

Online Shop and Delivery Services Utilization in Influencing SMEs Development

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Abstract. This paper aims to assess the extent to which the Integrated Online Shop and Delivery Services system gives impacts on the success of SMEs development. The study is conducted by giving Likert scale questionnaires to 30 restaurants operator across Bojongsoang district in Bandung and applies the expanded Technology Acceptance Model. The data then be analysed using the suggested method for Likert Scale data analysis which involves mean, standard deviation, and correlation analysis. The result indicates that the Integrated Online Shop has positively impacted the successful growth of the restaurants. With the total score of 74%-80% each for the total of 4 variables, they are easy accessibility, online publication, user's convenience, and support services. Restaurant's operators agree that the system has helped their restaurant's development success. It can be concluded that the integrated online shop and delivery services system has helped SMEs to improve their success and growth.

1. Introduction

Some factors of economic growth are the increasing productivity of the jobs, increasing jobs created and decreasing of the less productive jobs. Those processes occur at the enterprise level [1]. SMEs or Small and Medium Enterprises is widely influential in developing countries. Besides being the key factors for employment and economic growth, SMEs are also the key factors in distributing important and essential goods to the rural areas that are still lacking in the infrastructural aspect [2]. As of 2017, SMEs hold 99.99% of Indonesia's market share and 2.06% growth during the period of 2016 to 2017 [3]. Recently, wide utilization of smartphone has enhanced the SMEs approach in operating their businesses, particularly in promoting and delivering their product directly to the consumer. SMEs now have a more efficient way of promoting and delivering the products without establishing their own shop or retailing their products to certain markets or shops. In this particular study, the companies which are also the main subject have an integrated system of services, some of which are delivery and online food and drink shop services, which what differentiates it from the common online shop. Restaurants or food and drinks producers first need to register their shop and create their own shop account. They are also required to submit the menus and their prices. Restaurants, Menus, and Prices will be displayed on the application system. After the order was processed, the registered courier which also operates as a ride-sharing driver then pick the order up and deliver them to the customer.

Mobile transaction is increasingly being used by microenterprises in Kenya, according to the research, the use of the mobile payments and the digital technology by micro business operators has been enhanced by the mobile service providers and government. This shows the importance of online application, despite the different type of system used by SMEs [4]. Another research shows that the

main constraints in Indonesia SMEs are financial and marketing challenges. Particularly in marketing, the obstacles they encounter occurred because of lack of market expansion which also caused by difficulties in financial funding [5,6]. Other than that, access to finance, tax rate, competition, electricity and political factors are also the difficulties of SMEs growth [7]. The variables that affect the performance of the SMEs are entrepreneurial aspect and competence of the human resources, in contrast to innovativeness and sustainability which has no influences [8]. The factors that influence SMEs are perceived benefits, technology readiness, owners' innovativeness, owners' IT experience and owners' IT ability [9]. Information system quality is the factor of SMEs success [10].

This study aims to analyze whether the combination of innovativeness and information system aspect which is being applied by the system we are discussing has any significant influences for the growth of SMEs. The method of this study is the technology acceptance model developed by Davies in 1989 capable of assessing the extent to which new technological tools are accepted by the users. The method is expanded in order to accommodate the specific case of the utility of online delivery service by the SMEs. Likert scale questionnaires consist of four variables each is given to 30 restaurant operators across Bandung city area which has been registered in delivery services company's partnership.

2. Method

Technology acceptance model was developed by Davis in 1989. It is one of the most popular research models to predict the use and acceptance of information systems and technology by individual users. TAM has been widely studied and verified by different studies that examine individual technology acceptance behavior in different information systems constructs. The method in this study is expanded in order to accommodate the specific case of the utilization of online publicity services by the SMEs. The data then will be analyzed using analysis for Likert scale. Likert scale questionnaires consist of four variables each are given to 30 restaurant operators across Bandung city area which has been registered in online publicity services company's partnership. This study aims to assess the extent to which the SMEs are influenced by the utilization of online publicity services.

3. Results and Discussion

The results of this study presents context and use case diagram of the system showing how it operates. To This study aims to assess the extent to which SMEs growth is influenced by the usability of integrated online delivery services. Context Diagram of Integrated Online Shop and Delivery Services is illustrated in the Figure 1 below.

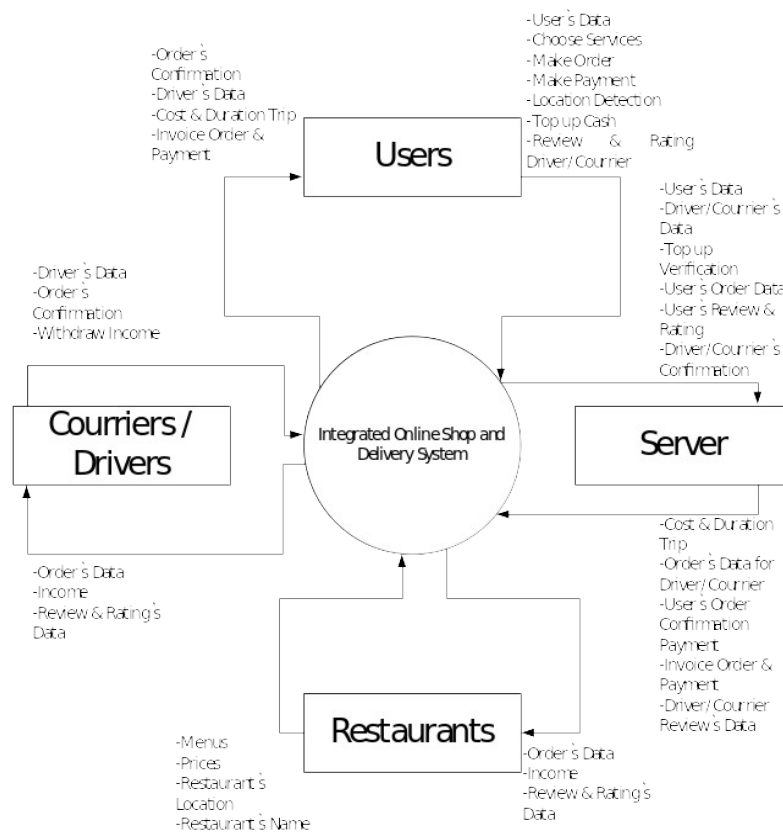


Figure 1. Working System

Registered restaurants will receive order's data, income, review, and rating's data, and submit their menus, prices, restaurant's location, and restaurant's name. Uses Case Diagram of Integrated Online Shop and Delivery Services is displayed in Figure 2.

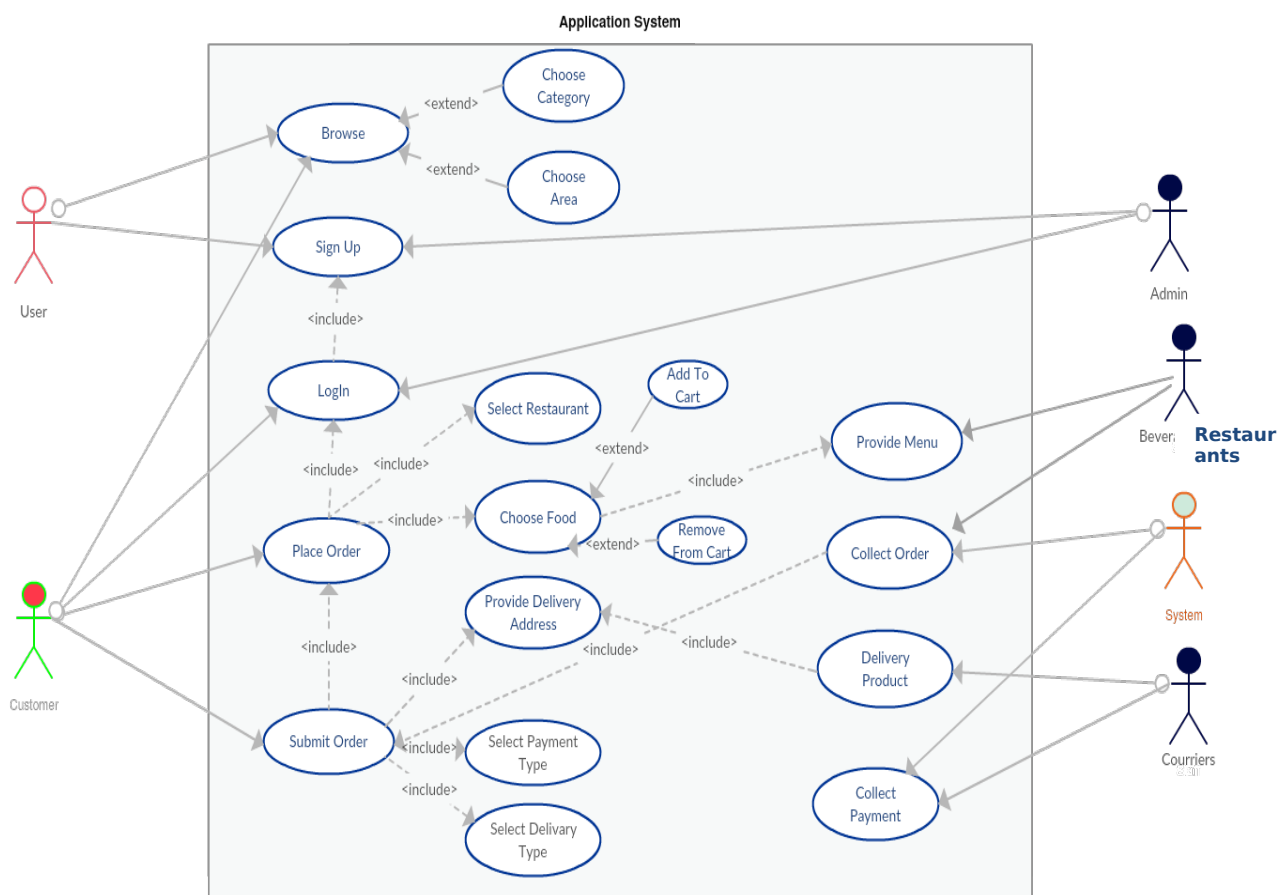


Figure 2. Detailed Working System.

Registered restaurants will collect order and provide menus, the couriers will then deliver the order to the customer. The data will be analysed using suggested data analysis procedures for Likert Scale data, it involves mean, std. Deviation and correlation analysis [6]. Figure 3 provides the basis of Technology Acceptance Model.

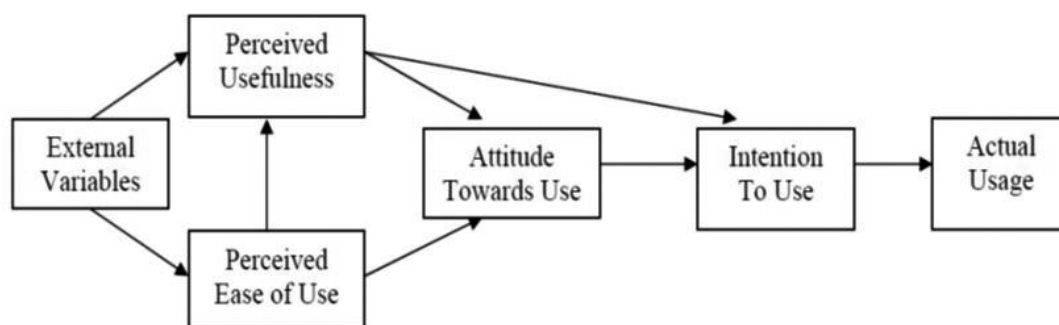


Figure 3. Technology Acceptance Model

In 2010, research conducted by Marion Mbongo used an expanded model of technology acceptance model for his mobile payment analysis. Figure 4 presents the expanded technology acceptance model by Marion Mbongo, Figure 5 presents an expanded technology acceptance model for this study.

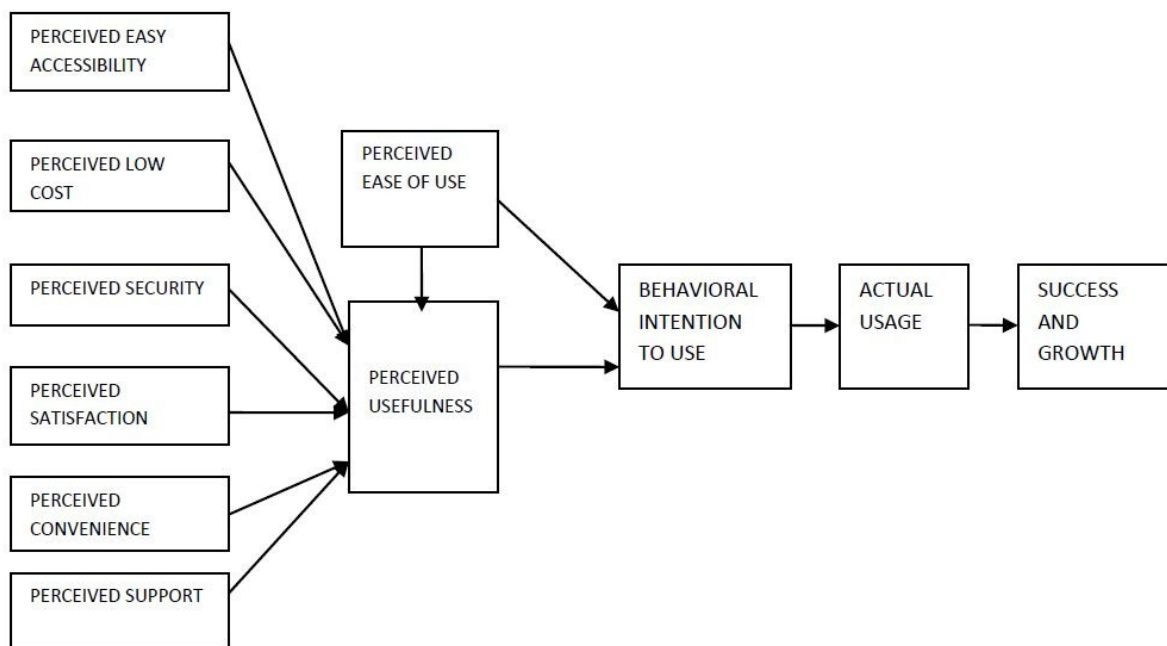


Figure 4. Expanded Technology Acceptance Model by Marion Mbongo

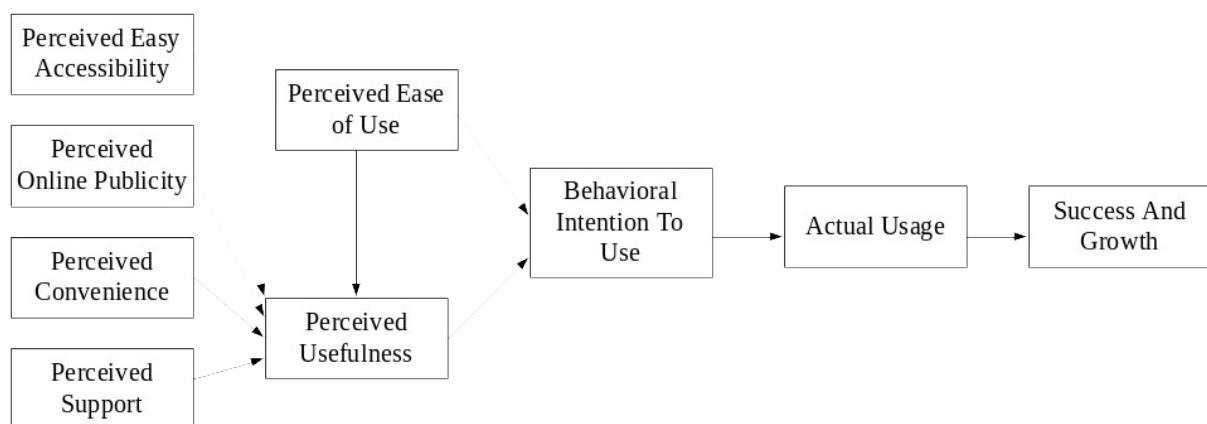


Figure 5. Expanded Technology Acceptance Model for this study

Perceived usefulness is an important factor for a new technological model, it stimulates the users to use the services on a frequent basis. In this study, perceived usefulness is divided into 4 categories as a factor to determine the success and growth of the SMEs according to its users. They are:

H1: Easy accessibility positively impact the successful growth of SMEs

H2: Online publicity positively impact the successful growth of SMEs

H3: User's convenience positively impacts the successful growth of SMEs

H4: Support Services positively impact the successful growth of SMEs

The answers represent score which will be counted as numerical scores and determine whether the integrated online shop and delivery services system has helped their business to develop (See Table 1).

Table 1. The answers score which be counted as numerical scores

Answers	Score
Very disagree	1
Disagree	2
Neutral	3
Agree	4
Very agree	5

Index (%) = (Total Score / Maximum score) x 100

Interval score

Index 0% – 19,99% : Very disagree

Index 20% – 39,99% : Disagree

Index 40% – 59,99% : Neutral

Index 60% – 79,99% : Agree

Index 80% – 100% : Very agree

The Analysis procedure for Likert scale involves mean, std. Deviation and correlation analysis using SPSS [6]. Tables 2 and 3 present the Descriptive statistics and Pearson's Correlations.

Table 2. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
H1	30	3,00	5,00	3,9667	,55605
H2	30	4,00	5,00	4,6333	,49013
H3	30	3,00	4,00	3,7333	,44978
H4	30	3,00	5,00	3,7333	,52083
Valid N (list wise)	30				

Table 2 shows the descriptive statistics of the data which involves minimum and maximum value, mean, and standard deviation. Table 3 shows Pearson's correlations of the data at the 0.05 level or 2-tailed.

Table 3. Pearson's Correlations

		H1	H2	H3	H4
H1	Pearson Correlation	1	-,299	,377*	-,270
	Sig. (2-tailed)		,108	,040	,149
	N	30	30	30	30
H2	Pearson Correlation	-,299	1	-,146	,144
	Sig. (2-tailed)	,108		,441	,447
	N	30	30	30	30
H3	Pearson Correlation	,377*	-,146	1	-,167
	Sig. (2-tailed)	,040	,441		,378
	N	30	30	30	30
H	Pearson Correlation	-,270	,144	-,167	1
	Sig. (2-tailed)	,149	,447	,378	
	N	30	30	30	30

*. Correlation is significant at the 0.05 level (2-tailed).

H1: Easy accessibility positively impact the successful growth of SMEs

With the mean of 3.9667 and total score of 79.33%, it indicates the users agree that easy accessibility of the system positively impacts their SME growth. The data also shows low variance or dispersion according to the std. Deviation of 0.55605.

H2: Online publicity positively impact the successful growth of SMEs

With the mean of 4.6333 and total score of 92.67%, it indicates the users very agree that online publicity of the system positively impacts their SME growth. The data also shows low variance or dispersion according to the std. Deviation of 0.49013.

H3: User's convenience positively impacts the successful growth of SMEs

With the mean of 3.7333 and total score of 74.67%, it indicates the users agree that user's convenience of the system positively impacts their SME growth. The data also shows low variance or dispersion according to the std. Deviation of 0.44978.

H4: Support Services positively impact the successful growth of SMEs

With the mean of 3.7333 and total score of 74.67%, it indicates the users agree that support services of the system positively impacts their business's growth. The data also shows low variance or dispersion according to the std. Deviation of 0.52083.

Based on significance 2 tailed test of the value of 0.04 which is less than 0.05, and Pearson correlation of 0.377 which is more than 0.349 as the value of r for the 0.05 level of significance, it concludes that there is a high correlation between easy accessibility and user's convenience.

4. Conclusion

Based on the research above, the restaurant's operators agree that easy accessibility, user's convenience and support services of the system positively impacts the successful growth of their business. Restaurant's operators agree that online publicity of the system positively impacts the successful growth of their business. There is also a high correlation between easy accessibility and user's convenience.

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