

E-Commerce During Covid 19 Pandemic: An Analysis of Tokopedia Use as A Trade Medium Among Members of Facebook Group

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Abstract

This study is aimed at explaining how the members of Facebook group use Tokopedia as an e-commerce application for their medium of online trading transactions. Mix-method is employed to carry out this study by using survey, in-depth interviews, observation and documentation as its data collection instruments. The participants of this study are a thousand members of Facebook group named *I love Parepare* who are purposively selected and categorized as active users of Tokopedia e-commerce for online purchase transactions during Covid 19 pandemic. The results of this study reveal two important things. *The first*, young people and housewives are found to be the most dominant users of Tokopedia. *The second*, they majority use Tokopedia as an online trading medium during this pandemic due to two main reasons namely; Tokopedia is one of the safest and the most convenient applications for e-commerce online transactions. Both findings of this study can be useful information for people who are in need of making purchase transactions during Covid 19 pandemic efficiently and safely. This study conclusively proves that using e-commerce application e.g. Tokopedia is the safest way of making trade transaction during Covid 19 pandemic and it is believed to be one of health approaches to prevent people from gathering.

Keywords: communication technology, Facebook group members, e-commerce, online trade transaction, covid 19 pandemic, Tokopedia

1. Introduction

The use of the internet as the instrument of an advanced information technology has made a drastic change to the pattern of humans' communication system from manual and face to face communications to online or virtual ones (Kaharuddin, Ahmad, D, Mardiana, Rusni (2020). Consequently, this

change has led to the growth of trade and business transactions in cyberspace, in which almost all of the transactions use online applications today. It certainly has brought a positive effect on those who live in urban or remote areas to be able to make purchases without taking into account the limited time and space. They do not need to visit shops

directly and make face to face transactions any more, but all they need is to use their online applications available in their smartphones to shop virtually without being hindered by geographical conditions and long distances among regions or islands in Indonesia (Mowlana, 2018).

The fact has inspired many people in the world of business and economy to design and to develop a device which can work to facilitate online sales services in terms of sharing messages for selling and buying things taking place between merchants and costumers. They finally invent the device and begin introducing it as an e-commerce trading model for business transactions all over the world, including in Indonesia. The device requires internet connection to function the transactions online. For the reason, it is widely known as an *e-commerce* (electronic commerce) for buying and selling of goods and services over the internet.

The presence of the internet has really made people from different parts of the world connected one another virtually (Kaharuddin, Mardiana, Ahmad, D. & Sari, AAI. 2022). The internet encourages the massive use of computer networks among people to facilitate them carrying out not their activities in all aspects of life such as education, politics, as well as economic and business. Using computer networks people find it very easy to communicate and to interact socially with people from different background all over the world. This situation has made people really rely their activities on the internet, computer, and high technology of communication devices e.g. mobile phones and smart phones. In this regard, we can clearly see and feel how those things really effect and change many aspects of life, including business transactions in which vendors, retail merchants of goods, and companies make applications for purchase transactions using those technological devices. (Meyer, 2003).

The invented applications for business are widely used not only for promoting products, but also for connecting buyers and sellers to carry out trade transactions easily. It is said easy because buyers and sellers interact in business simply by using the purchase application installed in their smart phones. Sellers or companies promote their products using the applications and buyers purchase the products by using the applications as well. Even, in a certain case, the buyers can be offered to be regular costumers for the companies' products since the data of

purchase transactions are automatically saved in the companies' servers as long as the companies use e-commerce transaction system (Pauline Ratnasingam & Dien D. Phan, 2003). The application of e-commerce provide some useful facilities such as electronic mailing address, selling items promotions with their details, selling prices of the items, offered discounts, sellout items, number of items available, and many more. Those facilities can be used not only by the companies for selling their products, but also by the costumers for buying the products. This is one of the trading models, that can make business transactions between seller and buyer easier, and more efficient (Boateng, 2016).

In Indonesia, there are around 82 million people or approximately 30% of the total population in Indonesia identified as active internet users (Surata, 2017). The fact has also encouraged an increase in users of e-commerce online transactions. As for business people, it is big e-commerce markets which can be a very tempting gold mine especially for those who can see economic potentials behind this trend. This growth is supported by data provided by the ministry of communication and information of Indonesia which indicate that the value of e-commerce transactions in 2013 reached approximately 130 trillion rupiahs. Therefore, the existence of the internet is now becoming a good infrastructure and suitable for running e-commerce applications to support people's tendency to make online trade transactions, which in turn succeeds in popularizing the term e-commerce as a medium in doing business on the Internet.

In 2020, the use of e-commerce transactions significantly increases in Indonesia. This phenomenon occurs due to two vital factors i.e. the growth of Internet supporting facility and the current outbreak of covid-19 pandemic which have already brought about the transformation of social interaction among people, from face to face interaction to virtual one, including trade transaction. The data from the ICD (*Internet Computer Data*) research institute in London UK indicate that the *e-commerce* market in Indonesia significantly grew up 42% from 2017-2019. The trend of using e-commerce seems to be higher in Indonesia compared to other countries in Asia, such as Malaysia (14%), Thailand (22%), as well as Philippines (28%) (Mitra, 2014). Again, for business people and investors, the data are very positive stimulus for developing trade transactions and business activities using e-commerce as an online medium.

By taking into account of the existence of internet and e-commerce applications, all commercial companies start promoting their products and shifting their marketing strategy virtually. These things are essential to do for making the companies stay exist and continue to grow. As long as the commercial companies adapt their marketing and managerial systems with technology, they will be able to provide people's needs about their products using online trade transactions during Covid 19 attack all over the world. (Zhang, 2014). Today, commercial companies really rely on technology and internet to establish global network, strategic planning, promotion and trade strategy, as well as evaluation procedures for the sake of examining the progress achieved in the business world (Kishore & Raghav, 2004). In other words, their success is not only determined by developing the number and the type of products, improving the quality, setting affordable prices or delivering the right products, but also determine by using collaboration between technology and internet in the form of e-commerce application to encourage online or virtual trade transactions. Tokopedia is widely recognized as one of commercial companies, which uses e-commerce system for distribution, buying, selling, marketing of goods and services through electronic systems such as the internet, television and other computer networks. The objective of this study is to investigate the use of Tokopedia among members of Facebook group during Covid 19 Pandemic. This study is important to encourage people to choose online system when purchasing products during this pandemic since it is one of the safest ways of preventing them from being infected by the disease.

2. Literature Review

2.1 Health Belief Model

HBM (*Health Belief Model*) is a model in the field of health psychology. This theory is used to explain and predict behavior related to the health or called health behavior. HBM (Health Belief Model) is the oldest and most widely used as a social cognition model in the health of psychology. This health model was developed in the early 1950s by a group of social psychologists at the United States Public Health Service, in an effort to understand the widespread failures into the public and to accept disease prevention or screening tests in the early detection of asymptomatic diseases (Janz & Becker, 1984; Rosenstock, Strecher &

Becker, 1988), or in other words, this theory is widely used to explain behavior related to the health in terms of behavior change and maintenance. But as it develops of HBM is used to predict individuals in taking precautions, filtering, or controlling the disease conditions (Sakinah, 2017). According to Glanz, et al. (2008), the Health Belief Model is a cognitive model that can be influenced by information from the surrounding environment. This theory explains that the possibility of individual taking precautions depends on the individual's self-confidence.

HBM (Health Belief Model) uses two aspects as a representation of an individual's health behavior in responding to a disease threat, that are the perception of disease threat and behavioral evaluation to ward off that threat. Threat perception is divided into two beliefs; the first is perceived susceptibility to disease and perceived severity of the consequences of the disease. Behavioral evaluation includes consideration of potential benefits (Perceived benefits) as well as consideration of obstacles (Perceived barriers) (Conner & Norman, 2005; Steptoe, 2010). Specifically, the HBM (Health Belief Model) consists of the following dimensions:

1. Perceived susceptibility. (Perceived vulnerability). Individual perceptions about a condition that vary greatly in their personal feelings of vulnerability (this dimension includes questions such as estimation of *resistibility*, confidence in diagnosis, and susceptibility to disease in general). So, this dimension refers to one's subjective perception of the risk of contracting a condition.
2. *Perceived severity*, (Severity Perception) which is the feeling that arises about the seriousness of contracting to the disease also it varies from one individual to another. These dimensions include the evaluations including the medical consequences such as, death, disability, and pain as well as social consequences such as, effects of conditions on work, family life, and social relations.
3. Perceived benefits. Acceptance of personal vulnerability to a condition believed seriously, held to produce the strengths that lead to individual behavior, this dimension is hypothesized depending on beliefs about the effectiveness of various measures available to reduce the threat of disease or in other words the individual will receive the health actions

that are considered appropriate to overcome a condition

4. Perceived barriers, that is, the potential negative aspects of certain health actions it could act as obstacles to perform recommended behavior. Such as cost benefit analysis where individuals weigh the cost of effectiveness whether or not these costs have side effects, cause unpleasant, uncomfortable, as well as time consuming.

2.2 System Success Model (ISSM)

Measurement of the success or effectiveness of the information systems is very important for understanding the value and efficacy of information systems management (DeLone and McLean, 2002). The ISSM model was created in 1992, based on information systems theory and empirical research

conducted by a number of researchers in the 1970s and 1980s. According to DeLone and McLean, the dependent variable of MIS research is divided into six variables, including system quality, information quality, system usage, personal and organizational influence, and user satisfaction. Among these variables, the quality of information can affect the use of the system which further affects user satisfaction, personal performance and organizational performance (Chiu et al., 2006). DeLone and McLean developed ISSM with the quality of service introduced, incorporating personal and organizational influences into net income, related to the user satisfaction as an important index to measure ISSM success and concluded that system and service quality can jointly influence the user satisfaction and willing to use (DeLone and McLean, 2003).

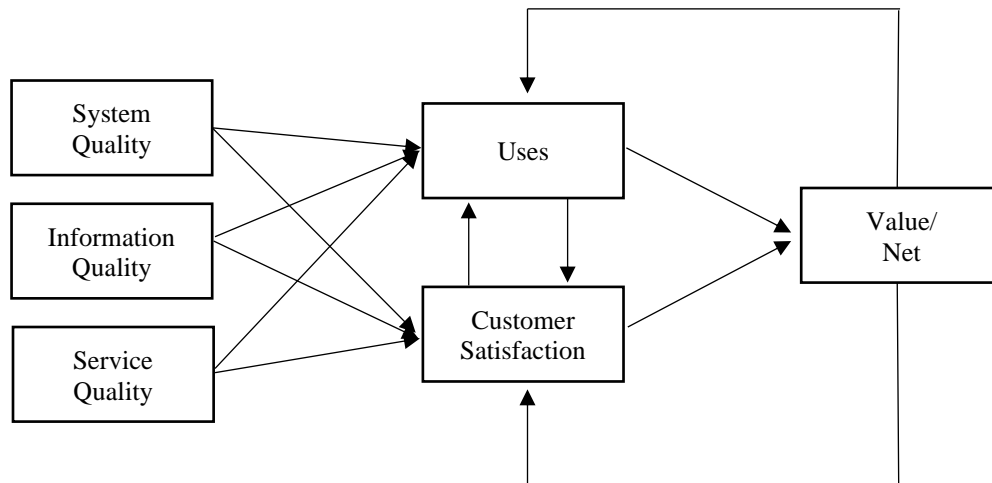


Figure 1. New ISSM

So far, ISSM has been used in checking usage in various information system users, especially online marketplaces. Angelina et al. has used ISSM to verify consumers' willingness to shop online (Angelina et al., 2019, Abidin & Kaharuddin, 2021). Dirgantari et al. uses the ISSM model to explain the level of e-commerce consumer usage and satisfaction during the pandemic (Dirgantari, 2020).

2.3 Diffusion of Innovations

This theory was popularized by Everett M. Rogers from a book called Diffusion of Innovation in 1961, so, from that book Roger considered a central figure in the theory of diffusion of innovation (Burhan, 2008). Initially this theory was used as a study in the field of sociology, because the diffusion of innovation is part of social change in which discuss the structure and function of social

systems. As the development of science, the diffusion of innovation is also an important study in the field of communication, because one important element of the diffusion of innovation is the communication channel. Diffusion theory describes the spread of an innovation through a population. Diffusion is the process which an innovation is spread or communicated through certain channels from time to time among members of the social system. The definition contains four main elements of diffusion, namely innovation, communication channels, time, and social systems. Innovation is an idea, practice, or an object that is considered the new one by the humans. This theory believes that an innovation is diffused into society in a predictable pattern (Rogers, 1983; Rizal, 2012).

Diffusion can also be referred to as social change, which is defined as the process of change that occurs in the structure and function of social systems, it means that when the new ideas are discovered and disseminated, then, these ideas can be adopted or rejected are leading to certain consequences from which social change occurs. In other words, this theory illustrates how an innovation spreads from time to time from an individual through an adoption decision process, which consists of five stages: 1) Individuals are aware of an innovation, 2) Individuals obtain enough knowledge to make decisions to the next stage, 3) Individuals have the decision to adopt or reject an innovation, 4) Individuals act on their decisions, 5) Individuals reflect their decisions usually in behavior (Rogers, 1983; Straub, 2009; Alzaidi, 2020).

The strength of this theory lies on the broad foundation of factors that influence the choices of a person makes about an innovation. This is the basis for understanding adoption which consists of five characteristics, as well as: relative advantage, compatibility, complexity, trialability and observability (Rogers, 1983; Straub, 2009; Rizal, 2012).

1. Relative Advantage

The individual will adopt the innovations or new ideas, if he considers them to be a better choice than the ideas they replaced. The more profitable to the innovation offered, So it can spreads faster in a social system. The relative level of profit is often expressed in terms of economic profitability or the granting of social status.

2. Compatibility

Compatibility is the degree of an innovation that is perceived, it has consistency with existing values, past experience, and the potential needs of adopters. An innovation can be compatible or not seen from (1) sociocultural values and beliefs, (2) ideas previously introduced, or (3) client needs for innovation. So, the more an innovation is not in accordance with the values and norms are prevailing in the social system, then the innovation cannot be adopted easily by the community.

3. Complexity

Complexity is a characteristic of an innovation that had been perceived difficult relatively or easy to understand and use by members of the social system. This level

assumes that an innovation can be quickly adopted when the innovation is easy to understand and would be understood by adopters.

4. Trial ability

Trialability is the level of an innovation can be tested before individuals actually adopt it. This stage determines an innovation will be adopted or rejected by adopters. The more an innovation is able to show or demonstrate its superiority, the faster the innovation would be adopted.

5. Observability

The ability of observation or observable is the level of an innovation that can be seen by others or in other words an innovation is easily observed and communicated to others. The easier individuals see the results and benefits of an innovation, the more they likely to adopt it.

2.4 Customers' satisfaction

Customers' satisfaction is the most important position in every sale and buy transaction. Customer satisfaction can be defined as an overall assessment of the product or service based on purchasing experience (Khadka, 2017). Customer satisfaction is the philosophy in business that shows the ability and responsibility to meet customer needs, managing and estimating what their expectations (Lager, 2008). Individual perceptions, both dissatisfaction or pleasure can be compared to the perceived performance of the product that is related to the one's expectations (Mendoza, Marius, Pérez, & Grimán, 2007). When customers are satisfied with a product or service, they are more likely to recommend it to others, and more likely to repeatedly buy or use those products and services, rather than switching to alternative other products (Bennett and Thiele, 2004).

Mustafa (2011) said that the loyalty of B2C e-commerce customers in Saudi Arabia is strongly influenced by customer satisfaction, but also influenced by customer trust. In Serbia, customer satisfaction in online shopping depends on determinants factors directly, such as security, delivery, availability of information, price, quality and time (Vasic, Kilibarda and Kaurin, 2019). User satisfaction system is the response and feedback was raised by user after using the information system. The user's attitude to information systems is a subjective criterion of how much the user likes the system used. Adopting from DeLone and

McLean (2003) this article uses two items namely:

- 1) Information Satisfaction (Repeat Purchase). The difference between information needed and information received. "In general, is the information satisfaction as a result of comparing the expectations or needs to the information systems with the performance of the system received".

- 2) Repeat Visit. One form of the global satisfaction with all systems that have been presented and conducted it is about the interactions regarding the level of satisfaction on information services and systems. As well as the benefits in the input and output process are received.

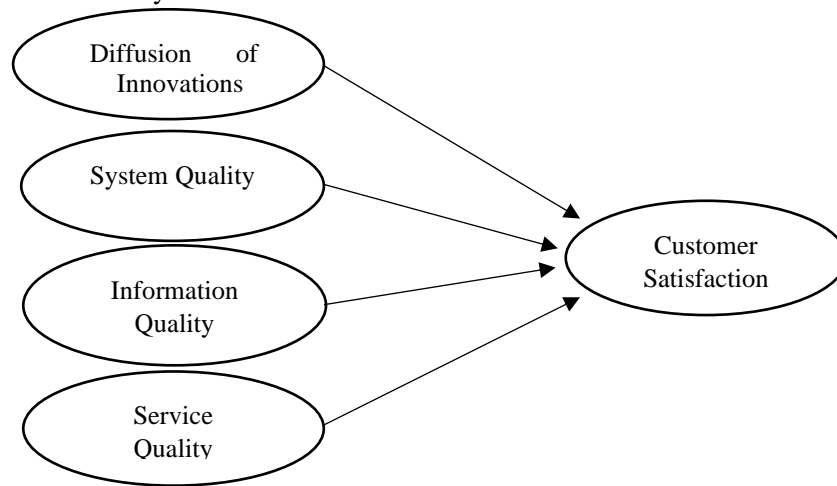


Figure 2. Research Model

This research type is a mixed (Mix Method) (Creswell, 2016; Samatan, 2018) it is using a pragmatic paradigm (Creswell, 2016). The research was conducted with the Embedded Concurrent strategy, the data collection was carried out simultaneously (Creswell, 2016; Samatan, 2018). And the data was analyzed based on field findings.

The research was conducted through surveys, in-depth interviews, observation and documentation, and the subject is *facebook* community and *Tokopedia* customers who are members of the Facebook group *I Love Parepare*.

The quantitative data is disseminated on google form application. The data collection was carried out from 01 April to 20 May 2020., Because at that time, the Covid-19 pandemic was at its peak, and people who usually made

transactions directly to the shop or to the market, they could not do this and finally choosing to use the transaction of purchasing over the internet.

The qualitative data were collected through written interviews, by sending a list of questions to the Facebook group *I Love Parepare*, and for some informants, in-depth interviews were conducted by making contact by telephone after getting a telephone number via messenger.

The quantitative data were analyzed through SPSS, while qualitative data was carried out in stages: data coding, data verification and data analysis (Ismail, Sunubi, A. H., Halidin, A., & Amzah., Nanning., Kaharuddin. (2020). After that, the quantitative and qualitative data were analyzed descriptively.

Table 2. Description of Diffusion of Innovation, ISSM and Customer Satisfaction (Quantitative)

Variabel	Number of Item
Diffusion of Innovation	12

Relative Advantage, Compatibility, Complicity, Triability, Observability

Information Quality	Completeness, Precision, Currency, Format of Output	4
System Quality	System Flexibility, System Integration, Time to Respond, Error Recovery, Convenience of Access, Language.	6
Service Quality	Assurance, Empathy, Responsiveness	3
User Satisfaction	Repeat Purchases, Repeat Visits	4

3. RESULTS/FINDINGS

Table 2 above shows, that the use of Tokopedia during a pandemic with the most respondents or 78 people (74%), are earning below 3 million rupiahs and 27 people (26%) earning above 3 million rupias. Most respondents had education

at university, namely 87 respondents or 82%, while the rest were at the education level below, namely 18 people (18%). Then in marital status, the largest number of respondents who used Tokopedia during a pandemic, namely, 67 respondents or 69% were unmarried and 33 respondents or 31%, were married.

Tabel 3. Consumer Tokopedia Characteristics

Consumer Tokopedia Characteristics	Frequency (n=105)	Percentage	Consumer Tokopedia Characteristics	Frequency (n=105)	Percentage
Income			Education Level		
< 3 Million Rupiah	78	74%	Elementary, Junior, Senior High schools	18	18%
> 3 Million Rupiah	27	26%	University	87	82%
Marital Status					
Married	33	31%			
Unmarried	72	69%			

Table 3 shows the correlation between the diffusion of innovation and customer satisfaction. The results showed the correlation

between the diffusion of innovation and customer satisfaction was 0.570. This figure shows that the correlation is less strong because the value is slightly above of the value of $r(0.5)$.

Tabel 4. Diffusion Innovation and Customer Satisfaction Correlation

		Diffusion Innovation	Customer Satisfaction
Diffusion Innovation	Pearson Correlation	1	.570**
	Sig. (2-tailed)		.000
Customer Satisfaction	Pearson Correlation	.570**	1
	Sig. (2-tailed)	.000	

Table 4 shows the correlation between system quality and customer satisfaction. The results

showed the correlation between the diffusion of innovation and customer satisfaction was

0.372. This figure shows a weak correlation because the value is below of the value of r (0.5).

Tabel 5. System Quality and Customer Satisfaction Correlation

		System Quality	Customer Satisfaction
System Quality	Pearson Correlation	1	.372**
	Sig. (2-tailed)		.000
Customer Satisfaction	Pearson Correlation	.372**	1
	Sig. (2-tailed)	.000	

Table 5 shows the correlation between information quality and customer satisfaction. The results showed the correlation between the

diffusion of innovation and customer satisfaction was 0.402. This figure shows a weak correlation because the value is below of the value of r (0.5).

Tabel 6. Information Quality and Customer Satisfaction Correlation

		Information Quality	Customer Satisfaction
Information Quality	Pearson Correlation	1	.402**
	Sig. (2-tailed)		.000
Customer Satisfaction	Pearson Correlation	.402**	1
	Sig. (2-tailed)	.000	

Table 6 shows the correlation between service quality and customer satisfaction. The results showed the correlation between the diffusion of

innovation and customer satisfaction was 0.467. This figure shows a weak correlation because the value is below of the value of r (0.5).

Tabel 7. Service Quality and Customer Satisfaction Correlation

		Service Quality	Customer Satisfaction
Service Quality	Pearson Correlation	1	.467**
	Sig. (2-tailed)		.000
Customer Satisfaction	Pearson Correlation	.467**	1
	Sig. (2-tailed)	.000	

Table 7 shows the correlation results of the Independent variable against the dependent variable. All Independent variables show a significant correlation to the dependent variable, if seen from the significance value

whose value is below 0.05. This is also supported by the results of the Pearson correlations, all of which are above of the r table value (0.176).

Tabel 8. Diffusion of Innovation, System Quality, Information Quality, Service Quality, and Customer Satisfaction Correlations

	Information Quality	System Quality	Service Quality	Difusi Inovasi	Customer Satisfaction
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Information Quality	Pearson Correlation	1	.508**	.529**	.453**	.402**
	Sig. (2-tailed)		.000	.000	.000	.000
System Quality	Pearson Correlation	.508**	1	.561**	.562**	.372**
	Sig. (2-tailed)	.000		.000	.000	.000
Service Quality	Pearson Correlation	.529**	.561**	1	.699**	.467**
	Sig. (2-tailed)	.000	.000		.000	.000
Difusi Inovasi	Pearson Correlation	.453**	.562**	.699**	1	.570**
	Sig. (2-tailed)	.000	.000	.000		.000
User Satisfaction	Pearson Correlation	.402**	.372**	.467**	.570**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

Based on the results of the respondents' answers, health is the main reason for shopping online. Fear of this pandemic, makes them look for the safest way to shop. By shopping online they do not need to meet with a seller and also it is the safest way during a pandemic. Online shopping makes them not need to crowd and can still maintain physical distancing. They can shop from home, and wait for the goods to deliver. Apart from health, other reasons is security transaction, low prices and convenience.

Most of the respondents are aware of the dangers for shopping by coming to the store for health reasons such as avoiding crowds in shops, reducing the spread of Covid-19 and being banned by the government. However, some respondents think that the pandemic is not their reason for shopping online. The reason is because by shopping online they get cheaper and more practical prices in comparing products. Shopping online provides several advantages to consumers. If it is related to the health during the Covid-19 pandemic, benefits that, the consumers can get by shopping online such as not having to meet other people to make transactions, providing a sense of security in shopping and shopping online can break the chain of spreading Covid-19.

For some people shopping online is still a strange thing, so they choose to keep shopping by coming to the store. This happened because

they thought the Pandemic was not too dangerous and many still shop by coming to the store, as said by one respondent, "Not a danger, but in the existing rules, we can see when shopping at the store / market is crowded. This pandemic prohibits people from gathering. "Another reason for them not to shop online is because primary goods such as food and beverages need to be bought directly to the store, "not really, because there are some basic necessities that must be bought directly to the supermarket". In addition, respondents are not afraid to shop offline because they think that people have met health protocols.

The other obstacles that respondents get when shopping online is like unfamiliarity, they're not used to it, the complexity, the internet network constraints, and the delivery it takes a long time, and also they are not being familiar with the payment transaction system, fear of product quality, expensive shipping costs, slow communication with sellers, the opportunities to fraud by the seller, unable to tell stories or ask other buyers, and the product cannot be seen directly.

4. DISCUSSION/ANALYSIS

Tokopedia shop is an online company of 3 e-commerce sites in Indonesia, the other two are *Lazada* and *Buka lapak*. Therefore *Tokopedia* is a company that cannot be considered small.

William Tanuwijaya and Leontinus Alpha Edison, are the founders of this company, and people who have played a major role in the development of this *Tokopedia* company. "Facing similar life experiences and challenges, we must do something to shorten the gap between big cities and small towns" That is a piece of sentence uttered by William at the inaugural launch of the *Tokopedia* application in Jakarta, on August 17, 2009. One of the intentions of the establishment this company according to William is for digital economic equality. Therefore, in the last 10 years, *Tokopedia* is one of the e-commerce sites that has promoted digital economic equality by motivating the Indonesian people to start selling online. This initiative is carried out by building a platform that allows anyone to start and find anything, wherever he is.

Conduct the marketing activities, is a fundamental problem in a company, so that various ways and efforts are carried out in order to get the market or consumers, including technology as a communication device. The use of internet technology as a communication tool in dealing with potential customers is one of the efforts to control the market. The internet, especially websites and social media, are the main tools in selling products, in addition to being used in providing information on discounted offers and promos, that are going on to consumers. This shows how strong marketing is done through the Internet today (Guilherme Pires, John Stanton & Ioannis-Dionysios Salavrakos, 2010).

This study aims to assess how to use Tokopedia as a trading medium in terms of innovation, system and health divisions in the Covid-19 Pandemic era. The results of the study found an increasing and changing in shopping behavior from offline (going to the store) to online shopping (e-commerce). Interestingly, although the amount of online shopping is increasing in the era of the pandemic, the consumers that we studied for, they are not fully to used to shop online. The measurement results shows that the diffusion of innovation has a less strong to the relationship with using of *Tokopedia* as a trading medium. The consumers still have difficulty to shop, especially in terms of the payment methods, not all of them have the types of payment provided and also do not have mobile banking so they have to walk to the ATM.

Consumer ratings of the system on *Tokopedia* showed a low correlation. The assessment carried out for this system is flexibility system, integration system, time to respond, error recovery, convenience of access, language. In addition, in terms of service quality, consumer ratings shown a low correlation with satisfaction with using *Tokopedia*. The assessment measure is taken for service quality such as assurance, empathy, and responsiveness. *Tokopedia's* data security guarantee was a concern some time ago due to a leak of *Tokopedia* customer data. 15 million *Tokopedia* user data leaked into cyberspace on the dark web. The data is sold by an account for 5000 USD. This affects consumer assessment of data security guarantees on *Tokopedia*. Information about products, payment methods and delivery estimates are important in online shopping. The quality of information received low ratings from respondents. The results of interviews with respondents indicated that sometimes the products that they have bought and that came to their homes are not exactly the same. The sellers sometimes hide the information about product deficiencies. And also low correlation occurs in the service quality which is associated with customer satisfaction.

The changes in online shopping during a pandemic are strongly influenced by changes in consumer behavior. Based on the results of interviews, this study found that health is the main consideration for consumers to choose shopping online at *Tokopedia*. With the existence of social / physical distancing regulations to prevent Covid-19 transmission, people are aware of the dangers of shopping when they come to stores because they will meet other people. By shopping online from home, consumers get a sense of security from the possibility of contracting the Covid-19 virus. The crowds are the most consumers fear, but some consumers still come to the store, because they think that the public has met the health protocol recommended by the government if they go outside, and there are also some basic items that must be bought by them at the store, instead of having to wait for delivery.

5. CONCLUSION

The use of Tokopedia to shop online during the pandemic has increased. In the application of innovation, people have accepted the use of technology as a new way of shopping.

However, people still experience some difficulties in using it due to sudden changes in the way they shop. The results showed that the diffusion of innovation, system quality, information quality and service quality had a relationship with the satisfaction of using Tokopedia. Health reasons are also things that affect the use of Tokopedia as an online trading medium. Fear of the pandemic and compliance with regulations implemented by the government during the pandemic have significantly affected the increase of online shopping on Tokopedia.

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