCar. From the statistical information above, 14 out of 30 respondents (46.7%) strongly agreed that the application is easy to control. Apart from that, 13 out of 30 respondents (43.3%) agreed with the statement. However, 3 respondents (10%) stayed neutral and none of them disagreed with the statement. It can be concluded that the function of this application was easy to control by the customers and the drivers.

Journal of Information System and Technology Management
JISTM
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

- ***Easy to Use for Beginner***

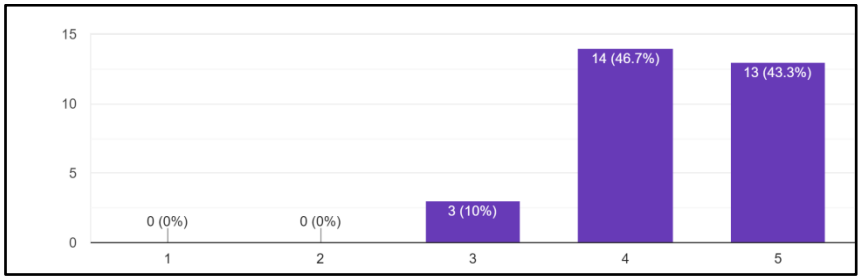

Figure 10: Do You Think SenangCar App Is Easy To Use For A Beginner?

Figure 10 demonstrated the number of respondents and the percentage based on their responses on easy to use for a beginner of SenangCar. From the statistical information above, 13 out of 30 respondents (43.3%) strongly agreed that the application is easy to use for a beginner. Apart from that, 14 out of 30 respondents (46.7%) agreed with the statement. However, 3 respondents (10%) stayed neutral and none of them disagreed with the statement. It could be concluded that the function of the apps is easy to use by the beginners.

- ***Using It Without Written Instructions***

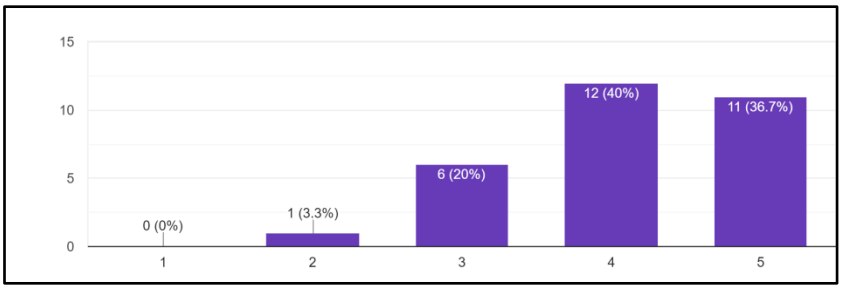

Figure 11: I Can Use It Without Written Instructions

Figure 11 demonstrated the number of respondents and the percentage based on their responses on using it without written instructions. From the statistical information above, 11 out of 30 respondents (36.7%) strongly agreed that the application could be used without written instructions. Apart from that, 12 out of 30 respondents (40%) agreed with the statement. However, 6 respondents (20%) stayed neutral and 1 respondent (3.3%) of them disagreed with the statement. It could be concluded that most of the users were known to use the SenangCar app without any guidelines.

Journal of Information System and Technology Management
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

- ***Easy To Learn To Operate The System***

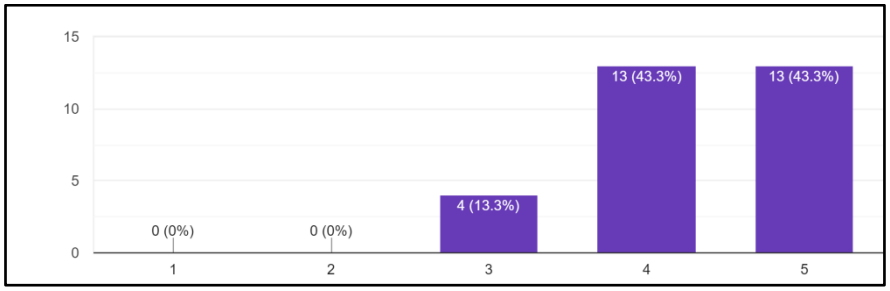

Figure 12: Learning To Operate The System Would Be Easy For Me

Figure 12 demonstrated the number of respondents and the percentage based on their responses on easy to learn to operate the system of SenangCar. From the statistical information above, we found that 13 out of 30 respondents (43.3%) strongly agree that the SenangCar app was easy to learn to operate the system. Apart from that, 13 out of 30 respondents (43.3%) agreed with the statement. However, 4 out of 30 respondents which was 13.3% were neutral and there were no respondents who disagreed with the statement. It could be concluded that the SenangCar was easy to learn to operate the system without the need of guidelines or instructions.

- ***Flexible To Interact With***

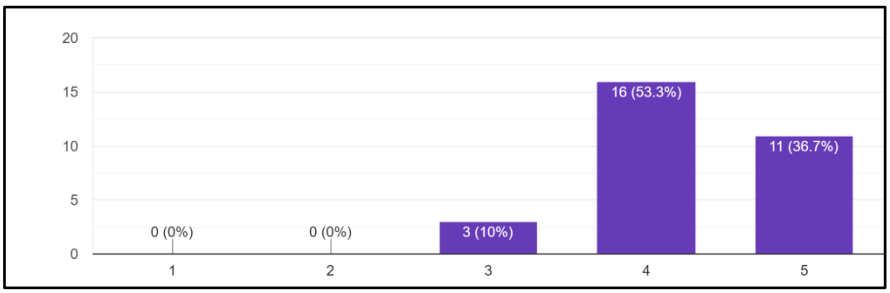

Figure 13: I Would Find The System To Be Flexible To Interact With

Figure 13 demonstrated the number of respondents and the percentage based on their responses on the flexibling to interact with the system of SenangCar. From the statistical information above, 11 out of 30 respondents (36.7%) strongly agreed that the application was flexible to interact with. Apart from that, 16 out of 30 respondents (53.3%) agreed with the statement. However, 3 respondents (10%) stayed neutral and none of them disagreed with the statement. It could be concluded that the system of SenangCar was flexible to interact with.

User Satisfaction

In this part, there were a total of 5 statements that stated below. The data would be analyzed and presented in bar charts to be viewed easily.

Journal of Information System and Technology Management
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

- ***Satisfaction***

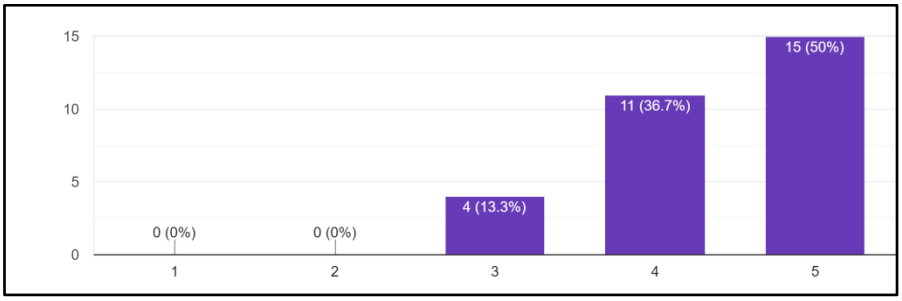

Figure 14: I Am Satisfied With The Prototype (SenangCar)

Figure 14 showed the number of respondents and the percentage based on their responses on satisfaction towards the prototype of SenangCar. According to the data collected, 36 respondents out of 30 respondents (86.7%) felt satisfied with the prototype of the application. They felt the style of the app was easier to understand. 4 out of 30 respondents (13.3%) stayed neutral. In conclusion, most of the users were satisfied with the prototype of the application.

- ***Recommendation***

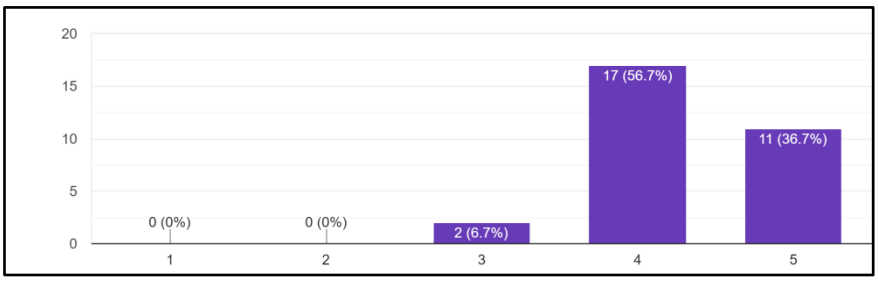

Figure 15: I Would Recommend It To A Friend

Figure 15 showed the number of respondents and the percentage based on their responses on willingness to recommend SenangCar to their friends. From the data collected, 28 out of 30 respondents (93.4%) stated that they would like to recommend SenangCar to their friends and family. In contrast, 2 respondents stayed neutral and no respondents were no willing to do so.

Majority of the respondents were willing to recommend it because the users felt that their transportation in UUM became easier. Thus, it was valuable to share the joy of using the SenangCar with others. So, it could be concluded that most of the users would like to recommend the application to their friends.

Journal of Information System and Technology Management
JISTM
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

- ***Works The Way I Want It To Work***

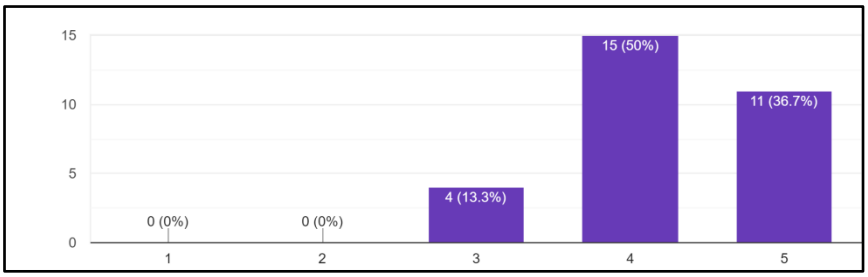

Figure 16: It Works The Way I Want It To Work

Figure 16 showed the number of respondents and the percentage based on their responses on the SenangCar works the way they want it to work. From the data collected, 26 out of 30 respondents (86.7%) stated they agreed with the statement. In contrast, 4 respondents stayed neutral (13.3%) and no respondents opposed the statement.

Majority of the respondents agreed with the statement because the application contains all the functions required by the user to have the transportation no matter by renting or booking a car easily and saving the time. In addition, the payment method provided also made the payment became more convenient if compared to using cash only.

- ***Importance***

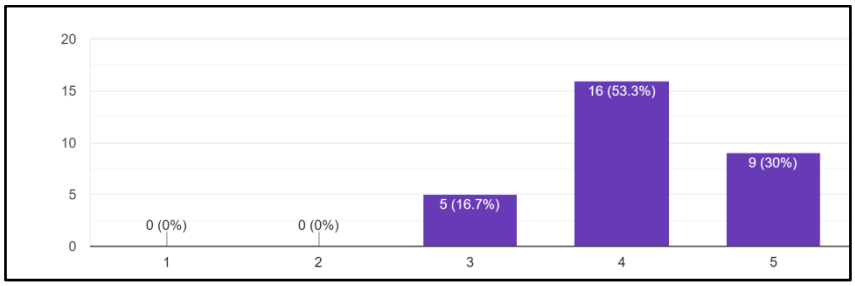

Figure 17: I Feel I Need To Have It

Figure 17 showed the number of respondents and the percentage based on their responses on whether they felt they need to have the SenangCar application. From the data collected, 25 out of 30 respondents (83.3%) stated that they would like to have SenangCar. However, 5 respondents stayed neutral and no respondents were no willing to do so.

Majority of the respondents were willing to have the application because they did not have other ways better to have transportation in UUM. However, some of them stayed neutral because they preferred to use the public transportation provided by UUM and also did not hang out with friends constantly. So, they did not need the transportation to rent or book a car.

Journal of Information System and Technology Management
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

- ***Overall Experience***

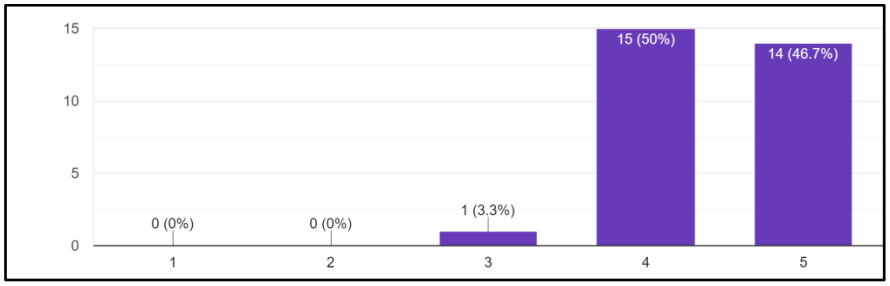

Figure 18: Overall Experience On SenangCar

Figure 18 showed the number of respondents and the percentage based on their responses on overall experience towards SenangCar. According to the data collected, 29 of the 30 respondents (96.7%) felt satisfied with the application and only 1 out of the 30 respondents (3.3%) stayed neutral. This was because they really had gained a good experience from the application aids them on their transportation in UUM. Other than that, they were satisfied with the style of the app no matter the background, the fonts or the flow of the application. In conclusion, most of the users felt satisfied with the SenangCar application.

Discussion

From all of the data that were collected through the google form survey, majority of the respondents liked the design of the prototype and they gave positive feedback from all of the aspects. Firstly, the number of male respondents were more than female respondents. Male respondents preferred a prototype which was simple and easier to use without any complicated steps. Besides, the age of respondents were between 18 to 33 years old because the adults were more active in using the application and the design was also suitable for them. The race of respondents were Malay, Chinese and Indian but the Chinese respondents were the majority as this was due to the reason there were differences among the classmates.

From the second part which discussed the interface of the application, most of the users were satisfied with the interface including the characters were easy to read, information in the app was organized well and also the design was easy to understand. This was due to the font size being suitable as it was not too large or too small. The information of the passengers and drivers were separate so they would not get confused when using the application. In addition, the functions in the interface were straightforward without any hidden button.

From the third part which discussed the effectiveness & ease of use of the application. From the overall data, most of the participants provided their positive feedback which are ease of use, functionality, usability, fulfill the need, easy to control, easy to use for beginners, using it without written instructions, easy to learn to operate the system and flexible to interact with the system. The reason for creating this application was to help the students inside UUM could find car-hailing easily which they would not need to create a post at New Seed Facebook group or find the car at the last minute in the Whatsapp group. It also could make it easy for the drivers to see whether the available time to take the passenger is just like the Grab car app. So by creating this app it would be easier for the students and drivers inside the UUM and it also reached the vision of this application through the online survey of participants.

Journal of Information System and Technology Management
EISSN: 0128-1666
JISTM
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

For the last section which discussed user satisfaction of the application. The overall data showed that most of the participants provided their positive feedback with the statements of "satisfaction", "recommendation", "works the way I want it to work", "importance" and "overall experience". The satisfaction of users is important in the evaluation because it could improve the prototype from the positive feedback given by the users.

Conclusion

In conclusion, it could be concluded that a majority of participants strongly believe that the SenangCar application prototype was convenient, saves time when using it and met the expectations and requirements. Moreover, a larger number of participants said that the application was user-friendly, that it only required a few clicks to accomplish what the user wanted to do with it, and they could use it effectively every time. Aside from that, they recommend it to their friends because it was easy to use and made their life more simple rather than using old methods to call a driver or rent a car. Respondents' satisfaction is vital in the evaluation since positive feedback from users allowed to enhance the prototype. Users would gain good experience based on User Experience (UX) such as simplicity and efficiency (Sunny et al., 2019). As a result, all user interface and usability recommendations and suggestions will be proposed and implemented in the future.

The research indicated the positive effect of developing a SenangCar for online car-hailing. The implication of this study could be knowing the user experience and satisfaction on this application which needs to be implemented in future. Limitation of the SenangCar occurred in the part of registration. Rules and regulations are not detailed and specific for the drivers, so this means everyone, whether a person even does not have a car license, is also able to register as a driver. However, since the applications are designed for the students in the UUM, the details such as the student and license card should be easy to proceed with while confirming that the driver is qualified. Following are the rules and regulations applicable for SenangCar where the driver should acquire a UUM car license which is only for Malaysian citizens, having a valid driver's license, no criminal history, and not being included on any blacklists maintained by the police, the land public transport agency or the road and transport department.

Future research should focus on the privacy and security of this online transportation service application. This is to get the knowledge of protecting the privacy information and security of users and drivers. Also, most of the respondents were in the younger age range. Future research should focus also more on the older age range, for example, 30 years old and above to test the user experience of the application from them for the ease of controlling the application on drivers and users.

Acknowledgement

The researchers would like to thank Prof. Madya Ts. Dr. Sobihatun Nur Binti Abdul Salam, who gave the guidance, knowledge and opportunity to conduct this research. Next, the researchers would like to thank groupmates for giving their contribution to this research and the participants who answered the survey of this research.

References

Hamdan, F. F. F., Abd Rahim, N. N., Othman, A. K., Mahmud, A., Ibrahim, N., & Zainuddin, N. Z. (2022). The Determinants of Service Quality and Customer Satisfaction in

Journal of Information System and Technology Management
JISTM
EISSN: 0128-1666
Volume 7 Issue 29 (December 2022) PP. 195-211
DOI: 10.35631/JISTM.729018

Malaysian E-Hailing Services. *International Journal of Academic Research in Economics and Management and Sciences*. 11(2), 550 - 557.

Hinderks, A., Winter, D., Schrepp, M. & Thomaschewski, J. (2020). Applicability of User Experience and Usability Questionnaires. *Journal of Universal Computer Science*, 25, 1717-1735.

Jais, S. & Marzuki, A. (2020). E-hailing services in Malaysia: Current practices and future outlook. *PLANNING MALAYSIA*, 18 (13)/

Mon, C. S., Tee, T. K. & Amir 'Aatief, A. H. (2019). A Prototype of a mobile car rental system. *Journal of Physics: Conference Series*, 1529(2020) 032023. Doi:10.1088/1742-1529/3/032023

Novitasyari, A & Widiastuti, N. I. (2019). Cashless in online transportation applications for services business. *IOP Conference Series: Materials Science and Engineering*, 662(2), 022071.

Nurasyiqin, M. R, Norshaheeda, M.N, Zulhilmi, M.N., and Clement, T.Q.Z (2022). Assessment of e-hailing services as an urban mobility option in KL city center, *AIP Conference Proceedings* 2617, 060010 (2022); https://doi.org/10.1063/5.0124451

Ooi, B. C. & Nazar, S. A. (2022). Exploring Factors Influencing E-Hailing Services in Klang Valley, Malaysia. *International Journal of Business and Economy*, 3(1), 32–46.

Putri, U. M., Amin, M. & Warjio, (2019). Development of Online Transportation Services. *International Journal of Research in Business and Social Science*, 8(4), 71–78.

Rahmat , A. K. ., Abdul Razak , A. H. ., Mohd Yusak , N. A. ., & Pahim , K. M. . (2022). Refining Electronic Hailing Service Quality on Customer Satisfaction and Impact on Electronic Word of Mouth. *Environment-Behaviour Proceedings Journal*, 7(SI8), 61-67.

Salim, S., Salman, M. A. H. & Salman, M. N. (2021). Profiling of Passengers by E-Hailing Services in Malaysia. *Multidisciplinary Applied Research and Innovation*, 2(2), 60-69.https://doi.org/10.21834/ebpj.v7iSI8.3916

Silalahi, S. L., Handayani, P. W. & Munajat, Q. (2021). Service Quality Analysis for online transportation services: Case study of go-jek. *Procedia Computer Science*, 124, 487–495.

Siti Norziah Ismail, & Ameera Ainur Azman. (2022). Kajian Kepuasan Pelanggan Terhadap Perkhidmatan 'E-Hailing' di Kuala Lumpur. *Research in Management of Technology and Business*, 3(2), 185–197. Retrieved from https://publisher.uthm.edu.my/periodicals/index.php/rmtb/article/view/9481

Sriram Narayanan, L Subhashree, A, Vaanishri, P. & Akiladevi, R. (2020). Car rental application using mobile application development. *International Journal of Computer Science and Mobile Computing*, 9(50), 109-112.

Sukmasetya, P. & Shalahuddin, M. K. (2020). Applying heuristic evaluation for evaluate and gain perspective of online transportation: A case study. *Proceedings of the 1st Borobudur International Symposium on Humanities, Economics and Social Sciences (BIS-HESS 2019)*, 2020.

Wijayanto, L., Sasami, I., Nugroho, R. & Suharto, D. (2018). Conflict resolution of online transportation vs Conventional Transportation. *Proceedings of the 5th International Conference on Social and Political Sciences (IcoSaPS 2018)*, 241.