Intention to use Technology to purchase coffee

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Abstract

This research aims to develop mobile application for ordering coffee to help increase convenience and reduce the waiting time from the coffee shop. It a was also used the Android platform for developing applications as a tool to help reduce time to wait for coffee orders. The behavior of the customer will send the customer information to the database using MySQL as the database management system and the coffee makers will follow the customer's order from their applications. Customers bring their orders at the store and pay for coffee. Then the coffee makers will progress to make coffee and send coffee to customers.

The purpose of this research is to investigate how technology can help customers to purchase coffee based on mobile application which customers can make new order, check order status, track order and register member. The research method was the model of System Development Life Cycle (SDLC) and relational database. The questionnaires were used to collect data about behaviour intention to use mobile payment. The results found that women often buy coffee in the morning before they go to work and their ages are between 23 and 30years old.

Keywords: Coffee, Intention, Technology

I. INTRODUCTION

Nowadays people are increasingly interested in coffee drinking. Because it makes them feel fresh. Coffee drinker are employee, student, teacher and they often drink coffee during their activities such as working, learning and relaxing. Additionally, when they feel sleepy and they need some drinks to be energetic. Most of them think that coffee helps them to be active. They always go to buy coffee from coffee shop although some coffee shops have queued for a long time.

Currently there is no mobile application to order coffee, which needs to add ingredients as customers need. Sometimes customers do not receive coffee as their ordered, for example, customers ordered moderate espresso but they got very strong espresso, customers ordered frappe latte but they got cold latte. From these causes, customers have dissatisfied and may not return to the same store again. Moreover, customers may not remember their previous orders that they did before.

Thus, researcher has the idea to create an application for order coffee through the mobile application. Coffee drinker can mix their own coffee ingredients such as sugar, cream and syrup for consuming coffee as they need. From previous study Anand S, et. al (2012) explained that the most popular smartphone platform was open-source android and the usefulness of mobile device pushed application move forward. Consequently, researcher used the Android application for developing applications as a tool.

II. LITERATURE REVIEW

The TAM is defined as how people can accept and are familiar with technology. The previous researchers are Walczuch et al. (2007) and Alemayehu and Hepu (2008) who studied in business and found that the acceptant of technology could be applied to test user acceptance of information technology such as how often customer access internet. In this study, technology acceptance (Davis, 1989) is used in questionnaires for searching and delivering information. In addition, technology acceptance can be come from perceive usefulness (PU) and perceived ease of use (PEOU). Perceive usefulness means the user think that they can get benefit after using information technology, at the same time as perceived ease of use refers how easy the user can take from technology.

From previous study (Walczuch et al., 2007) proposed the capability of TAM can be measured dimension of characters; i.e. discomfort, innovativeness, insecurity, and optimism from

financial service provider. The results from these studies have shown that the optimist users have positive attitudes towards technology but they are discomfort in using any new information technology.

Furthermore, Pathirana and Azam (2017) presented the opinion of user for mobile payment that they trust to use mobile because of convenience and fast responsiveness. On the other hand, Li et.al. (2019) proposed perceived ease of use and perceived usefulness effected on intention to use mobile payment but they are not related risk perception. It means user distrust to use mobile payment and they are afraid of third party.

III. RESEARCH METHOD

To increase convenience for customers to order coffee by using mobile applications that involve how to know type of coffee drink based on android operating system. In order to purchase through the application can be done in many forms depending on the convenience of customers that they can mix their own coffee and get coffee as ordered. This research is created by using the model of System Development Life Cycle (SDLC) and relational database.

Web application is the development of web-based systems which has an online flow system (Online) both local (local) within Local Area Network (LAN) and global to the internet networking. It is suitable for jobs that require real-time data. The function of the web application is that some programs will be placed on the Rendering Engine. The Rendering Engine will perform the main functions.

In using web applications to order coffee on the Android operating system will focus on application development in order to increase convenience and reduce the waiting time for ordering coffee at the store or waiting for a coffee order queue in an urgent time. The user can use the Android Operating System 4.0 or higher to connect to the application. So that customers can use the application to order coffee by users can choose ingredients through the application itself. While the function of the application will send the customer information to the database and the side of the coffee shop will pull the coffee order into the store.

IV. SYSTEM DESIGN

In design of web application development, there are 3 phases of planning and data flow diagrams as follows: 1. System administrator 2. Employee and 3. Users (Customer) that users can use system by supporting to login to the system choose ingredients and order menu. System administrator will be able to add, delete, edit information. Employee will be able to check the list of products that the users has ordered from the menu item.

Phase 1 (Frontend) is the features in mobile application for customers are as follows:

a. Login page is shown how to order coffee by using mobile application.

Figure 1. Login

b. Sign up page is shown how to register as a member. Customer must fill in this form before order.

Figure 2. Sign up

c. Main menu page is shown type of coffee such as Americano, Cappuccino, Espresso, Latte and Mocha.

Figure 3. Main menu

d. Americano page is shown frappe, cold and hot drink. It is also the shot of coffee.

Figure 4. Americano

e. Cappucino page is shown frappe, cold and hot drink. It is also the shot of coffee.

Figure 5. Cappuccino

f. Espresso page is shown frappe, cold and hot drink. It is also the shot of coffee.

Figure 6 Espresso

g. Latte page is shown frappe, cold and hot drink. It is also the shot of coffee and milk.

Figure 7. Latte

h. Mocha page is shown frappe, cold and hot drink. It is also the shot of coffee and chocolate.

Figure 8. Mocha

i. Order page is shown detail of customer's order such as type of coffee, the number of cup and the total of charge.

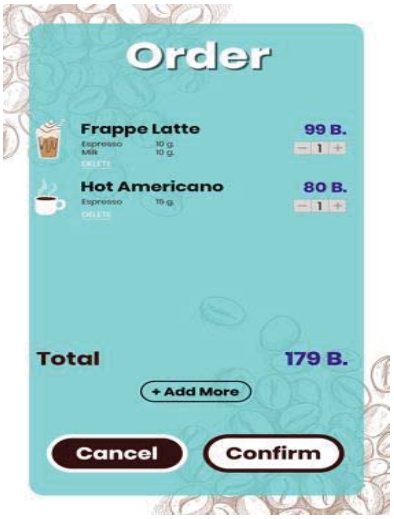

Figure 9. Order

j. Status page is shown status of customer's order such as in progress or finish.

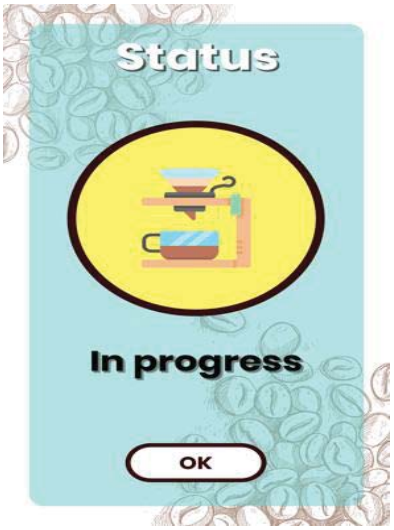

Figure 10. In progress

k. Finish page means ready to pick customer's order and pay.

Figure 11. Finish

Phase 2 (Backend) is the features in web application for system administrator and employee are as follows:

a. Admin login page is made based on design and used database management system that is related mobile application and web application.

Figure 12. Admin login

b. Admin main menu page is shown customer's order, type of coffee and report.

Figure 13. Admin main menu

c. Admin coffee menu page is shown type of coffee.

Figure 14. Admin coffee menu

d. Customer status page is presented the number of customers, the queue of customer, customer's order, and the status of order.

Figure 15. Customer status

e. Order detail page is shown detail of customer's order such as type of coffee, the number of cup and the total of charge.

Figure 16. Order detail

f. Report page is shown how many cups of coffee was sold per day, per month, and per year. It can also be compared type of coffee which customers love to drink.

Figure 17. Report

V. CONCLUSION

This research is a technical study of using web applications on Android operating systems. That content is about coffee consumption without specifying gender or age, and can also be made to know which type of coffee is the most consume. The research has been studied with the general public by using the applications that are created to check the information that customers interested in increasing or decreasing coffee drinking and most interest in coffee.

This study will bring applications that are created to experiment with consumers behavior. In order to bring the things that most customers are interested in. In addition, it should be developed in accordance with other operating systems such as IOS systems.

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