# **Utilization of Online Food Delivery System on Competitiveness for Micro, Small, and Medium Businesses**

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Abstract. This study aims to examine and analyze the impact utilization the Online Food Delivery System on business competitiveness for Micro, Small, and Medium Businesses. This study was conducted using quantitative descriptive method, and regression analysis using a sample of 15 entrepreneurs in Bandung, West Java. Primary data is collected through survey method by distributing questionnaire by online. The result shows that utilization the Online Food Delivery System classified as good with the value of mean above 3,22, and Business Competitive for Micro, Small, and Medium Businesses classified as good with the value of mean above 3,05. Furthermore, the hypothesis proposed in this study shows that utilization the Online Food Delivery System has a significant effect on the business competitiveness for Micro, Small, and Medium Businesses. The study findings useful for future references in user satisfaction information system.

# 1. Introduction

Nowadays technological advances are so rapid that it affects several sectors of the economy that indirectly demands economic actors to make improvements to their business strategies. One of them is by utilizing a system that can interact between buyers and food business owners to carry out the buying and selling process which we often refer to as the Online Food Delivery System. The purpose of this system in terms of the seller is to facilitate the owner to market their products and facilitate online ordering transactions [1]. While from the seller's side the existence of this system is very helpful to find the desired product very easily and quickly. Online food delivery system is a food service from restaurants to customers through online applications that connect producers with consumers. Many food entrepreneurs are seeing this business increase, because of the popularity of online ordering. Online applications that can be connected to smartphones make it easier to use this application. This mobile application provides a customer tracking system for food delivery, customers order food in the restaurant or store they are aiming for, provides payment options either online or with cash-on-delivery systems, and provides a feedback system and recommendations on food assessment and delivery modes. [2]. Online food delivery applications are considered to be more convenient, reliable and free from distractions, and more efficient, so this has increased the restaurant and store business widely [2]. Utilization of this online food delivery system, is easily utilized by SMEs in their business, because it can provide time and cost efficiency in marketing their products. There is no need for fixed assets for space to display goods to be marketed. Does not require limited time in marketing. Online food delivery has become an unlimited media or market in bringing together many buyers and sellers. This opportunity can provide an increase in SME marketing by disseminating information on products offered by SME through the internet media. This online media can also increase product branding and business to be more professional because the scope of recipient information is very broad. Reducing communication costs, increasing customer service, reducing waiting times, and increasing sales, and increasing competitiveness contribute to the use of this system by SMEs [3]. SMEs as a group of companies with traditional methods play an important role in driving the growth of the economic sector and are job creation in the community, so it is important to identify the competitiveness of SMEs in maintaining their competitiveness through the use of e-commerce [4]. The use of ICT can help SMEs effectively in creating their competitive advantage. This is because the financial resources and assets of SMEs are not as big as large companies in developing innovative products and marketing solutions. SMEs are much more flexible so they are easy to adapt to changes in ICT, and can show continuous improvement in shaping the competitive position of SMEs.

Previous research stated that one of the reasons why economic growth in the food business is growing so fast is because of the rapid development of the service provider system concept itself [5]. The increasing growth of e-commerce in this case is aimed at previous research which is one of the challenges that needs to be faced by business people because at the same time the development of this technology invites many competitors who are very innovative in marketing their products [6]. In the research it was found that reaching buyers and expanding the marketing of products sold is one of the main keys why this system needs to be realized by business people. In addition, today's communitybased online habits also influence people's habits to search for anything on the internet. In another study it was mentioned that more than 70 percent reported comfort and time savings as their main reason for buying food online [7]. Previous research also mentioned that the rapid growth of e-commerce has given birth to changes in new business forms, and has changed business performance. So, it is said that the thinking behind this concept will become more significant in the future [8]. Even in other studies it was concluded the importance of a model used to test basic design criteria for service delivery systems to customers, where this framework must describe the dynamics behind some of the more sophisticated systems that can be found in the food service industry [9]. The other research that states that the importance of showing the factors and mechanisms of action that affect the competitiveness of companies and determine their achievement and maintenance is very necessary SMEs [4]. Based on the previous studies, the development of this research was formulated in terms of increasing competitive SMEs through the use of online food delivery systems. The utilization of this Online Food Delivery System can certainly be used as one of the important components in a business strategy that can be used by Medium Small Micro Business to improve their competitiveness.

The purpose of this research is to find out influence of Utilization the Online Food Delivery System on business competitiveness Medium Small Micro Business. Does the effect of increasing competitiveness can provide an increase in sales results after using the system, or even experience a decrease from before using the Online Food Delivery System.

This study was conducted using quantitative descriptive method, and regression analysis using a sample of 15 entrepreneurs in Bandung, West Java. Primary data is collected through survey method by distributing questionnaire by online.

# 2. Method

The study is based on the collection of primary data. Data collection took place over 1-month period from September 15, 2019, to October 17, 2019, via an onlione survey. Of the 35 prospecive respondents who followed the link, only those who responded positively were selected for the survey. The statements were presented to all respondents in the same order, resulting in a final sample size 15 for empirical study. The survey was conducted in North Bandung city (Dago). The purposive sampling used special characteristics is Medium Small Micro Business that sell heavy food in Bandung city. As the population was small and homogeneous, all samples are given an equal probability.

This study focuses the major factors which affect Competitiveness Business of Medium Small Micro Business. A structured questionnaire was designed with close-ended questions. It was designed in such a manner so that it caters all the areas of study. All items measured on a five-point Likert Scale.

Quantitative research method was used in this research so as to investigate and observe the collected data with the help of statistical technique. The signs expected for the regression coefficients are given in parentheses, and the magnitudes are left for the estimation. The dependent variable is Competitiveness Business which the aggregate amount of the sales annually. The independent variable is utility of online food delivery measured as the number of usefulness perception.

## 3. Results and Discussion

Before entering into the results of the discussion, it is first necessary to know the basic forms and components in this study. The most important business component in this discussion is because Micro, Small and Medium Enterprises, which are basically business as well. Therefore, the need to know the components in the business itself. Basically, business does create several business models that aim to realize the business model itself. Usually it will not be less than two types of organizational and financial architecture of the business itself. At this stage the architecture is not a blue print on the computer or other business models [9].

Medium Small Micro Business was formed to benefit the people below to run their own businesses and, in an effort, to increase employment to offset the unemployment rate in the area. The government is also paying particular attention to the Medium Small Micro Business as the economic backbone to the small people. However, the Medium Small Micro Business often find problems in their business. However, over the development of the times, the current generation has been surrounded by the name of technology. Technology is currently penetrating into various sectors, such as education, industry, and other welfare services also to the government [10]. It is undeniable that today's technology affects so many businesses out there. Starting from the emergence of new businesses, until the development of businesses that have existed for a long time, and therein lies the opportunities that is found by business people of Medium Small Micro Business.

Online Food Delivery System plays an important role in the appointment and even distribution of business people to the food industry sector in an area. By utilizing an online-based system, now there are no more business people who do not have the opportunity to promote their business [11]. The workflow in the Online Food Delivery System is divided into three main layers, namely Analysis, Application and Results. In the analysis section there is a method of data mining which is an automatic grouping in order to get recommendations on the system to buyers. So that business owners whose reputation and products are large or good can appear more frequently to the buyer's application, increasing the possibility of more purchases.

Whereas in the application part is the process of data processing in presenting how to distinguish which data should be displayed to buyers and which data should be displayed to the seller's side [11]. While the results are the result of application performance and data that can be continuously processed into data that can be reused or re-analyzed gradually to create an efficient program algorithm by implementing data mining or machine learning. The architecture of online food ordering systems generally includes servers, and cashier counters and food production. Conceptually the system is built based on components that include Android or IOS technology applications in ordering from customers' mobile devices, restaurant or store owner computers that track customer records and menu adjustments on server applications, restaurants and store-owned databases to store renewable menu information and order details, the main areas of restaurants and shops connected with wireless technology, as well as Android or IOS applications that are used to determine the location of the restaurant according to its geographical location [12]. In addition, application modules require system modules and system designs that connect customers and producers. Defined by the authorities in the menu renewal and production and marketing capacity in the restaurant. Operational daily sales activities are handled by the designated

part of the restaurant. Determination of payment whether using online or cash as well as customer feedback becomes an important part in the application. All customer data is stored in a database.

The Online Food Delivery System certainly provides many benefits to buyers and sellers. Mainly in the types of fast food foods. The implementation of this system can also be further developed using a version of another system such as GIS or Geographic Information System which can display like the locations of food business providers available online sales system in an area. The presence of this system is expected to facilitate business owners in providing information and promoting their food products. Like the menu with the most affordable prices or the latest products [13].

The existence of the Online Food Delivery System can also provide additional employment in the field of transportation, especially for food delivery people. This certainly can reduce unemployment in an area [14]. The utilization of the Online Food Delivery System for Medium Small Micro Business certainly has such a big effect. Mainly in improving the quality of competitiveness so as to create a more affordable business atmosphere in terms of business people because the presence of this system provides equality for new businesses and old business people to compete with the same class in this online-based system. It is hoped that this utilization can improve the quality of work of Medium Small Micro Business owners.

Building a conceptual model of application usage in this study by considering a literature review where using the application can increase system productivity and this can grow businesses over time SME entrepreneurs in increasing their competition. Adaptation with the technology acceptance model (TAM) is used in research to study the acceptance of online food ordering applications, showing that attitudes towards online food applications are basically caused by the usability and ease of the ordering process, varying according to information technology innovation and trust in e-commerce.

Online Food Delivery System that is used and as a topic in this study is a wireless food ordering system application that uses the internet. Where this application can be accessed via IOS and Android devices. Both of these devices are popular technologies that have their respective popularity and have evolved several times in the use of cellular technology. Food ordering systems are developing very dynamically due to the increasing popularity and capabilities of mobile devices and various new systems or technologies that are constantly being launched. At present, all web-based systems are trying to match the mobile device platform to the service needs of their customers.

It is important that in the online food delivery system developed by all system developers aim to improve communication between producers and customers. The choice of coverage areas for restaurants and shops, as well as the choice of menu or food service becomes a very important part. The main function in this application is in the pattern of customers in finding services so the GPS system must be active. Facility to search for services based on location based on the distance of consumers with the manufacturer detects GPS and according to location options that are directly displayed in the application. Users can communicate with food service providers with the help of mailboxes and get notifications. On the other side the application also provides facilities to add or reject requests from people who want to join the service. Those are all important parts in the form of facilities that must be present in this application.

Online food delivery system applications that are used are increasingly developing, more reliable, easy and accurate so that they are considered to achieve the goals intended to satisfy user services. This application is generally used by users because it is designed to accommodate small to large orders, the appearance of the menu with options according to the wishes of the customer and can automatically calculate payment bills for purchases by customers, including giving discounts and giving bonuses. This can improve the performance of business operators who use this application. The analysis of the respondents' answers shows that there are a lot of businesses that were previously unknown, now can be found on an online-based system. There are also some business people who have only just emerged thanks to this online-based system. The use of online-based systems greatly helps the development of its business because it can reach even more customers, answered by more than 85% respondents. More than 75% respondents answered the system has easy to used, the use of this food-based online system

makes it easy for buyers and sellers by providing the main feature that everyone can get, that is effectiveness. The value of the use of the system can improve user performance of mean above 3.12. The Value of the use of the system is able to increase user productivity of mean above 3,02. The value of the use of the system is beneficial user of mean above 3.14. The Online Food Delivery System classified as good with the value of mean above 3,22.

The use of ICT can create competitive advantage and improve the performance and competitiveness of SMEs. One way for SMEs to be ahead of its competitors is by the use of online businesses that drive competitive advantage and company performance. Online businesses can increase the market reach of SMEs and also operational efficiency. The results of descriptive analysis for competitiveness business using product market indicators with competitive prices indicate that more than 80% of respondents answered the product sales market is wider than before. As many as more than 75% of respondents gave answers to the selling price offered responded well by customers with the level of sales that are increasing every period. The Business Competitive for Micro, Small, and Medium Businesses classified as good with the value of mean above 3,05. The results of this study indicate that the use of applications can create competitive advantages with market accessibility that provides positive performance improvements for SMEs.

The hypothesis that must be given is Utilization Online Food Delivery System can affect Competitiveness Business in the Medium Small Micro Business. So that, Online Food Delivery System can provide solutions for Medium Small Micro Business in increasing their competitiveness against other food businesses that already have such a big name or that are very well known. Hypotheses Test that Utilization Online Food Delivery System increases as Competitiveness Business increases. The extent association of Utilization Online Food Delivery System with Competitiveness Business was measured firstly by Pearson Correlation. The results presented in Table 1 below.

Table 1
Pearson Correlation Result

Correlations										
		Competitiveness Business (Y)	Utilization Online Food Delivery System (X)							
Pearson	Competitiveness Business (Y)	1,000	,878							
Correlation	Utilization Online Food Delivery System (X)	,878	1,000							
	Competitiveness Business (Y)		,000							
Sig. (2-tailed)	Utilization Online Food Delivery System (X)	,000								
	Competitiveness Business (Y)	15	15							
N	Utilization Online Food Delivery System (X)	15	15							

Source: Output SPSSv24

The Pearson Correlation at the 0.05 level significance (2-tailed) result shows there is a strong positive association between Utilization Online Food Delivery System and Competitiveness Business. This indicates that as Utilization Online Food Delivery System increases, the Competitiveness Business increases. Sig. (2-tailed) in the table above shows that the significance level of the relationship between both of variables is 0,000. This value of 0,000 <0.05, means the correlation is significant. The extent association of Utilization Online Food Delivery System with Competitiveness Business was measured secondly test the hypothesis by regression. The results presented in Table 2. Table 2 shows the model explained 77.1% of the variation in the competitiveness business. The Utilization Online Food Delivery System is significantly related with the Competitiveness Business (beta = ,878, p=.000). The t statistics shows there is a significant linear relationship between the Utilization Online Food Delivery System is significantly related with the Competitiveness Business (t=38,118, sig.000). The positive sign of the

slope coefficient indicates that this relationship is positive.

Table 2
Regression Result

Regression Result										
Coefficients <sup>a</sup>										
Model			l	Unstandardized Coefficients		Standardized Coefficients				
		В	Std. Error	Beta	t	Sig.				
1	(Co	onstant)		6,822	,179		38,118	,000		
	Uti	Utilization Online Food		,205	,040	,878	5,196	,001		
	Delivery System (X)									
a. Dependent Variable: Competitiveness Business (Y)										
Model Summary										
Model R R Squa		re	Adjusted R Sq	uare Std.	Std. Error of the Estimate					
1	1 ,878 <sup>a</sup> ,771			,743		,1376				
a.	a. Predictors: (Constant), Utilization Online Food Delivery System									

Source: Output SPSSv24

This study has attempted to examine the impact of the Utilization Online Food Delivery System on the Competitiveness Business by using primary data. The regression model explains 77,1% of variation of the Competitiveness Business. These shows the Utilization Online Food Delivery System effect of the Competitiveness Business Medium Small Micro Business respectively.

## 4. Conclusion

The utilization of the Online Food Delivery System has a positive impact on increasing the competitiveness of Medium Small Micro Business so that it can increase sales which can directly increase the income of the Medium Small Micro Business. However, with a good and attractive user system, both sellers and buyers do not need a long time to be introduced to the system, because all the information is very easy to understand. In its use the system can run very well so as to increase comfort for its main users, buyers so that it can attract the desire of buyers to use the system again. In addition to the Delivery system, the seller gets additional features such as the utilization of sales data within a certain time to be directly made into a recap which can be very useful for the seller to monitor the business environment.

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