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USER ACCEPTANCE OF 'OKUE' MOBILE ENTREPRENEURSHIP APPLICATION FOR PEOPLE WITH DISABILITIES

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Abstract

There are many disabled people in today's society, and fewer are struggling for their own lives. Some would be able to work to earn a living while others are unable to do so because of some difficulties. On the other hand, many people with disabilities are trying to make a living by selling. However, they do not have a platform for selling their goods online. Therefore, the purpose of this study to investigate the user acceptance of an interactive entrepreneurship tool in the form of a mobile application named 'OKUE' which was designed with redundant multimedia elements for the use of person with disabilities (PWD). OKUE was designed and developed as an early intervention to help people with disabilities who are struggling to promote their products online. This study involved 30 respondents related to OKUE, namely buyers and PWD. Acceptance of the OKUE mobile application was evaluated using the QUIS (Questionnaire for User Interface Satisfaction) questionnaire which was used to measure user acceptance (64.9% for interactivity, 70.02% for efficiency and 82.21% for satisfaction). The findings described that all respondents agreed that the 'OKUE' Mobile Entrepreneurship Application is usable and appropriate to help people with disabilities promote their products and help them earn their living money.

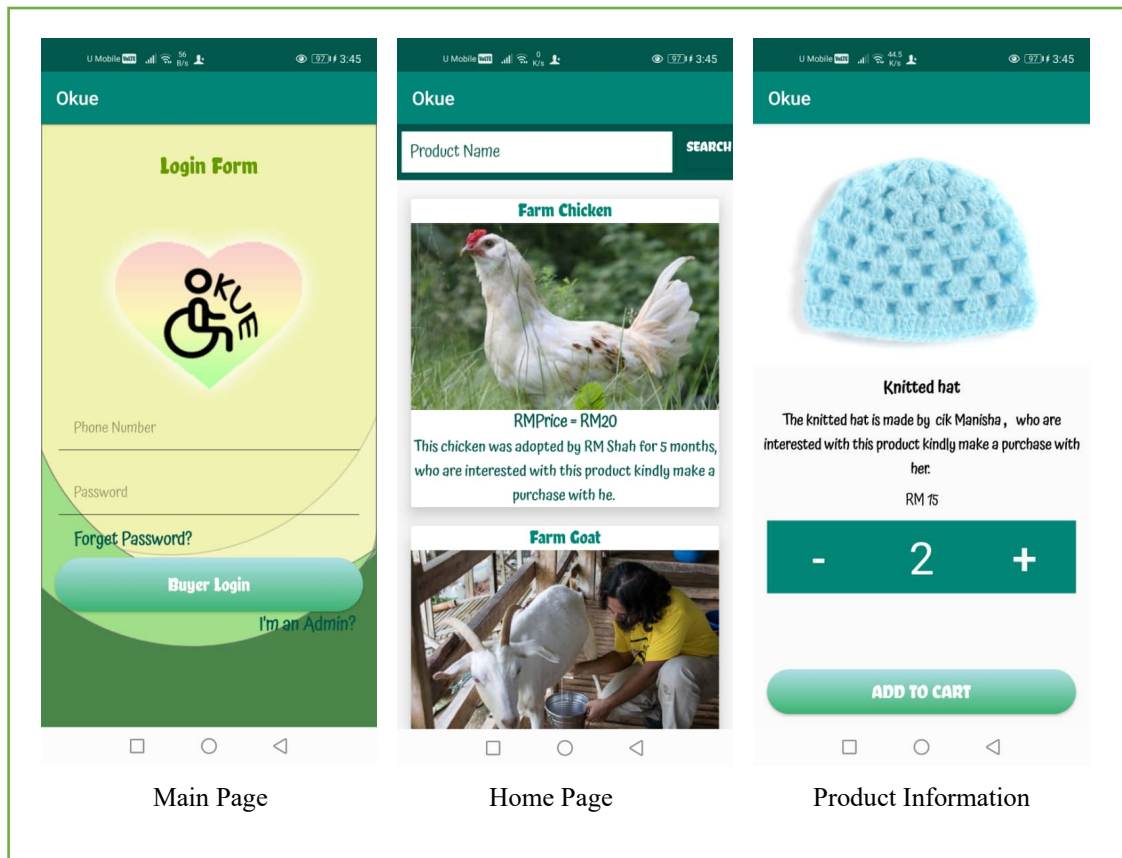*Keywords:* Mobile entrepreneurship application, OKUE, Person with disabilities, PWD

1. Introduction

People with disabilities are more likely to experience poverty (Yeo & Moore, 2003). Disabled people suffer deep discrimination and social disadvantage, but this has not created significant interest among mainstream sociologists (Barnes & Mercer, 2010). However, as the field of disability studies within the academy is institutionalized, a number of important questions are raised (Oliver & Barnes, 2010). There is a way for helping people with disabilities which based on the aim of living independently (Improving the life chances of disabled people, 2005). The philosophy and practice of independent living has been in nature since the 1970s, and it had a huge effect on organisations and political campaigns by people with disabilities around the world (Barnes & Mercer, 2005). Person with disabilities are ignored, the meaning of fair accommodation is misunderstood and the presence of the minority group which is people with disabilities, this is scarcely recognized in adult education and this adult education frequently forgets, overlooks or ignores autism as too rare a category (Berube, 1998).

1.1. Design And Development of OKUE Application

OKUE is developed as a user-friendly and efficient mobile application for the disabled people promote and sell their products and the person who interested also can purchase their products from disabled people through this online mobile application. Figure 01 shows the interfaces for the OKUE mobile application.
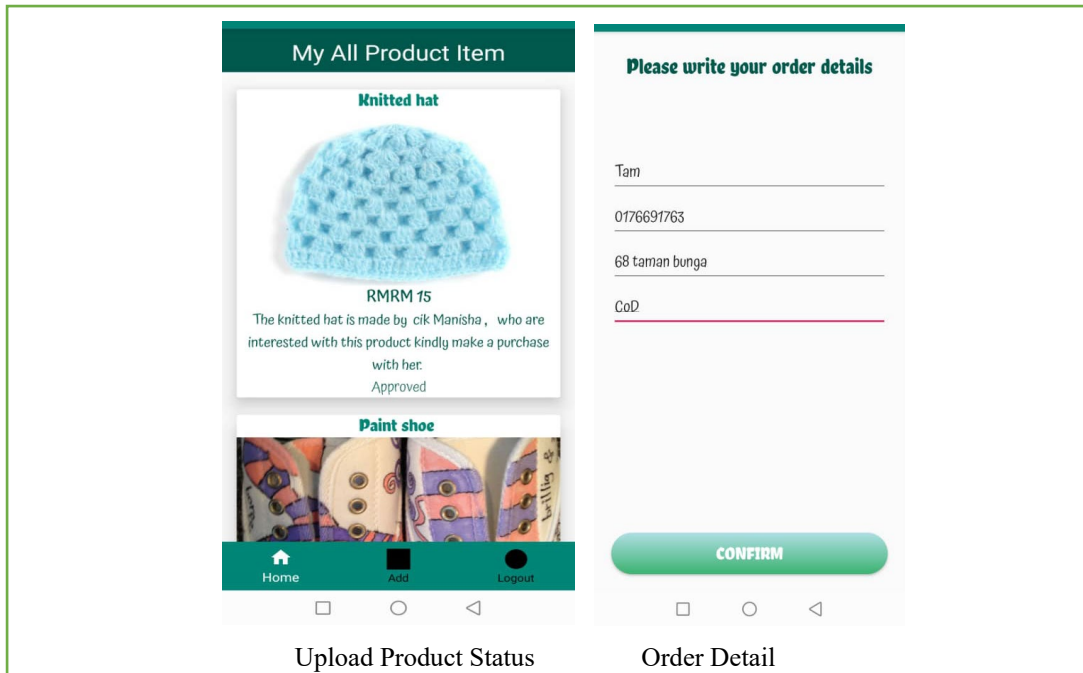

| Main Page | Home Page | Product Information |

Upload Product Status	Order Detail

Figure 1. The interfaces of OKUE mobile application

1.2. Concept Model of OKUE Application

Figure 02 show the concept model of OKUE mobile application. Users will register as a seller or a buyer and the information filled up will be then store in online database which is Firebase. Then, seller will login and able to upload their products including product's description, price and image, all of this information will be stored in Firebase also and showed in buyer's home page. After buyer logged in their accounts, they will add their interested products into shopping cart, then filled up their information such as name, phone no., address and payment method, these data will have stored in Firebase, then finally sent back to seller's page as received a new order.
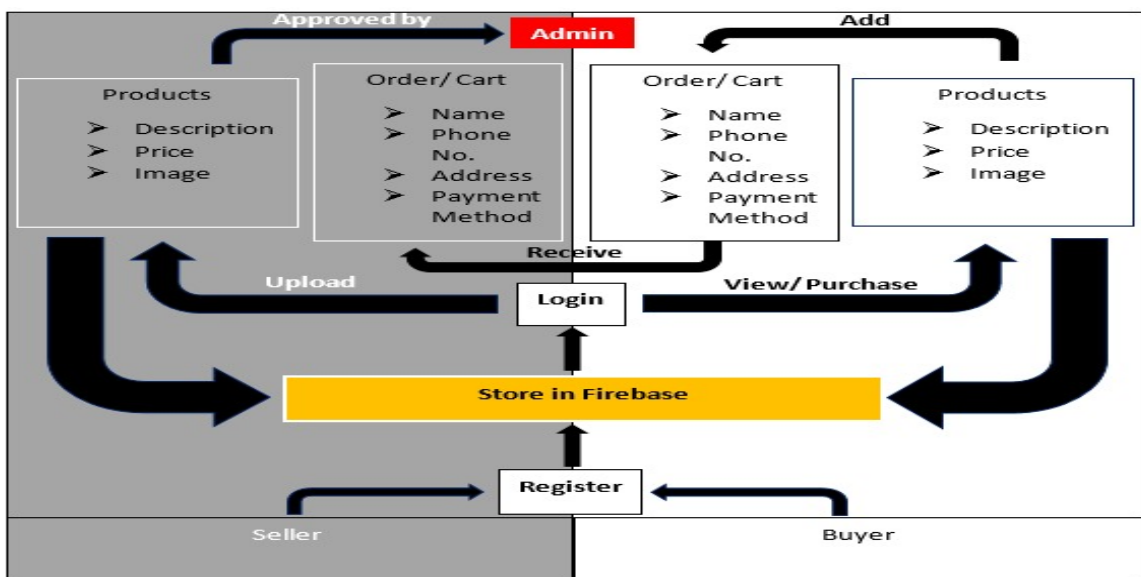

Figure 2. Concept model of OKUE mobile application

2. Problem Statement

Disability is defined as a neurological deficiency in this respect which including loss of limbs and loss of sensory equipment (Gleeson, 1996). In others words from Disabled People International, disability is the loss or limitation of opportunities to take part in the normal life of the community on an equal level with others due to physical and social barriers (Oliver, 1996). People with disabilities are ignored, the meaning of fair accommodation is misunderstood and the presence of the minority group which is people with disabilities, this is scarcely recognized in adult education and this adult education frequently forgets, overlooks or ignores autism as too rare a category (Berube, 1998). For instance, a disability is any disorder of the body or mind which considered as impairment that makes it more difficult for the person with the disorder to perform certain tasks which only limited to specific activities and communicate with the world around them. Any types that will affect a person's daily life is called as disability such as problems of visions, movement, hearing, learning and others more. Moreover, referring to the WHO, impairment, activity limitation and participant restrictions are the three dimensions of disability (World Health Organization, 2001).

3. Research Questions

The main question in this study is how to help the PWD in the field of entrepreneurship in Malaysia by promoting their products? There are a number of research questions that derive from the main research question:

- How can the online PWD product be promoted globally?
- What are the appropriate technological features used by persons with disabilities to promote their products?

4. Purpose of the Study

The main objective of this research is to design and develop a mobile entrepreneurship application for PWD to promote their product online easily to the public. The following objectives should be accomplished in order to achieve this:

- To identify the core element of OKUE mobile application.
- To design and develop OKUE mobile application based on objective 1.
- To evaluate an effectiveness OKUE mobile application based on objective 2.

5. Research Methods

The flow of the evaluation method is the process of re-assessment of how the researcher collects data to focus on the outcome of the OKUE Mobile Application by the developer. The evaluation consists of five stages, namely method, material, participant, procedure and data analysis (Figure 03).
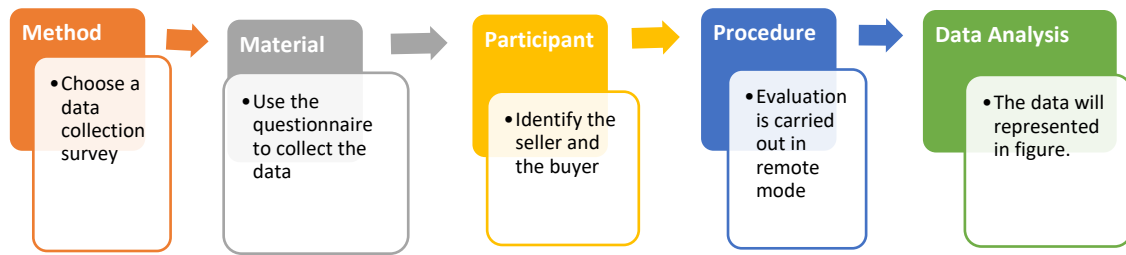
Figure 3. Steps in the evaluation method

5.1. Summative Evaluation

Summative evaluation brings lots of advantages such as can determine the achievement, identify the weakness and opportunity in learning process of improvement is developed (Baht, 2019). The Summative Evaluation surveyed target audiences with evaluation questions. These questions require the processes and functions of the OKUE project. The developers choose survey as the method in this evaluation report is because surveys are relatively inexpensive and useful in describing the characteristics of a large population, and it can be administered in many modes. The results will be filled out in the Google Form manual and the results will be shown in the Analysis Charts.

5.2. Instrument/Materials

Developers choose questionnaires as this evaluation materials because they are cheaper than personal interviewing and quicker if the sample is large and widely dispersed (Lorraine T Midanik, 2010). A research instrument consisting of a series of questions for gathering information from respondents. Then, online questionnaire is the best method because it is an efficient way of obtaining large amounts of information from a large sample of people. Moreover, the data of the questionnaire will be collected relatively quickly because the researcher would not need to be present when the questionnaires were completed while it is a time-saving method for the researchers (Wright, 2005). This is useful for large populations when interviews would be impractical. The questionnaires in this evaluation is using by Google Form. Developer will prepare certain questions for OKUE's user to evaluate for the application. Then, researchers prepared two types of questionnaires to different users which is seller and buyer. Both questionnaires have contained 10 questions including one open-ended question. Each user will answer the questions via Google Form to give evaluation to the OKUE, which is OKUE Mobile Application. This survey including open-ended and closed questions based on three aspects, which are four questions for interactivity, three questions for effectiveness and three questions for satisfaction including one open-ended question.

After researcher collecting all responses, the three dimensions have been concluded that adapted with based on interactivity, effectiveness and satisfaction (Norman, 1993) to evaluate the OKUE mobile application. The questionnaires divided by two type which are buyer's questionnaire and seller's questionnaire. The both type questionnaires have contained 10 questions including one open-ended question. All user required to answer the question based on the ranking such as strongly agree, agree,

neutral, disagree and strongly disagree. The results have collected and were analyses using parametric statistical method (Table 01).

Table 1. The constructs, items and abbreviation in the adapted IES Seller's/Buyer's questionnaire

Constructs	Item	Abbreviation
Seller/Buyer Interactivity	• This mobile application allows sellers to manipulate (update, add, delete) profile's information.	SI1
	• This mobile application allows sellers to manipulate (update, add, delete) products' information.	SI2
	• This mobile application allows sellers to login and logout their own accounts.	SI3
	• This mobile application allows sellers to communicate with buyers.	SI4
Seller/Buyer Effectiveness	• This mobile application is effective for sellers to promote their products.	SE1
	• This mobile application is effective for sellers to earn money.	SE2
	• This mobile application received new orders from buyers in a fast speed.	SE3
Seller/Buyer Satisfaction	• This mobile application does not need a very strong internet connection.	SS1
	• This mobile application is user-friendly.	SS2

5.3. Participant

The participant of our project is disabled people and the person who has interest to buy disabled people's products. This is because the application is a kind of mobile entrepreneur application by promoting the products that provided by the disabled people. Therefore, all the products in the platform of OKUE are sold by disabled people, which called sellers. By the way, for the people who would like to purchase disabled people's product using OKUE are considered as buyers. So that, expect for disabled people, the person who have interest to purchase disabled people's products also considered as the main target user or participant to this application and there will have 30 users to evaluate this application.

5.4. Procedure

The procedure of the users to evaluate the application is remote mode. During covid-19, researchers not able to let users evaluate OKUE mobile application. In order to get the responses, researchers would upload the APK file on Google drive and letting the users download the application to test the application on their own smart phones. Moreover, researchers have prepared the screen recording of the test plan of how using the OKUE mobile application via Google Form too. They can refer and enter every sections of the application to experience the flow of use. For example, disabled people will be testing the seller mode while the others will be testing the buyer mode. After users testing all the interfaces and experience the application, the users will fill in the questionnaire and submit online by clicking the Google Form's link that sent by developers through WhatsApp.

5.5. Data Analysis

After users answered the questionnaire, the results were analysed in interpretation with the figures, which is pie chart and bar chart. Then, the developer will easy to read and understand the overall data that recorded in the Google form.

6. Findings

For interactivity, the overall result for seller OKUE mobile application's interactivity section achieved 8.33% (strongly agree), 50% (agree), 35% (neutral), 1.68% (disagree) and 5% (strongly disagree). For effectiveness of OKUE mobile application was 4.47% (strongly agree), 55.57% (agree), 37.77% (neutral), 1.68% (disagree) and 0% (strongly disagree) from the users' answer. For the perspective satisfaction, 39.77% (strongly agree), 46.65% (agree), 13.58% (neutral), 0% (disagree) and 0% (strongly disagree) (Table 02).

Table 2. Result of OKUE's evaluation for seller

Aspect	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean Score
Interactivity	5.00	1.68	35.00	50.00	8.33	3.55
Effectiveness	0.00	1.68	37.77	55.57	4.47	3.82
Satisfaction	0.00	0.00	13.58	46.65	39.77	4.17

For interactivity, the overall result for buyer OKUE mobile application's interactivity section achieved 5% (strongly agree), 66.65% (agree), 8.35% (neutral), 10% (disagree) and 10% (strongly disagree). For effectiveness of OKUE mobile application was 2.233% (strongly agree), 77.767% (agree), 20% (neutral), 0% (disagree) and 0% (strongly disagree) from the users' answer. For the perspective satisfaction, 15% (strongly agree), 63% (agree), 15.35% (neutral), 6.65% (disagree) and 0% (strongly disagree). (Table 03).

Table 3. Result of OKUE's evaluation for buyer

Aspect	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean Score
Interactivity	10.00	10.00	8.35	66.65	5.00	3.50
Effectiveness	0.00	0.00	20.00	77.77	2.23	3.82
Satisfaction	0.00	6.65	15.35	63.00	15.00	4.13

From the results of the survey, sellers and buyers showed a high acceptance to OKUE mobile application in the aspects of interactivity, effectiveness, and satisfaction.

7. Conclusion

This evaluation was conducted with online survey and the flow is simplified and visualized in a figure to measure the performance of OKUE mobile application in the aspects of interactivity, effectiveness and satisfaction. The results show that there were positive feedbacks in overall regarding the OKUE mobile application that can assist disable person to promote their products and help them earn money for living. In seller side, the result that achieve 58.33% for interactivity, 60.04% for effectiveness, and 86.42% for satisfaction. While in buyer side, the result that achieve shown 71.65% for interactivity, 80% for effectiveness, and 78.0% for satisfaction. The overall results are considering as good because respondents interested with the OKUE mobile application more than 60% and above. Besides, in order to have a clear concept for the OKUE mobile application, a concept model is designed and created to include the available tasks for sellers and buyers in OKUE. As a result, the development of the OKUE mobile application is necessary to help people with disabilities improve their lifestyle independently. This result indicated that OKUE had a great potential to help people with disabilities to be an entrepreneur without depending on others.

Acknowledgments

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