The Effect Of Gender In The Implementation Of Self Ordering Machine In A Fast Food Restaurant

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Abstract: The differences in the characteristics of male and female consumers also cause differences in purchasing decision making. Before buying products and services, female consumers will collect subjective information from the people around them, while male consumers prefer objective information based on the quality of the products and services. In addition, female consumers have a higher acceptance of risk when compared to male consumers. Therefore, female consumers are more careful in making purchases. Because of these differences in characteristics, this study aims to determine whether there are differences in adopting self ordering machines at fast food restaurants based on Theory of Acceptance and Use of Technology (UTAUT). Self Ordering Machine is a technological innovation in the company's business process that allows customers to order and pay for orders independently. With the implementation of the Self Ordering Machine, it is hoped that the company can improve its performance. The results showed that there were no differences between male and female consumers in adopting the Self Ordering Machine.

1.   Introduction

The results of research conducted by AnitaB.org, a global technology organization (2020), show that at this time, men are more dominant in using technology than women. The data shows that women who use technology are only 28.8% of the total workforce. Although this number tends to increase from year to year, it will take 12 years to equal men in technology (Stevany, 2020).

This also applies to access to financial services. The banking industry has used technology to provide its services. The results of research from Global Misroscope (2019) state that the use of technology for women is lower than that of men. The study concluded that there are still gender gaps in the use of technology based on a survey conducted in 55 developing countries (Karunia, 2019).

This condition also occurs in Indonesia. Based on research conducted by Hootsuite and We Are Sosial (2021), it is stated that men who use technology are higher than women. This research was conducted on the entire Indonesian people, amounting to 274.9 million people. Of the 73.7 million internet users, 50.3% of the internet users are male and the remaining 49.7% are female users (Novianty & Prastya, 2021).

For the restaurant industry, especially fast food restaurants, it has taken advantage of digital technology in its business. Restaurant has implemented a self ordering machine system since 2018. Mc Donald's Indonesia, a fast food restaurant operating in Indonesia, targets that as many as 76 of their outlets throughout Indonesia will have self ordering machines installed. In March 2019 Mc Donald's Indonesia has opened its 200th branch in Banjarmasin, South Kalimantan, which is equipped with a Self Ordering Machine. Self Ordering Machine is a service that provides flexibility for consumers to order themselves and make payments through available machines. Thus the Self Ordering Machine can provide comfort for customers because it can reduce customer queues (Aryanto, 2019). However, research conducted by Leong (Leong, 2019), proves that there is negative feedback from customers in implementing self ordering machines. There are still problems with the system, especially in menu selection and payment methods. Therefore companies must be able to build a good Customer Experience by knowing what customers want, so that it has an impact on increasing customer satisfaction and loyalty and advocating for brands (Gultom, 2019).

The implementation of the self ordering machine system at fast food restaurants in Indonesia still needs attention because in Indonesia digital transformation is still in its early stages. Not all consumers feel comfortable with using this technology. In conducting consumer transactions, it requires security, interaction and transparency. So as to allow dissatisfaction with customers if the problem cannot be resolved. Research conducted by (Martiyanti, 2015) shows that there are differences in risk acceptance between male and female consumers. Women have a higher perceived risk than men. Women are more likely to pay attention to security risks and threats

when making digital transactions. Women's trust in the use of technology to transact using technology is lower than that of men.

Based on the description above, this study aims to determine the differences in readiness to use self-ordering machine technology in women and men.

2.   Literature review

2.1   Self Ordering Machine

Self Ordering Machine is a system that allows customers to access restaurant menus and order food using self-service kiosks or self-service terminals. The Self Ordering Machine can also be combined with other devices such as remote management software, so that other platforms are available, such as a web-based digital billboard platform. For example, menu information can be combined with discount information (Advance Tech, 2021)

The features contained in the Self Ordering Machine (Advance Tech, 2021):

• E-Menu

When compared to traditional menus, e-menus can provide more interesting, detailed and interactive information. Views like this are expected to improve the overall customer experience

• Remote Content Management

With remote content management, managers can create new menu creations that are more visually appealing. Managers can also change prices within a certain time limit. For example, at certain times the manager can give discounts easily. Through remote content management managers can use the online interface to carry out remote promotions.

2.2 Self Ordering Machine and Company Performance Improvement

Self ordering machine is the result of technological innovation applied in the company. The process of innovation in business is a critical success factor for a company. Companies need to create an environment that encourages innovation within the company. In fast food restaurants, an important and very specific form of innovation is service process innovation. The first step in process innovation is the search for ideas. In the search for ideas the manager identifies relevant trends. Based on these trends, managers guide the focus of innovation that leads to idea discovery. The ideas are then evaluated, and the most interesting ideas become innovation projects. This project was developed by forming a special team to make a prototype (Kirchmer, 2017).

Process innovation and product and service development innovation can help companies develop quickly and effectively. Innovation can provide competitive advantage in a changing environment (Hu et al., 2020).

The use of self ordering machines in the restaurant business can improve company performance. With the availability of self ordering machines, customers can order food independently. Customers can easily access the menu and order food. The food information will be processed immediately so that it can reduce the overall service waiting time. This fast processing is expected to increase customer satisfaction and attract customers to increase purchases (Advance Tech, 2021).

2.3 Differences in the characteristics of male and female consumers

There are many differences in characteristics between female and male consumers. This difference may be due to the physical differences in the brain between women and men. Women have a thicker corpus callosum which allows women to use both sides of their brain, whereas men mostly use only the left side of their brain. Therefore men tend to do logical calculations and process facts. For women, besides having this ability, women have the ability to process visual images and interpret contexts (Zoovu, 2019).

If a consumer needs a product or service, the consumer tends to collect information and evaluate various alternatives. In this case, women are more concerned with information that is subjective in nature, for example obtaining product and service information from customer reviews. Male consumers prefer subjective information such as brands and models (Zoovu, 2019).

The differences between female and male consumers are also shown in the selection of products and services. For male consumers, if they find a suitable brand, they tend to be loyal to the product. Female consumers are not dependent on brands but they will be loyal if they receive good service. Therefore, for female customers, companies must be able to build personal relationships with customers, while for male consumers, companies must promote product excellence and benefits (Zoovu, 2019).

The level of consumer satisfaction also differs between male and female consumers. In male consumers, satisfaction is obtained if these consumers get services to find the right goods quickly. Whereas for female consumers, satisfying service is if they get help from experts to get the right product (Zoovu, 2019).

Likewise in purchasing activities. Female consumers are more focused on issues of trust and assurance, while male consumers are more focused on the value obtained through purchases (Zoovu, 2019).

By knowing the differences in the characteristics of male and female consumers, it is hoped that the company can increase customer loyalty.

2.4 Gender and Adoption of Self Ordering Machine Technology

In implementing the Self Ordering Machine in fast food restaurants, it should be noted that there are differences in the characteristics of male and female consumers. Therefore, readiness in the adoption of self ordering machine technology will also differ between male and female consumers. One of the models used to examine the readiness for technology adoption is the unified theory of acceptance and use of technology (UTAUT) model. This model explains that there are four components that influence technology adoption, namely performance expectations, social influences, business expectations and conditions that facilitate technology adoption.

Performance expectations refer to the individual's use of technology. These individuals feel confident that the use of technology can improve their performance. Users must feel confident that the use of technology can provide trust and there are benefits.The use of technology can provide a sense of comfort and efficiency (Seo, 2020). When compared to male consumers, female consumers have higher expectations of this performance, because in the use of technology, female consumers focus more on trust. So that female consumers will adopt technology if they believe that the technology can provide a sense of security. To build trust, companies must be able to build personal relationships with customers.

Business expectations refer that the technology used will flexibly simplify and speed up the process. Users must be convinced that the use of technology can make the buying process run faster so that it can increase productivity (Ayaz & Yanartaş, 2020). Performance expectations may be of higher value to male consumers because male consumers have a higher score if they get the right product or service in a fast time.

Social influence refers to the belief that individuals must use new technology if people who are considered important to them also use the technology. This factor shows the influence of the opinion of friends or the hierarchy of superiors in the use of technology (Ayaz & Yanartaş, 2020). In the use of technology, female consumers tend to be influenced by people who are considered important to them. In the adoption of technology, female consumers tend to use subjective information.

Facilitating condition is the extent to which consumers believe that the company provides technical and organizational support for consumers as technology users. Female consumers will have satisfaction if the company can provide expert assistance in the use of technology.

3. Research method

This study aims to determine the differences in the readiness of the adoption of self-ordering machine technology in fast food restaurants for female and male consumers. The analytical method used is the comparative method using the t test. This research was conducted at McDonald's Indonesia restaurant in Bandung, with a sample of male and female consumers during 2019. The analysis was conducted using a questionnaire. The variables in this study are based on the UTAUT theory which consists of four components, namely:

- Performance expectations, which include: confidence that consumers can use a self ordering machine in the right way, and get benefits from using the machine.
- Business expectations, which include: fast and quality service delivery. In addition, the services provided can give the right results, there are no mistakes in ordering.
- Social influence, which includes: the influence of family and colleagues in the use of self ordering machine technology
- Facilitating conditions, which include; facilities that make it easy for consumers to make ordering easier; there is complete and accurate menu description information along with prices, discounts. In addition, the existing facilities can also make it easier for consumers to create new menu creations, with new sizes, so that consumers can control their orders.

4. Research results and discussion

To test the comparison of the readiness of male and female consumers, the independent t test was used, with the following results:

Table 1. Research Results

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
performance expectancy	Equal variances assumed	3.715	.062	-1.427	36	.162
	Equal variances not assumed			-1.399	29.489	.172
efort expectancy	Equal variances assumed	1.262	.269	-1.276	36	.210
	Equal variances not assumed			-1.265	33.805	.214
social influence	Equal variances assumed	.005	.945	-1.178	36	.246
	Equal variances not assumed			-1.175	35.143	.248
facilitating conditions	Equal variances assumed	.514	.478	-1.278	36	.209
	Equal variances not assumed			-1.269	33.997	.213

The test results do not show any differences in the readiness to adopt self-ordering machines in female and male consumers, because the significance value in the table of the results of the study shows a number greater than 0.05.

The results showed no difference in performance expectations. Both female and male consumers think that they can use self ordering machines in the right way and can provide benefits for consumers. Consumers consider there is no problem in using the machine.

For the business expectation component, there is also no significant difference between male and female consumers in readiness for technology adoption. All consumers feel that the use of machines can provide quality services to provide appropriate services so that there are no errors in the menu ordered.

Social influence also has the same impact on female and male consumers. Consumers consider the information conveyed by their families and other colleagues important in the adoption of self ordering machines.

Female and male consumers also have the same opinion that Self ordering machines provide convenience by providing menu facilities with detailed descriptions, price and discount information, how to make new menu creations. All consumers think that the facilities available on the machine make it easy to place orders.

5. Conclusion

The development of technology causes the business environment to change. Likewise in the restaurant business. Restaurant also tries to develop new innovations in providing services to its customers. One of the technologies used is self ordering machine. This study aims to determine the comparison of the readiness for adoption of this technology in male and female consumers, because based on previous research there are differences in characteristics between female and male consumers. The results showed that there was no difference in the readiness of male and female consumers to adopt self ordering machines. All consumers think that self ordering machines can simplify the ordering process.

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