

Trends Financial Technology Usage Decision for Resilience in Urban Society: Impact of New Normal Era Covid-19

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Abstract

The main objective of the research was to discuss the influence of financial technology on usage decisions for resilience and how the systems give services to accommodate the needs of the consumers. The pilot study was guided by specific aims and goals to evaluate the number of online platforms in Indonesia that can impact millennial generations' usage decisions in urban society. Furthermore, questionnaires were collected based on the purposive sampling technique in the Indonesian market. 400 respondents participated in an online survey, and only 349 respondents that provided valid results can be selected to participate in this study. The findings of this study indicate that advertisement positively relates to usage decisions of fintech. In addition, electronic word of mouth and electronic service quality showed a positive relationship to usage decisions of fintech. Lastly, the brand image shows an insignificant effect on the purchase decision of fintech. Finally, the study results that online platform gives strengthen potential strategies in financial technology by using advertisement, electronic service quality, and electronic word of mouth in sustainability and growth.

Keywords : Advertisement; Brand Images; E-ServQual; E-WoM; Financial Technology; Purchase Decisions.

JEL Classification : D800, O1, M31, M37

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1. INTRODUCTION

The development of electronic trading, also known as electronic commerce, has significantly influenced international trade around the globe. The advance of the technology era, especially the internet, has dramatically changed the e-commerce business industry. Many companies provide website services to make their service available online over the internet. The transaction value from global data (BPS 2021) in Indonesia showed that e-commerce had grown significantly from year to year, with a transaction value of around USD 3.5 trillion. This transaction value forecasted in 2023 will reach around USD 6.5 trillion. E-commerce has proved successful and significantly affected both the economy and society (Peña-García et al., 2020). Indonesia has more than fifty (50) online companies registered under Indonesia E-commerce Association. As described in table 1, visitor trends

to visit online platforms in 2020. The user has increased significantly over fifty percent (50%) in last term 2020.

Table 1. Online Financial Technology Platform in Indonesia by 2020

No	Fintech E-commerce	Total Visitor			
		T1-2020	T2-2020	T3-2020	T4-2020
1	Ali Express	1,350,000	13,448,200	1,332,100	543,800
2	Bhinneka	4,450,000	3,804,800	2,803,800	4,442,600
3	Blibli	17,600,000	18,307,500	18,695,000	22,413,100
4	Bukalapak	37,633,300	35,288,100	31,409,200	38,583,100
5	Elevenia	1,166,700	1,094,500	809,900	991,600
6	JD ID	6,066,700	9,301,000	4,785,800	4,163,100
7	Lazada	24,400,000	22,021,800	22,674,700	36,260,000
8	Matahari	1,533,300	2,197,200	119,800	1,788,100
9	Shopee	71,533,300	93,440,300	96,532,300	129,320,000
10	Tokopedia	69,800,000	86,103,300	84,997,100	114,655,000

Source: Iprice (2021)

The aggressively increased industry e-commerce competition between online platforms and individual online sellers becomes more intense (Shi, 2018). The current situation makes the company focus on electronic service quality. Electronic service quality must be handled carefully by the company. Electronic service quality consists of reliability, responsiveness, access, flexibility, ease of navigation, efficiency, assurance/trust, privacy/security, price knowledge, site aesthetic, and customization/personalization (Parasuraman et al., 2005). Moreover, electronic service quality has shown positive suggestions towards customer satisfaction and repurchase intention (Cao et al., 2018).

Recently, with the advance of technology, customers heavily search for information about a product or service over the internet to maximize the purchase decision process (Alalwan, 2018; Purba et al., 2020; Shiau et al., 2018). Furthermore, a customer used advertisements as a communication tool a few years ago; however, now, they mostly welcome suggestions that online users post on the internet (Ismagilova et al., 2020). Furthermore, electronic word of mouth (e-WOM) is described as the robust and continuing information exchange process between prior, currently active, and potential customers about products, services, brands, and firms, which can be accessible by people and organizations through internet service (Ismagilova et al., 2016). Instantly, electronic word of mouth transmits about a product or service in the form of free promotion tools, which can help a customer to understand about product or service and minimize uncertainty risk while making a buying decision (Purnamasari, 2018; Shaikh et al., 2017)

In addition, brand image is one of the key factors of brand equity, which is evaluated as customers' common point of view and feeling about a brand and has formed on customer behavior (Zhang, 2015). On the other hand, from a marketing point of view, this activities is to control customers perception and attitude in relation to the brand, build up a brand image in customer mind, trigger customers real purchasing behavior of brand, then escalate sales, enlarge market share and maximize brand equity (Zhang, 2015). Additionally, customer purchase decisions will impact by brand features and attributes; it is ruled by the customer point of view about the brand image in-depth sense. Nevertheless, customers

have changed their lifestyle and approach the information, and brand image has become an essential factor in purchasing decisions.

Continuously adapting to the changes in the business of e-commerce, customers from around the globe are more into online shopping to search and purchase for a product and service; this also applies to a customer in Indonesia. This means the Indonesian government has to adopt digital payment services to serve online customers transaction. According to (Bank Indonesia, 2019), the digital landscape in Indonesia still has large market opportunities to grow around 51 percent. Mobile users in Indonesia are about 355,5 million, and social media users are around 150 million users. Furthermore, internet users have increased rapidly in Indonesia, with about 196.71 million users, around 73.7 % (APJII, 2020). Instantly, since the penetration, internet users showed the greatest number, around 50 percent, then e-commerce adoption among internet users demonstrated a high percentage around 88 percent (Bank Indonesia, 2019; Capgemini Research Institute, 2020). The population in Indonesia who has bank account age above 15 is around 48 percent. Instantly, however financial literacy rate in Indonesia turned out to be only 38 percent (Bank Indonesia, 2019).

The advanced technology and trend of online shopping affect the economy and change the pattern of customers' transactions, including the bank and finance sector. The use of the internet makes the world flat and borderless. E-commerce has affected customers to adapt to a digital payment system. This can be reflected by using credit cards and debit card transfer payments, which can be done by smartphone device (Bank Indonesia, 2019). In addition, online platform marketplace business, especially e-commerce and financial technology, proliferate in Indonesia. As more than 272 fintech users and around 200 e-commerce participants in Indonesia, thus the government, especially the Bank of Indonesia, needs to support both fintech and e-commerce. As predicted, by 2025, internet users in Indonesia will reach USD. 100 billion. In addition to a payment system, financial technology transactions operations are an appealing bank in Indonesia, especially forced by online transactions by e-commerce (Bank Indonesia, 2019).

Moreover, fintech and banks try to offer various payment services to online e-commerce and cause disruption in Indonesia's financial sector (Purba et al., 2019; Purba et al., 2020). However, the merchants need to choose which payment service will benefit the most; on the other hand, it also allows customers to choose which digital payment they will use. Therefore, various payment services will affect customer online purchase decision-making (Tan et al., 2019).

Using digital payment for online shopping is to increases customer experience in making a purchase decision. The existing research pointed out that the adoption of fintech services of commercial banks in China is highly affected by perceived ease of use, usefulness, brand image, attitude, trust, brand image, government support, and innovative users (Hu et al., 2019). Advertisement is one factor that influences customer purchase decisions, especially in online shopping using digital payment systems. Following the previous pilot study of Nizam et al. (2018), this is that the largest advertisement is more convincing than small size advertisements. Also, unnamed advertisements trigger high curiosity from the customers.

Furthermore, electronic word of mouth has influenced purchasing decisions in e-commerce (Yusuf et al., 2018). The results showed that electronic word of mouth significantly affected the purchase decision for customers to purchase online e-commerce.

In addition, the current online shopping situation that changes faster from time to time and the advancement of fintech will affect all aspects of society's lifestyle, especially for the millennial generation that fully use+d online applications twenty-four hours, seven days a week (24/7). Therefore, the study behind the trend of fintech factors that influence purchase decisions will help the millennial generation decide wisely in the future.

The study is essential to explore how advertisement, brand image, electronic word of mouth, and electronic service quality will help customers make an online purchase decision using Financial Technology, which is also forced by the situation of pandemic COVID-19 in physical distancing. This research has been done in Indonesia during March-August 2021 with respondents' profile only millennial generations born with digital native especially for fintech application includes OVO, ShopeePay, Linkaja, etc. Fintech is a fascinating topic, increasing the author's interest in discussing how far FINTECH has utilized since the pandemic of COVID-19 for support life and socializing with strictly health procedures aligned with government regulations. The research gap for the pilot study is to find out whether an advertisement, brand images, electronic service quality, electronic word of mouth significantly affected purchase decision in fintech directly in the post-pandemic of COVID-19. A variable used in this study has been adopted and modified according to the pilot study's purpose.

This paper contributes how far the FinTech; digital payment, transactions in giving services, and avoiding people from Corona Virus 19 by implementing the payment system. The pilot study proves that utilizing fintech provides benefits, specifically during physical distancing conditions, consumers continue their shopping activities using fintech. This paper is organized as follows. First, literature review and hypothesis development will be discussed. Secondly, the research method and the findings will be concluded with the discussion of theoretical and practical implications of the study, followed by limitations and proposed directions for further research.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Advertisement

Advertisement can be explained as a communication tool to persuade the audience to purchase and buy decisions and distribute information about products and services to crowds (Niazi et al., 2012). Furthermore, some scholars stated that advertisement is a non-paid promotional media where idea, concept, product, service, and dissemination information via particular media by certain sponsors to influence audience behavior (Manandhar, 2018). According to (Katke 2007), advertisement is a marketing weapon that gives a long-lasting effect on the audience's brain as it is broadcasting widely.

Moreover, advertisements through various channel distribution heavily affected viewers' online purchase decisions. Advertising is a way of mass communication tool that is accessible for marketing people. Advertising can be seen as a communication, marketing, economic and social process that can be viewed from a functional point of view. In addition, other scholars stated that advertisement is a paid, non-personal tool to communicate with an audience through a variety of media by company, organization, and personal endorsement who can distribute the advertising message to persuade audiences, create awareness about the product and service in customers mind and lastly escalate knowledge about product and service (Raj & Roy, 2015). When a customer receives a

message from the online advertisement, if they think this product or service meets their need, they will purchase a product directly through the internet. An advertisement will positively impact online purchase decisions based on the above explanation.

H1: Advertisement has a positive effect on online purchase consumer decision

Brand image

Brand image can be defined as a consumer's point of view towards a certain brand and affects consumer behavior (Zhang, 2015). Cretu & Brodie (2007) explained that brand image depicts a company's offering in terms of symbols or characters that deliver certain meanings on the product and services. Moreover, (Mao et al., 2020) defined brand image as consumers' perspective towards a brand. Accordingly, (Işoraité, 2018) explains that when a brand image depicts the consumer's needs, values, and lifestyle, the consumer will prefer to purchase that brand. The businesses should create a strong brand image because consumers will assess the products or services' quality and the brand image that could set apart the product from its competitors and create emotional stimuli in their minds.

According to some scholars, brand images are first perceptions when a product brand is put down in front of the eyes of customers (Saleem & Raja, 2014). Additionally, the brand image acts as customer support to fulfill their wants and needs by differentiating brands from competitors' products and services (Liu et al., 2020). Interestingly, a brand image showed a significant impact on the quality of life for a product and service (Jalilvand & Samiei, 2012). Some studies showed brand image as present connections, subjective point of view, and set of beliefs of a specific brand that come across in customers' minds (Cretu & Brodie, 2007). In addition, a brand image consists of an emotional value, which brand positioning is an essential part of a brand image (Nuseir, 2019; Sallam, 2015).

The brand image must be continuously organized along with the company mission and vision statements. Even though a company logo constitutes the brand shapes the ultimate element of a positive side of brand image, a slogan and other brand identities that differentiate one brand from other brands are crucial (Cretu & Brodie, 2007). Furthermore, emotionally plays an essential part in brand image in online purchase consumer decisions (Raj & Roy, 2015). Thus, brand image has shown a significant effect on online purchase decisions.

H2: Brand image has a positive effect on online purchase consumer decision

Electronic Word of Mouth (E-WOM)

Word of mouth is verbal communication between individuals and other parties, which has product, service, and brand attributes. Word of mouth is a natural conversation between consumers that occurs directly and indirectly (Jalilvand et al., 2011). Communication shapes interpersonal individuals in many ways, such as word of mouth and electronic word of mouth have been generally accepted and discussed by many scholars to understand the flow of word of mouth that will affect the consumer buying process (Ismagilova et al., 2020; King et al., 2014). Yadav et al. (2013) described electronic word of mouth as both positive and negative conversations made by prior customer experience regarding product, firm, or service accessible widely through the website. Instantly, electronic word of mouth had known created interpersonal relationships, noncontemporary, general, the diversity of electronic word of mouth was when a piece of information shared to others, the information is available to anyone. Lastly, the message can be accessed by everyone who has internet service (King et al., 2014).

In addition, electronic word of mouth showed positive control towards online shoppers' attitudes and purchase intentions (Jalilvand & Samiei, 2012). The increase in electronic word of mouth is due to extensively escalating e-commerce business, website, and social media users who utilize digital technology to search for information (Chetioui et al., 2020). Currently, the credibility and trustworthiness of electronic word of mouth only can be established based on trust. These can be shaped by interaction, reading, and electronic word-of-mouth sources such as review platforms and blogs. By doing this, a customer gets used to the electronic word of mouth platform and content provided, resulting in trust being developed (Chetioui et al., 2020). Instantly, trust evolution was determined on previous activities with electronic word-of-mouth websites (Hsu et al., 2018).

Constantly, customers easily trust a good positive review of electronic word of mouth. In the next step, a customer will make an online purchase based on certain websites based on suggestions for a particular product and service. Electronic opinions, reviews, and suggestions are key points to look for additional information for online customers (Chevalier & Mayzlin, 2006). Moreover, electronic word of mouth is contemplated to obtain extensive effectiveness that influences online users' attitudes and perceptions (Jalilvand & Samiei, 2012). According to Papathanassis & Knolle (2011), electronic word of mouth can be viewed as applying the information to give suggestions in the buying decision process for online shoppers. Additionally, Positive electronic word of mouth can mitigate the risk and avoidance of uncertainty for online customers; therefore, electronic word of mouth will affect consumers buying decision process.

H3: Electronic word of mouth will positively affect consumer decisions for online purchase

Electronic Service Quality

Service Quality comes from two different words include service and quality. Kenyon & Sen (2012) stated that how a customer can be defined as a perceived value in a characteristic of a product in one service. Quality is used as a strategic measurement to achieve better operational efficiency and business performance. Wolfinbarger & Gilly (2003) described that quality is integrated with satisfaction, retention, and customer loyalty in an online business context. Therefore, quality can be a success factor for online sales. Furthermore, scholars added that service quality is an essential attribute for successful e-commerce. At the same time, a consumer can easily compare products online to know about features of a product, which can be done easily within arm's length rather than compare product through traditional way (Santos, 2003).

Broadly view from Parasuraman et al. (2005) about electronic service quality as a customer evaluation of website quality. However, electronic service quality included a customer experience during the interaction over the site and quality in terms of post purchased interaction such as fulfillment and return. Electronic service quality widely covers all phases of customer interaction with the website and must facilitate online purchase service effectively and efficiently. Moreover, electronic service quality is the extent of the service quality, was used to a traditional transaction by face to face, while the current situation there is a transformation of electronic media developed through the advanced of the technology. In addition, Piercy (2014) explained that electronic service quality stages consist of pre-purchased, purchased, and post purchased. Post purchased stages activity such as an evaluation, trial and error, purchase and fulfillment of product and service while all the activities can be finalized through a website interface.

Additionally, an interface can be accessed through computer desktop, smartphone, tablet and mobile phone, more focus purchased of products through interface base on technology.

In the digital era, aligned with the development of e-commerce business, thus service quality can be seen as one of the essential parts of electronic trade. Blut (2016) explored electronic service quality as a wider customer interaction service with online shops. This means that customer interaction with firms in online shopping starts from the beginning to the end of the transactions. There is a process of service provided by the company in each stage of interactions. Borrowing from Ghosh (2018), electronic service quality is a customer interaction phase with the website. This measurement was developed based on the customer experience of both websites, including Amazon and Walmart.

According to Raza et al. (2020), electronic service quality can be a vital point for a successful online business and affect the customer experience in a virtual interactive. Therefore, electronic service quality will show the differences between other firms and create a competitive market advantage.

H4: Electronic service quality will positively affect consumer decisions for online purchases.

Purchase Decision Using Fintech

Recently, many activities have been done through the internet, including purchasing a product or a service online, especially when the COVID-19 pandemic spread all over Indonesia. In this situation, some customers may be unwilling to purchase online because of trust elements and various types of risks associated with online transactions. According to Das & Teng (2004), trust and risk have a relationship with decision-making. Furthermore, a scholarly analysis factor will affect online purchase decisions and come out sated that know how to use the internet to purchase a product or service (Pilik, 2013). Moreover, online purchase decisions are shaped by buying a product online (Verma & Jain, 2015).

In addition, online purchase decisions showed a relationship between judgment and purpose to purchase online. Malik & Guptha (2013) declared an online purchase behavior as the cycle of buying a product or service over the internet and consists of identifying a problem, seeking the information, product evaluation option, decision-making process, and post-purchase action. Additionally, online purchase decisions can be explored as a transformation of an attitude and behavior to shop online based on technology acceptance by users (Wu & Ke, 2015). Moreover, scholars explored online purchase decisions influenced by customer satisfaction, customer loyalty, and word of mouth (Bauboniene & Guleviciute, 2015). Instantly, there is a significant relationship between advertisement, brand image, electronic word of mouth, and electronic service quality towards online purchase decisions.

3. METHOD, DATA, AND ANALYSIS

This pilot study model was used to test the utility of financial technology in making purchase decisions by urban millennial customers during COVID-19 in Indonesia. The participants for the pilot study were customers who lived in Jakarta, Depok, Bogor, and Bekasi. This study used the sampling method with purposive sampling technique to the customers who shopped and were familiar with electronic commerce or online marketplace.

The research utilized an online questionnaire. The questionnaire items were designed in a five-point Likert scale displayed in table 2, set out from strongly disagree to agree strongly—the method of respondent selection who are utilizing Shopee online marketplace. The population's selection and determination in answering the questionnaire are essential to gather reliable and representative data of the population's output (Sun & Saenko, 2016). Jöreskog et al. (2016) stated that the sample population is an essential element in the research and the whole part of observations that will be done in this pilot study.

Table 2. Variable sources and number of items

Variable	Item	Source
Advertisement	1 I like to see an advertisement	(Korgaonkar & Wolin, 2009)
	2. Advertisement is good thing	
	3. Advertisement increased cost of products	
	4. Advertisement is informative and up to date	
	5. Advertisement increased brand awareness	
	6. I always read, listen or watch advertisement until end	
Brand Images	1. Fintech brand has created a distinct image in my mind.	(Hanaysha et al., 2014)
	2. Fintech brand has given me whatever it promised to me	
	3. Fintech brand I'm using is associated with the manufacturer's image.	
	4. Fintech brand provided me with a better lifestyle	
	5. Fintech of the brand is able to build a strong brand relationship with me.	
	6. Fintech brand make my life easier	
E-WOM	1. Comments on social media can be trusted	(Bataineh, 2015)
	2. I feel confident to discuss social media	
	3. Online reviews provided by the reviewer are helpful	
	4. Quality of online reviewers is highly recommended, reliable, and up to date	
	5. Online comments provided are understandable	
	6. Online reviewers provided by reviewers have reliable evidence to support the comments	
E-Service Quality	1. The brand gives prompt services to customers	(Udo et al., 2010)
	2. There is no difficulty to access the application	
	3. A software seems to be up to date	
	4. The application provides high-quality information	
	5. The fintech application fulfill my expectations	
	6. The fintech application provides high security and privacy for personal data and payment	
Purchase Decision	1. I often use Shopee pay to shop	(Mbetete & Tanamal, 2020)
	2. I searched information about the categories to purchase from Shopee platform	
	3. I will shop at Shopee	
	4. I like to use Shopee pay	
	5. I relied for information about past shopping experienced at Shopee through peer to peer	
	6. Shopee offered several payment methods	

According to Ghozali (2018), respondents must fill in the data for future research analysis with specific characteristics. The pilot study respondents can be grouped under the generation of Y and Z, categorized as millennials for both groups. The pilot stud from this research distributed the questionnaire to 400 respondents, and the data of questionnaires used for this pilot study only 349 respondents. To minimize the problem, the author created a pre-test to distribute. Furthermore, the pre-test did make sure there was no more ambiguity in the questionnaire items that were distributed.

Conceptual Framework

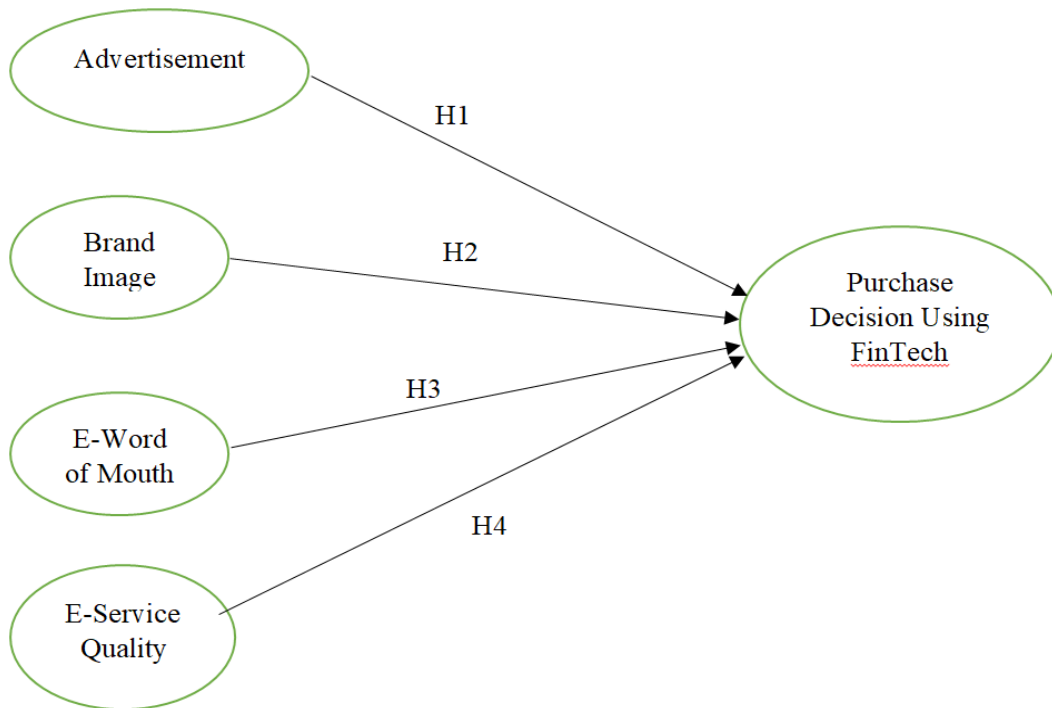


Figure 1. Modeling Framework

4. RESULTS

In the Results chapter, we will review the pilot study results and the analysis achieved descriptive statistics for the pilot study. Descriptive statistics conducted the correlation and covariance between each variable. After collecting the data, the analysis results were calculated using application software.

Table 3. Coefficient Determination Value

Model	R Square	R Square Adjusted
Purchase Decision	0.509	0.903

The table stated the R and R² values. The R Square determines the simple correlation. This value means total variation in the dependent variable of online purchase decision, which all independent variables can describe include advertisement, brand image, electronic word of mouth, and electronic service quality. In this case, the value is 50.9 percent, while the rest is 49.1 percent controlled by other variables excluded in the study.

Table 4. The result of the F-Test

Model	F	Sig
Purchase Decision	89.081	.000b

Based on the result from ANOVA showed that significance level of sig is $0.000 < 0.005$ and F calculation $> F$ table is $89.081 > 2.37$, so it can be concluded that variables of advertisement, brand image, electronic word of mouth, and electronic service quality have shown significant effect on online purchase decision making of using an online platform. Furthermore, it can be summarized that the regression model statistically significantly predicts the outcome variables.

Table 5. The result of T-test

Model	Standard Coefficients	t	Sig.	Results
Advertisement	.092	1.680	0.094	Reliable
Brand Image	.041	0.607	0.544	Not Reliable
E-WOM	.447	7.022	0.000	Reliable
ESQ	.218	3.984	0.000	Reliable

The significance level value of advertisement is 0.094, which is beyond 0.05, and t calculation value $1.680 > t$ table 1.649 can be explained the variable of the advertisement has an important effect on purchase decision in using fintech. Thus, H1 is accepted. Significance level value from Brand Image is 0.544, which is beyond 0.05, and t-calculation value $0.607 < t$ table 1.649 can be explained that variable of Brand Image has an insignificant effect on purchase decision in using fintech. Therefore, H2 is rejected.

Table 5 presents the significance value from electronic word of mouth (E-WOM) is 0.000, which is less than 0.05, and t calculation value is $7.022 > t$ value 1.649. This can conclude that the variable of electronic word of mouth (E-WOM) impacts purchase decisions in using fintech. To conclude, H3 is accepted. Lastly, the significance of point level from electronic service quality (ESQ) is 0.000, which is less than 0.05, and the t calculation value is $3.984 > t$ value 1.649. Thus, it described that the variable from electronic service quality (ESQ) had influenced the purchase decision of using fintech. Therefore, H4 is accepted.

5. DISCUSSION

In this study, the advertisement results significantly affect a purchase decision to use financial technology. The hypothesis supported with a characteristic of respondents from the questionnaire is millennial generations, where respondents are affected by advertisement. The advertisement showed a significant effect on purchase decisions that reflected on one item above standard value. In addition, the item of advertisement about advertisement is informative and up to date represented the highest value compared to other items. Society believed advertisement provided the newest product information, including features, benefits, price, and any other activities. Moreover, the advertisement content should consist of flash sales which is will increase more brand awareness and also curiosity to check the content, and after that, they will make a purchase of the product using a mobile phone. The fact posited advertisement affected society, especially the millennial generations. The pilot study was supported by prior research in Malaysia about online internet user attitude towards advertisements (Nizam et al., 2018). The results showed that

advertisement affected purchase decisions because society trusted advertisement-supported society in purchasing decisions both for online and traditional conservative shopping. Characteristics of the respondent from previous research are similar with current research respondent age dominant between 21 - 35 years old and graduated with bachelor's degree. Consistently, the study results are supported by the research from Nizam et al. (2018) that stated advertisement has positively significantly affected purchase decision to use fintech in this digital era.

Furthermore, another prior study researched Jordan to determine whether digital marketing can potentially affect purchase decisions (Al-azzam & Al-mizeed, 2021). The characteristic of the respondent from the study is university students about 18 - 24 years old. In addition, the research in two different countries demonstrated that advertising has a greater relationship with purchase decisions (Al-azzam & Al-mizeed, 2021). Thus, these are the facts that advertisements heavily influenced purchase decisions using fintech for online shopping and other shopping activities.

Next, Brand images have not shown a significant effect on purchase decision to use fintech. Inconsistently the study done by Yusuf (2021) showed that brand images significantly affected a purchase decision to use technology. Other scholars also stated that brand image significantly affects purchase decisions (Mbeti & Tanamal, 2020). Current research displayed the lowest value from brand images is BI5 about Fintech of the brand is able to build a relationship. The result revealed that the fintech brand could not build a relationship with customers. Reality showed that customers tend to use fintech heavily depending on benefits from promotion activities, including cashback, rewards, and loyalty points. The prior study displayed that brand images have greatly shaped a purchase decision. The research explored brand includes OMO powder, Kotex sanitary napkin, and Neptune oil in Vietnam (Khuong & Tram, 2015). There are differences between Indonesian and Vietnamese cultures; therefore, the result has shown different output between brand image and purchase decisions (Hofstede, 2016). Previous research has a demographic profile with the majority of respondents aged between 18 - 25 years old.

Moreover, the discussed product also showed the differences, such as in Vietnam, the product is for personal consumption and use, while in Indonesia is for technology use like payment systems. In addition, the result showed that respondents in this current study know and accept the brand images from the company and do not encounter any problem in purchase decisions using fintech for online shopping. Furthermore, the majority age in this respondent between 20 years old and 30 years old can be classified as the millennial generation, which is more concerned about advertisement and other factors that will affect online purchase decisions in using fintech. Constantly, based on this study, brand images for fintech have not shown a significant effect on purchase decisions, especially for millennials.

Variable of E-WOM in this study showed a positive relationship with purchase decision in fintech. Electronic word of mouth is an essential element that creates customer loyalty and repurchase intention. Nowadays, E-WOM is conveniently shared online through various platforms, including Instagram, YouTube, Twitter, and TikTok. Previous research supported current research about E-WOM in social media positively impacts purchase decisions (Poturak & Turkyilmaz, 2018). The respondents come from Romania and Bosnian, between 18 - 24 years old, and the majority of bachelor's degree students. Moreover, the characteristics of respondents between prior research and current research

have presented the differences, especially culture differences; however, the result revealed that E-WOM had influenced the purchase decision. In addition, customers from around the globe will rely on E-WOM before they decide to purchase both products and services. The pilot study showed respondents from the study heavily rely on electronic word of mouth, especially in online shopping since the characteristics of respondents are millennial generations. Customers relied on electronic word of mouth in the digital era and advance of technology. The E-commerce market emphasizes customers' reviews of the product to build credibility for the store and trust for the next customers. This study supported E-WOM information credibility, and website quality is an essential factor of E-WOM. Our empirical test result is consistent with previous research, where E-WOM has a potential influence on purchase decisions in e-commerce (Yusuf et al., 2018).

Lastly, the variable of E-Service Quality in our empirical study demonstrated a positive impact on purchase decisions in fintech. Recently, in advanced technology, e-service quality has become a popular variable to discuss in online shopping. Service quality consists of tangibility, empathy, reliability, responsiveness, and assurance (Zeithaml et al., 2017). Moreover, electronic service quality discussed in the study is responsiveness, security, privacy, ease of use, and fulfillment. The dimensions showed the valid result to create a purchase decision. This study is consistently supported by previous research that stated there is a positive impact of e-service quality on purchase decisions in China's online shopping (Zhou, 2010). Other studies also developed that e-service quality has a positive relationship in purchase decisions (Udo et al., 2010). Moreover, a prior study was done in the USA about online shopping. The majority of respondents are university students about 18 – 24 years old. In the meantime, the current study was doing in Indonesia dominantly respondents by millennial generations between 20 – 30 years old. However, the study was explored in two different countries but showed supported electronic service quality and purchase decision results.

Furthermore, the previous study supported the present research that mentioned a significant relationship between e-service quality and purchase decision (Archana & Khanna, 2012). The study was doing it in India about online shopping. Consistently, the study was done in India and Indonesia has a similar result that e-service quality shaped purchase decision. As a result, the present pilot study based on the real situation supported that e-service quality affects purchase decisions, especially for using fintech to make purchases and payments.

6. CONCLUSION

In conclusion, this study evaluates advertisement, brand image, electronic word of mouth, and electronic service quality for consumers. It analyzes the influence of these variables on the consumers purchasing decisions in the Indonesian market – the pilot study was performed through online questionnaires. Questionnaires were disseminated based on sampling techniques and collected in the Indonesian market. The results of questionnaires gathered 400 participants, and only 349 samples can be used for this study. To conclude, the pilot study results demonstrated that only three hypotheses positively affect purchase decisions in financial technology. On the other hand, one hypothesis about the brand image was rejected that insignificant affects purchasing decision in fintech. This research proved that fintech allocated Fintech ecosystems greatly and contributed to the Indonesian economy.

In addition, the most decisive impact on consumers to make a purchasing decision in fintech is an electronic word of mouth. Moreover, brand image is the most insignificant factor in fintech purchasing decisions on online platforms. Next, service providers developed Fintech applications to meet the fast-changing demand globally. The research was limited to the millennial generations in urban society. Future research can be done, taking into other variables such as brand love and gamification that will affect purchasing decisions in fintech. Finally, this finding may differ from the analysis study to identify any differences.

REFERENCES

- Al-azzam, A. F., & Al-mizeed, K. (2021). *The Effect of Digital Marketing on Purchasing Decisions: A Case Study in Jordan*. 8(5), 455–463. <https://doi.org/10.13106/jafeb.2021.vol8.no5.0455>
- Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management*, 42(June), 65–77. <https://doi.org/10.1016/j.ijinfomgt.2018.06.001>
- APJII. (2020). Buletin APJII. In *Asosiasi Penyelenggara Jasa Internet Indonesia* (p. 1).
- Archana, R., & Khanna, V. . (2012). Impact of E-Service Quality on Consumer Purchase Behaviour in an Online Shopping. *Impact of E-Service Quality on Consumer Purchase Behaviour in an Online Shopping.*, 15(2), 79499.
- Bank Indonesia. (2019). *Indonesia Payment Systems Blueprint 2025 Bank Indonesia : Navigating the National Payment Systems in the Digital Era*. 1–49.
- Bataineh, A. Q. (2015). The Impact of Perceived e-WOM on Purchase Intention: The Mediating Role of Corporate Image. *International Journal of Marketing Studies*, 7(1), 126–137. <https://doi.org/10.5539/ijms.v7n1p126>
- Bauboniene, Z., & Guleviciute, G. (2015). E-Commerce Factors Influencing Consumers' Online Shopping Decision. *Social Technologies*, 5(1), 74–81. <https://doi.org/10.13165/ST-15-5-1-06>
- Blut, M. (2016). E-Service Quality: Development of a Hierarchical Model. *Journal of Retailing*, 92(4), 500–517. <https://doi.org/10.1016/j.jretai.2016.09.002>
- BPS. (2021). Statistik Pertumbuhan Ekonomi Indonesia Triwulan IV-2020. *Pertumbuhan Ekonomi Indonesia*, 13(02), 2.
- Cao, Y., Ajjan, H., & Hong, P. (2018). Post-purchase shipping and customer service experiences in online shopping and their impact on customer satisfaction: An empirical study with comparison. *Asia Pacific Journal of Marketing and Logistics*, 30(2), 400–416. <https://doi.org/10.1108/APJML-04-2017-0071>
- Capgemini Research Institute. (2020). *World FinTech Report 2020*. 1–35.
- Chetioui, Y., Lebdaoui, H., & Chetioui, H. (2020). Factors influencing consumer attitudes toward online shopping: the mediating effect of trust. *EuroMed Journal of Business*. <https://doi.org/10.1108/EMJB-05-2020-0046>
- Chevalier, J. A., & Mayzlin, D. (2006). The Effect of Word of Mouth on Sales: Online Book Reviews. *Journal of Marketing Research*, XLIII(August), 345–354.

<https://doi.org/10.1509/jmkr.43.3.345>

- Cretu, A. E., & Brodie, R. J. (2007). The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. *Industrial Marketing Management*, 36(2), 230–240. <https://doi.org/10.1016/j.indmarman.2005.08.013>
- Das, T. K., & Teng, B. S. (2004). The risk-based view of trust: A conceptual framework. *Journal of Business and Psychology*, 19(1), 85–116. <https://doi.org/10.1023/B:JOBU.0000040274.23551.1b>
- Ghosh, M. (2018). Measuring electronic service quality in India using E-S-QUAL. *International Journal of Quality and Reliability Management*, 35(2), 430–445. <https://doi.org/10.1108/IJQRM-07-2016-0101>
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25*. Badan Penerbit Universitas Diponegoro.
- Hanaysha, J., Hilman, H., & Hasmini Abdul-Ghani, N. (2014). Direct and Indirect Effects of Product Innovation and Product Quality on Brand Image: Empirical Evidence from Automotive Industry. *International Journal of Scientific and Research Publications*, 4(1), 2250–3153.
- Hofstede, G. (2016). *Cultural Values per Country*. <https://geerthofstede.com/culture-geert-hofstede-gert-jan-hofstede/6d-model-of-national-culture/>
- Hsu, S. W., Qing, F., Wang, C. C., & Hsieh, H. L. (2018). Evaluation of service quality in facebook-based group-buying. *Electronic Commerce Research*. 10.1016/j.elerap.2018.01.006
- Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S. (2019). Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model. *Symmetry*, 11(3). <https://doi.org/10.3390/sym11030340>
- Ismagilova, E., Slade, E., Rana, N. P., & Dwivedi, Y. K. (2020). The effect of characteristics of source credibility on consumer behaviour: A meta-analysis. *Journal of Retailing and Consumer Services*, 53(September 2018), 1–9. <https://doi.org/10.1016/j.jretconser.2019.01.005>
- Ismagilova, E., Slade, E., & Williams, M. (2016). Persuasiveness of eWOM communications: Literature review and suggestions for future research. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 9844 LNCS, 354–359. https://doi.org/10.1007/978-3-319-45234-0_32
- Jalilvand, M. R., Esfahani, S. S., & Samiei, N. (2011). Electronic word-of-mouth: Challenges and opportunities. *Procedia Computer Science*, 3, 42–46. <https://doi.org/10.1016/j.procs.2010.12.008>
- Jalilvand, M. R., & Samiei, N. (2012). The effect of electronic word of mouth on brand image and purchase intention: An empirical study in the automobile industry in Iran. *Marketing Intelligence and Planning*, 30(4), 460–476. <https://doi.org/10.1108/02634501211231946>
- Jöreskog, K. G., Olsson, U. H., & Wallentin, F. Y. (2016). Springer Series in Statistics Multivariate Analysis with LISREL. In *Livro*.
- Katke, K. (2007). The impact of television advertising on child health and family spending

- A Case Study. *Advertising & Society*, 6(9), 283–286. <http://hdl.handle.net/2259/625>
- Kenyon, G., & Sen, K. (2012). A model for assessing consumer perceptions of quality. *International Journal of Quality and Service Sciences*, 4(2), 175–188. <https://doi.org/10.1108/17566691211232909>
- Khuong, M. N., & Tram, V. N. B. (2015). The Effects of Emotional Marketing on Consumer Product Perception, Brand Awareness and Purchase Decision – A Study in Ho Chi Minh City, Vietnam. *Journal of Economics, Business and Management*, 3(5), 524–530. <https://doi.org/10.7763/joebm.2015.v3.240>
- King, R. A., Racherla, P., & Bush, V. D. (2014). What we know and don't know about online word-of-mouth: A review and synthesis of the literature. *Journal of Interactive Marketing*, 28(3), 167–183. <https://doi.org/10.1016/j.intmar.2014.02.001>
- Korgaonkar, P., & Wolin, L. D. (2009). Web usage, advertising, and shopping: Relationship patterns. *COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, 28(2), 191–204. <https://doi.org/10.1108/10662240210422549>
- Liu, C., Zhang, Y., & Zhang, J. (2020). The impact of self-congruity and virtual interactivity on online celebrity brand equity and fans' purchase intention. *Journal of Product and Brand Management*, 29(6), 783–801. <https://doi.org/10.1108/JPBM-11-2018-2106>
- Malik, G., & Gupta, A. (2013). An Empirical Study on Behavioral Intent of Consumers in Online Shopping. *Business Perspectives and Research. Business Perspectives and Research*, 13–28. <https://dx.doi.org/10.1177/2278533720130102>
- Manandhar, B. (2018). Effect of Advertisement in Consumer Behavior. *Management Dynamics*, 21(1), 46–54. <https://doi.org/10.3126/md.v21i1.27046>
- Mao, Y., Lai, Y., Luo, Y., Liu, S., Du, Y., Zhou, J., Ma, J., Bonaiuto, F., & Bonaiuto, M. (2020). Apple or Huawei: Understanding flow, brand image, brand identity, brand personality and purchase intention of smartphone. *Sustainability (Switzerland)*, 12(8), 1–22. <https://doi.org/10.3390/SU12083391>
- Mbete, G. S., & Tanamal, R. (2020). Effect of Easiness, Service Quality, Price, Trust of Quality of Information, and Brand Image of Consumer Purchase Decision on Shopee Online Purchase. *Jurnal Informatika Universitas Pamulang*, 5(2), 100. <https://doi.org/10.32493/informatika.v5i2.4946>
- Niazi, G. S. K., Siddiqui, J., Shah, B. A., & Hunjra, A. I. (2012). *Effective advertising and its influence on consumer buying behavior*. 4(3), 114–119. <https://doi.org/10.22610/imbr.v4i3.971>
- Nizam, N. Z., Abdullah Jaafar, J., & Supaat, S. H. (2018). Interactive Online Advertising: The Effectiveness of Marketing Strategy towards Customers Purchase Decision. *MATEC Web of Conferences*, 150, 1–6. <https://doi.org/10.1051/mateconf/201815005043>
- Nuseir, M. T. (2019). The impact of electronic word of mouth (e-WOM) on the online purchase intention of consumers in the Islamic countries – a case of (UAE). *Journal of Islamic Marketing*, 10(3), 759–767. <https://doi.org/10.1108/JIMA-03-2018-0059>
- Papathanassis, A., & Knolle, F. (2011). Exploring the adoption and processing of online holiday reviews: A grounded theory approach. *Tourism Management*, 32(2), 215–224.

<https://doi.org/10.1016/j.tourman.2009.12.005>

- Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL A Multiple-Item Scale for Assessing Electronic Service Quality. *Journal of Service Research*, 7(3), 213–233. <https://doi.org/10.1177/1094670504271156>
- Peña-García, N., Gil-Saura, I., Rodríguez-Orejuela, A., & Siqueira-Junior, J. R. (2020). Purchase intention and purchase behavior online: A cross-cultural approach. *Heliyon*, 6(6). <https://doi.org/10.1016/j.heliyon.2020.e04284>
- Piercy, N. (2014). Online service quality: Content and process of analysis. *Journal of Marketing Management*, 30(7–8), 747–785. <https://doi.org/10.1080/0267257X.2013.839571>
- Pilík, M. (2013). Selected factors influencing customers' behaviour in e-commerce on B2C markets in the Czech Republic. *7th European Conference on Information Management and Evaluation, ECIME 2013*, 121–128.
- Poturak, M., & Turkyilmaz, M. (2018). The impact of eWOM in Social Media on Consumer Purchase Decisions: A Comparative Study between Romanian and Bosnian Consumers. *Management and Economic Review*, 138–160. <https://doi.org/10.24818/mer/2018.12-02>
- Purba, J., Hery, H., & Purba, P. (2019). *Usage ICT Application for Bundling Products: Strategic Digital Marketing in Facing the 4.0 Technology*. February 2019. <https://doi.org/10.4108/eai.24-10-2018.2280543>
- Purba, J. T., Hery, & Widjaja, A. E. (2020). E-commerce implementation in supporting business services strategy (case study at petshop gifaro evidence). *Journal of Physics: Conference Series*, 1563(1). <https://doi.org/10.1088/1742-6596/1563/1/012012>
- Purba, J. T., Samuel, S., & Purba, A. (2020). Strategic Collaboration ICT in the online Transportation Services in Jakarta Area. *IOP Conference Series: Materials Science and Engineering*, 918(1). <https://doi.org/10.1088/1757-899X/918/1/012206>
- Purnamasari, D. (2018). The Roles of E-Service Quality , E-Trust , and E-Satisfaction on Online Retail Loyalty. *Industrial Research Workshop and National Seminar*, 1(2), 634–641. <https://doi.org/10.35313/irwns.v9i0.1107>
- Raj, M. P. M., & Roy, S. (2015). Impact of Brand Image on Consumer Decision-making: A Study on High-technology Products. *Global Business Review*, 16(3), 463–477. <https://doi.org/10.1177/0972150915569934>
- Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020). Internet banking service quality, e-customer satisfaction and loyalty: the modified e-SERVQUAL model. *TQM Journal*, 32(6), 1443–1466. <https://doi.org/10.1108/TQM-02-2020-0019>
- Saleem, H., & Raja, N. S. (2014). The impact of service quality on customer satisfaction, customer loyalty and brand image: Evidence from hotel industry of Pakistan. *Middle - East Journal of Scientific Research*, 19(5), 706–711. <https://doi.org/10.5829/idosi.mejsr.2014.19.5.21018>
- Sallam, M. A. (2015). The Effects of Satisfaction and Brand Identification on Brand Love and Brand Equity Outcome: The Role of Brand Loyalty. *European Journal of Business and Social Sciences*, 4(09), 42–55.
- Santos, J. (2003). E-service quality: A model of virtual service quality dimensions.

- Managing Service Quality: An International Journal*, 13(3), 233–246.
<https://doi.org/10.1108/09604520310476490>
- Shaikh, S., Rathi, S., & Janrao, P. (2017). Recommendation system in e-commerce websites: a graph based approached. *2017 IEEE 7th International Advance Computing Conference (IACC)*.
- Shi, L. (2018). *Strategic Plan regarding Qingyang E-commerce Development*. webofproceedings.org.
- Shiau, W. L., Dwivedi, Y. K., & Lai, H. H. (2018). Examining the core knowledge on facebook. *International Journal of Information Management*, 43(May), 52–63.
<https://doi.org/10.1016/j.ijinfomgt.2018.06.006>
- Sun, B., & Saenko, K. (2016). Return of frustratingly easy domain adaptation |. *Aaai*, 1, 2058–2065.
- Tan, J. D., Purba, J. T., & Widjaya, A. E. (2019). *Financial Technology as an Innovation Strategy for Digital Payment Services in the Millennial Generation*. 292(Agc), 364–373.
<https://doi.org/10.2991/agc-18.2019.58>
- Udo, G. J., Bagchi, K. K., & Kirs, P. J. (2010). An assessment of customers' e-service quality perception, satisfaction and intention. *International Journal of Information Management*, 30(6), 481–492. <https://doi.org/10.1016/j.ijinfomgt.2010.03.005>
- Verma, P., & Jain, S. (2015). Skills Augmenting Online Shopping Behavior: A Study of Need for Cognition Positive Segment. *Business Perspectives and Research*, 3(2), 126–145.
<https://doi.org/10.1177/2278533715578556>
- Wolfinbarger, M., & Gilly, M. C. (2003). eTailQ: Dimensionalizing, measuring and predicting etail quality. *Journal of Retailing*, 79(3), 183–198.
[https://doi.org/10.1016/S0022-4359\(03\)00034-4](https://doi.org/10.1016/S0022-4359(03)00034-4)
- Wu, W. Y., & Ke, C. C. (2015). An online shopping behavior model integrating personality traits, perceived risk, and technology acceptance. *Social Behavior and Personality*, 43(1), 85–98. <https://doi.org/10.2224/sbp.2015.43.1.85>
- Yadav, M. S., de Valck, K., Hennig-Thurau, T., Hoffman, D. L., & Spann, M. (2013). Social commerce: A contingency framework for assessing marketing potential. *Journal of Interactive Marketing*, 27(4), 311–323. <https://doi.org/10.1016/j.intmar.2013.09.001>
- Yusuf, A. (2021). The Influence of Product Innovation and Brand Image on Customer Purchase Decision on Oppo Smartphone Products in South Tangerang City. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(1), 472–481. <https://doi.org/10.33258/birci.v4i1.1629>
- Yusuf, A. S., Che Hussin, A. R., & Busalim, A. H. (2018). Influence of e-WOM engagement on consumer purchase intention in social commerce. *Journal of Services Marketing*, 32(4), 493–504. <https://doi.org/10.1108/JSM-01-2017-0031>
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2017). *Services Marketing* (Seventh Ed, Vol. 5). McGraw Hill. <https://doi.org/10.1016/j.bushor.2008.01.008>
- Zhang, Y. (2015). The Impact of Brand Image on Consumer Behavior: A Literature Review. *Open Journal of Business and Management*, 03(01), 58–62.
<https://doi.org/10.4236/ojbm.2015.31006>

Zhou, Y. J. (2010). Impact Of E-Service Quality On Purchase Intention Through Mediator Perceived Value In Online Shopping. *Journal Of Information Engineering And Applications*, 7(8)(November).