Factors Affecting Repurchase Intention of Digital Products on Online Games in Indonesia

David Chandra Sukma Wibowo, Evi Rinawati Simanjuntak

Abstract: Today more and more gamers purchase digital products on the online game. Therefore, the study was conducted to determine the factors that influence repurchase intention on digital online game items on the official website. Factors studied were system, service, and information quality on repurchase intention through utilitarian & hedonic shopping value and customer satisfaction. The data processed through validation, reliability and SEM analysis. From the results the most influence is information quality, where this affects hedonic & utilitarian shopping value, then leads to customer satisfaction and finally to repurchase intention. Based on the results the managerial implication is focused on increasing information with currency dimensions and system quality with accessibility dimensions to increase repurchase intention to purchase digital products.

Keywords: Repurchase intention, product digital, service quality, system quality, information quality.

I. INTRODUCTION

In this digital era, the development of the game industry in Indonesia is enormous, and continues to grow over time, according to Cipto Adiguno (Deputy of the Indonesian Game Association's Capital Access) from a survey conducted in 2017, there was a value of 800 Million US Dollars or around 11 Trillion Rupiah (Indonesia's currency) in the gaming industry in Indonesia. The average annual growth is around 25% to 30%. Various platforms or media are used to play games, from consoles, smartphones, to using a PC. The choices used by the community are certainly following their needs and tastes, but what will be emphasized more is the Online Game, which is currently also more and more fans.

Based on sources obtained from www.statista.com which is a website that contains various types of statistical data, they conducted research in Indonesia about the gaming
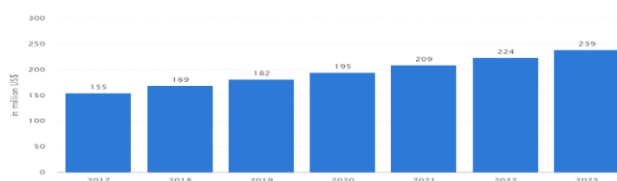

Fig I Graph of growth in Game industry revenue

industry in Indonesia, where revenue in the online game industry in Indonesia has increased, and will be predicted to continue to increase, as seen in the figure above, which can be interpreted to increase the number of Indonesian people who make purchases related to these online games.

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On the other hand, the development of the online market will and has created opportunities, as well as significant challenges for existing online e-commerce websites, where the costs incurred to get new customers in e-commerce are higher compared to existing traditional media [30]). Profit growth in e-commerce will be very fast after the relationship between the customer, and the seller is formed because usually, customers who make repeat purchases will spend more money than before. Therefore, it will be essential and needs to be done by sellers who make sales through online media to attract more existing buyers to repurchase or repurchase so that they can still compete in their markets. Repurchase intention can be interpreted as the possibility of someone in using a product again in the future [10]-[4]. Besides, repurchase varies depending on the durability of a product, but for products that are not durable, it can be interpreted as a competitor to the customer in making a repeat purchase or at least advising [26].

A. Formulation of the Problem

Along with the times, where not only physical products are sold through online media, but digital products are also being traded, both officially and not, and digital products sold are digital products from online games that are also growing, and some even enter the Asian Games. 2018 although the Medal has not been counted as an official sport. Transactions for purchases of digital products that occur are carried out by these Online Game players, usually on official media or platforms that provide the game or the game website itself. Existing platforms that are used to carry out these transactions are becoming increasingly popular, where many games use this media to purchase games and buy digital products. In addition, the number of transactions for buying and selling digital products outside the official website has increased, for example 5173.com which is the largest and oldest platform for buying and selling digital products in China wherein 2011 there were 40 million registered people and in 2011 Previously, there were total transactions in 2010 of 7 billion Yuan.

From the description above, and also from the data, it appears that there is a continuous increase in the number of players of this online game, where this will be a good source of income for online game companies, especially those who are free to play games, whereby knowing the factors which influences repurchase intentions can help improve the company, in addition, it is possible that the longer the phenomenon of transactions outside the official website will continue to increase in accordance with the development of online games. So, it appears that it is crucial for companies to know what factors influence the intention to repurchase digital products to continue to increase revenue through

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repurchases when transactions outside the official platforms provided continue to increase

B. Research Purposes

This study aims to find out the factors that influence repurchase intention on digital online game products through the website or the official platform of the game among the system quality, service quality, and information quality factors, where knowing these factors will help companies to find out what factors actually needs to be improved to further increase repurchase of digital products from online games so that in addition to that it can increase revenue from developers or publishers from online.

C. Research Gaps

There is previous research that discusses the purchase intention of digital products that are in the Social Network Community (SNC), entitled "Investigating the intention to purchase digital items in social networking communities: A customer value perspective" [21].In addition, there is also research conducted on repurchase intention on Internet shopping from e-commerce on ordinary or non-digital products in Korea, by looking at System Quality, Information Quality, and Service Quality, which is "Factors influencing Internet shopping value and customer repurchase intention "[19]. Then there is research that discusses repurchase behaviour, which in this study, the researchers examined the behaviour of repurchase of digital products by looking at the frequency of purchases, total purchases, and several other factors. The study has "An exploratory study of factors influencing repurchase behaviour toward game items: A field study" [23].

From the research that has been studied previously both regarding repurchase intention on e-commerce, purchase of digital products both on the Social Network or on the Game, there are different things to the research that will be examined here, where to be examined is the repurchase intention of purchasing digital products located on Online Games in Indonesia, due to seeing the gaming industry which is indeed developing very rapidly in Indonesia and how the developers or publishers of Online Games are the majority of Game Free to Play, or it can also be said Freemium whose revenue they can get comes from purchase of these digital products

D. Model Construct and Hypothesis

Construct of the model is adopted from previous studies [19], where the previous studies studied online transaction in Korea, but in this studies will study about online transaction in Indonesia specifically around JABODETABEK (Jakarta, Bogor, Depok, Tangerang, and Bekasi, these are the city that known for being part of Jakarta Metropolitan Area) area, and the product that will be observed is a digital item from an online PC game that is sold from an e-commerce that not in the online game official website.

▪ *System Quality*

System Quality or quality of a system is essential, especially in online-based transactions, where system quality refers to the level of satisfaction of consumers with the technical and functional aspects of online shopping website pages [2]-[32]. In an internet shopping environment, quality systems

must support the shopping activities of customers by providing security and accessibility, which is added to the speed and variety of other helpful features [9]-[6]. Previous research said that both security and accessibility on a website would significantly affect both utilitarian and hedonic shopping values [25]. If customers feel their security is compromised or threatened, they will no longer feel eager in the shopping process. Besides that, accessibility affects utilitarian and hedonic shopping values because customers who shop online are usually impatient to wait for access to the website [19].

    i.   *H1a*: Security affects Utilitarian Shopping Value positively.

    ii.   *H1b*: Security affects hedonic shopping values positively.

    iii.   *H2a*: Accessibility influences utilitarian shopping value positively.

    iv.   *H2b*: Accessibility affects hedonic shopping values positively.

▪ *Information Quality*

Information Quality is the level of satisfaction from the quality of the information provided or provided by the shopping website provider [32]. The quality of information is considered to be a marketing tool that can ensure smooth online shopping transactions [34]. Comprehensive information is one of the factors that influence new customers in making purchasing decisions [28]. Many factors influence information quality. However, this research chooses information variety and information currency as factors used, because, in the internet shopping environment, customers cannot reach either utilitarian or hedonic goals if the website does not provide much and up-to-date information [11]-[7]. Information variety represents the large variety of information, which can satisfy various types of existing consumers, while the information currency refers to the extent to which consumers receive that information quickly [18]-[7]. Based on previous studies, it has been said that providing timely and reliable information on a product will help customers make shopping decisions [2]. Providing various information needed by the customer is essential in online business because the customer does not always have much time to search for information about a product or service in detail [29]-[24]-[22]. In other words, either hedonic or utilitarian can increase when customers can easily search for the desired product and get various information about the product [29]-[2].

    i.   *H3a*: Information Variety has a positive effect on Utilitarian Shopping Value.

    ii.   *H3b*: Information Variety has a positive effect on hedonic shopping value.

    iii.   *H4a*: Information Currency has a positive effect on utilitarian shopping value.

    iv.   *H4b*: Information Currency has a positive effect on hedonic shopping value.

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■ *Service Quality*

Service Quality can be interpreted as the satisfaction of consumers with services that have been provided from online shopping websites [2]-[31]. Due to online goods shopping where buyers and sellers do not meet face to face, service quality is crucial in this business [2]. Repurchase Intention is defined as an individual's decision to repurchase a service, where the decision is to carry out activities at the service provider in the future, and how the activity will proceed [14]. There is a positive relationship between service quality and repurchase intention and willingness to recommend [5]. Also, some studies find that service quality is an essential factor in behavioral necessity. However, in this study, service quality is divided or assessed based on two things, namely quickness and receptiveness, where both of these will affect utilitarian and hedonic shopping values [19].

  i.   *H5a*: Quickness has a positive effect on utilitarian shopping value
  ii.   *H5b*: Quickness has a positive effect on hedonic shopping value
  iii. *H6a*: Receptiveness has a positive effect on utilitarian shopping value
  iv.   *H6b*: Receptiveness has a positive effect on hedonic shopping value

■ *Hedonic Shopping Value (HSV) & Utilitarian Shopping Value (USV)*

Hedonic shopping value is subjective, emotional, and fun, where people who are doing shopping activities will experience a condition called "Flow Experience," which is the loss of time awareness because they are too focused on an activity [8]. Whereas Utilitarian shoppers have a strong desire to get more value than what they buy. They have a mission or work determined from the start. When you finish shopping, you will see whether the mission is completed correctly or not [16]. Hedonic and utilitarian are potent determinants in determining consumer behavior where the results not only come from the intention to buy but also from the awareness in the pursuit of pleasure in shopping [3]. Both of these become chairs for Internet shopping because they can motivate consumers to re-visit the website and fundamentally influence re-shopping [19]. The views of customers regarding utilitarian and hedonic become essential components that can make customers do repurchase [34].

In addition, in the world of online shopping, hedonic shopping value is considered to have the most crucial role in determining customer satisfaction, seeing how hedonic customers are looking for fun and shopping experiences that they enjoy [20], besides that utilitarian shopping value also has influence on customer satisfaction, where customers with this type of utilitarian focus on their goals in doing shopping [19]. Customers with utilitarian types are customers who focus on the goals they have. They will be happier if they are on a website that has all the information they need, is easy to use, and saves time [33]. Whereas customers with hedonic type are more looking for a good website like in general, but also that gives a stimulus to the satisfaction and entertainment in the shopping process, where many customers with this type feel motivated in spending if they feel involved in a product or there is a relationship in their products and hobbies [20]-[19].

  i.   *H7a*: Utilitarian shopping value has a positive influence on customer satisfaction
  ii.   *H7b*: Hedonic shopping value has a positive relationship with customer satisfaction
  iii. *H8a*: Utilitarian shopping value has a positive effect on repurchase intention.
  iv.   *H8b*: Hedonic shopping value has a positive effect on repurchase intention.

■ *Customer Satisfaction (CS)*

Customer Satisfaction is a response to the evaluation of the process when the customer does the shopping activity where the activity is satisfying and represents the achievement of goals well [16]. Customer Satisfaction becomes a vital thing to consider because it refers to satisfaction at the end of the expenditure, in this case, it is very much influenced by various things during the shopping process, from pre-purchase to post-purchase [1] The relationship between customer satisfaction and repurchase intention has been widely studied, there is empirical evidence that supports the relationship between customer satisfaction and repurchase intention [27]. Utilitarian shopping value and hedonic shopping value are essential components of customer satisfaction where satisfied customers will have a higher likelihood of buying back, where increasing customer satisfaction is essential in increasing repurchase intention [19].

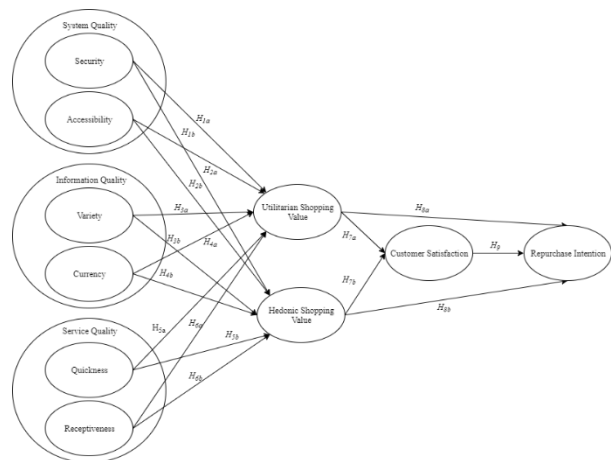 i.   *H9*: Customer satisfaction has a positive effect on repurchase intention.

Fig. II. Theoretical framework

II. RESEARCH METHODS

Based on the previous research, we use quantitative methods, and this method is a method that uses data in the form of numbers to be able to analyst what is being studied [15]. In this research, the method used in the data collection process is using the survey method, which is a method of data collection using a questionnaire as a research tool. The survey is distributed to selected samples through purposive sampling, which is a data collection technique or sample with specific considerations and measured using 5 points Likert Scale from very disagree to very agree.

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From the data obtained will be tested for validity and reliability of the data obtained using the Confirmatory Factor Analysis or CFA and Cronbach Alpha Test, after that the data that has passed the validity and reliability test can be tested again using the Structural Equation Model or SEM to see the relationship between variables and test the hypotheses that have been made. In conducting the Cronbach Alpha Test will use the SPSS tool, then the data that has passed will be connected to the SmartPLS tool that will be used to perform CFA and SEM.

Table I Variable Operationalization

Variable	Factor	Measured Item
System Quality [19]	Security (Security of websites where you can buy digital products)	Digital product purchasing websites provide security for personal data
		The website for purchasing digital products still feels comfortable during the payment process.
		Digital product purchasing websites do not worry about the possibility of spreading personal data.
		Digital product purchasing websites generally offer secure transactions.
	Accessibility (Ease of access)	Digital product purchasing websites have good connections when accessed
		Digital product purchasing websites have URLs that are easy to use
		The website for purchasing digital products is easy to remember.
		Website for purchasing digital products, immediately react when one menu is clicked
Service Quality [19]	Quickness (Speed of service provided)	Digital product purchasing websites deliver products quickly
		Digital product purchasing websites provide fast shipping.
		Websites for purchasing digital products sending according to shipping limits
	Receptiveness (Acceptance level of service provided)	Digital product purchasing websites provide clear instructions on returns or refunds
		Digital product purchasing websites put out more effort to offer guarantees for digital products being sold.
		Digital product purchasing websites provide statements regarding returns or refunds
Information Quality [7] - [17]	Variety (Variety of information available)	Digital product purchasing websites provide lots of information about these items
		Digital product purchasing websites have many types of products for sale.
		The existing digital product purchasing website shows products that are widely bought by other players.
	Currency (Understanding of existing information)	Digital product purchasing websites display the latest information about products for sale
		Digital product purchasing websites send e-mails about the latest information from the products they sell
		Website purchases of digital products often update information on the website
Hedonic Shopping Value [19]-[19]		for me shopping for digital products feels good
		I feel excited when choosing digital online game products offered when shopping.
		I spent a long time when buying digital products on online games websites without me knowing
Utilitarian Shopping Value [19]-[19]		I usually visit online game websites when there are digital products that I need.
		When shopping for online digital game products, I usually look for what I need or want
		Shopping for digital products through the official online game website makes shopping fast.
		Shopping for digital products through the official online game website makes shopping easy
Customer Satisfaction [19]		I feel satisfied shopping for digital products on the official website of the online game that I play.
		Compared to shopping for digital products online games on unofficial websites, I feel more satisfied shopping on the official website.
		I am satisfied with the digital product information provided on the official online game website
repurchase intention [17] - [24]		I intend to go back to buying digital online game products on the official website of the game.
		I intend to get digital product information from the official website of the online game that I play.
		I intend to continue to use the official website to purchase digital products from the games that I play.
		Except for unplanned reasons, I intend to continue purchasing digital products through the official website of the online game that I play.

III. RESULT AND DISCUSSION

After the data collection has been completed, the next step is analyzing all the data that have been obtained, where the data obtained are 176 data. However, from the data that passes the filter question, 152 answers can be used in this analysis process. Nevertheless, before the data is processed, it is necessary to clean the data so that the data used is clean. From the results of cleaning the data, there are 130 remaining data, which will be used for the analysis process from beginning to end. The demographic distribution of the respondents who filled out the data for this study, where the majority was filled by men aged between 17 to 25 years and working as entrepreneurs with a Bachelor's degree education and living in Tangerang.

Table II Composite Reliability and Average Variance Extracted Values

	Cronbach's Alpha	Composite Reliability	AVE
Customer Satisfaction	0.818	0.891	0.733
Hedonic Shopping Value	0.800	0.871	0.693
Information Quality Currency	0.775	0.841	0.572
Information Quality Variety	0.774	0.869	0.689
Repurchase Intention	0.756	0.845	0.578
Service Quality Quickness	0.748	0.839	0.567
Service Quality Receptiveness	0.732	0.836	0.635
System Quality Accessibility	0.709	0.823	0.543
System Quality Security	0.703	0.834	0.627
Utilitarian Shopping Value	0.700	0.829	0.618

The next thing that we need to check is the reliability and the validity of the item that we used in this research because most of the items are 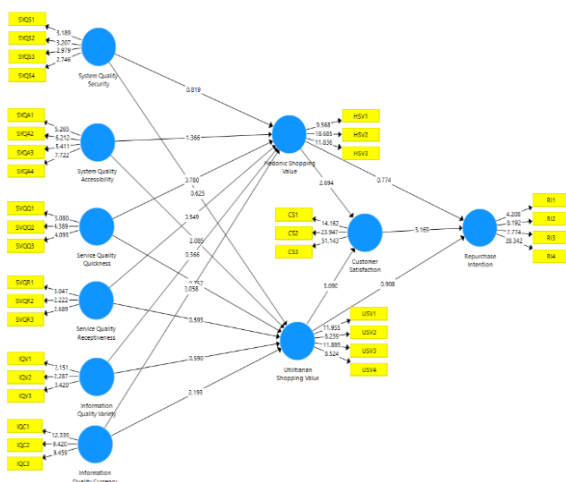used to measure abstract concepts. The data was evaluated using three types of measure: Cronbach's alpha, Composite Reliability, and Average Variance Extracted.

It can be seen from the table above that the values of Composite Reliability and Average Variance Extracted and Cronbach Alpha are obtained from the processing done using SmartPLS. From these results, it can be seen that all variables have a value that matches the standard where the good AVE value is> 0.5 [13] and for an excellent Composite Reliability value is> 0.7 [13]. Because these two things also meet the requirements, the analysis process will be continued by conducting SEM on the model that has been made. The SEM process will be carried out using the SmartPLS tool as well, wherein this analysis, the T-Statistic value is above 1.96 so that it can be said that the significant relationship of the variables tested in the model. Here is a model using SmartPls.

A. Structural Equation Model & Hypothesis Testing

Several relationships have T-Statistic values that meet the standards, namely System Quality Accessibility to Utilitarian Shopping Value, then information quality currency to hedonic shopping value, and also utilitarian shopping value, then Hedonic and utilitarian shopping value to customer satisfaction and finally customer satisfaction to Repurchase Intention. In the table above, it appears that there is an indirect relationship that occurs between hedonic shopping value, utilitarian shopping value, customer satisfaction, and repurchase intention, wherefrom the results of processing the SmartPLS tool, there are only two indirect relationships that can be said to be significant. It can be seen from the value of T Statistics obtained is a number above 1.96, which is said also as significant. Also, in Table III, the path coefficient value is seen, which means the influence of the relationship between these variables.

Table III Path Coefficient

	CS	HSV	RI	USV
System Quality Accessibility		0.144		0.203
Information Quality Currency		0.176		0.192
Service Quality Receptiveness		0.096		0.079
Service Quality Quickness		0.093		0.078
System Quality Security		-0.107		0.075
Information Quality Variety		0.042		0.072
Customer Satisfaction			0.329	
Hedonic Shopping Value	0.240		0.097	
Repurchase Intention				
Utilitarian Shopping Value	0.271		0.088	

Fig III Result from SmartPLS

From Table V, that contains the result of SmartPLS, we can see that there are 6 paths that we can say is significant, that is customer satisfaction to repurchase intention (T Statistics = 3.169), utilitarian shopping value to customer satisfaction (T Statistic = 3.090), hedonic shopping value to customer satisfaction (T Statistic = 2.694), information quality currency to utilitarian shopping value (T Statistic = 2.193), system quality accessibility to utilitarian shopping value (T Statistic = 2.085), and information quality currency to hedonic shopping value (T Statistic = 2.058). Other than those six paths, no other path meets our criteria of significant. From that result, we can say that the one that had an impact on repurchase intention to buy online game digital items from the official site are both of information quality currency and system quality accessibility. That we can see from the table above is those two variables had an impact on other variables that end up to the final variable repurchase intention.

Table IV R Square

	R Square
Customer Satisfaction	0.169
Hedonic Shopping Value	0.096
Repurchase Intention	0.170
Utilitarian Shopping Value	0.137

Table V Analysis results for SEM using SmartPLS

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Customer Satisfaction -> Repurchase Intention	0.329	0.335	0.104	3.169	0.002
Utilitarian Shopping Value -> Customer Satisfaction	0.271	0.274	0.088	3.090	0.002
Hedonic Shopping Value -> Customer Satisfaction	0.240	0.245	0.089	2.694	0.007
Information Quality Currency -> Utilitarian Shopping Value	0.192	0.183	0.088	2.193	0.028
System Quality Accessibility -> Utilitarian Shopping Value	0.203	0.217	0.097	2.085	0.037
Information Quality Currency -> Hedonic Shopping Value	0.176	0.201	0.086	2.058	0.040
System Quality Accessibility -> Hedonic Shopping Value	0.144	0.155	0.105	1.366	0.172
Utilitarian Shopping Value -> Repurchase Intention	0.088	0.097	0.097	0.908	0.364
System Quality Security -> Hedonic Shopping Value	-0.107	-0.097	0.130	0.819	0.413
Service Quality Quickness -> Hedonic Shopping Value	0.093	0.093	0.119	0.780	0.436
Hedonic Shopping Value -> Repurchase Intention	0.097	0.100	0.126	0.774	0.439
Service Quality Quickness -> Utilitarian Shopping Value	0.078	0.085	0.103	0.757	0.449
System Quality Security -> Utilitarian Shopping Value	0.075	0.069	0.120	0.625	0.532
Service Quality Receptiveness -> Utilitarian Shopping Value	0.079	0.075	0.134	0.593	0.553
Information Quality Variety -> Utilitarian Shopping Value	0.072	0.064	0.123	0.590	0.555
Service Quality Receptiveness -> Hedonic Shopping Value	0.096	0.105	0.174	0.549	0.583
Information Quality Variety -> Hedonic Shopping Value	0.042	0.054	0.114	0.366	0.714

If seen from the results of *R* Square, where the values obtained vary, where here the *R* Square shows the value of the dependent variable explained by the independent variable. Of the three variables that influence this repurchase intention, the most influential is customer satisfaction, although it is only 16.9% that represents the variable that we observe. The value represented by the independent variable can be said to be small, so it can be said that other factors represent this dependent variable that not used in this research.

Besides, there are indirect effects that occur as in table VI, which shows the indirect relationship that occurs between hedonic shopping value, utilitarian shopping value, customer satisfaction, and repurchase intention, wherefrom the results of processing the SmartPLS tool there are only two indirect relationships that can be said significantly. It can be seen from the value of T Statistics obtained is a number above 1.96, which is said also as significant.

Based on the results of data processing that has been obtained using the Structural Equation Model method with the help of this SmartPLS tool, then if it is connected with the initial hypothesis analysis, the results obtained can be seen in Table VII.

Table VI Indirect Effect

	T Statistics ($\lvert O/STDEV \rvert$)	P Values
Hedonic Shopping Value -> Customer Satisfaction -> Repurchase Intention	2.006	0.045
Utilitarian Shopping Value -> Customer Satisfaction -> Repurchase Intention	2.162	0.031

Table VII Hypothesis Analysis

Category	Factor	Hypothesis	Results
System Quality	Security	H1a: Security influences utilitarian shopping value positively.	Not Supported
		H1b: Security affects hedonic shopping values positively	Not Supported
	Accessibility	H2a: Accessibility influences utilitarian shopping value positively	**Supported**
		H2b: Accessibility affects hedonic shopping values positively	Not Supported
Information Quality	Variety	H3a: Information Variety has a positive effect on Utilitarian Shopping Value	Not Supported
		H3b: Information Variety has a positive effect on hedonic shopping value	Not Supported
	Currency	H4a: Information Currency has a positive effect on utilitarian shopping value	**Supported**
		H4b: Information Currency has a positive effect on hedonic shopping value	**Supported**
Service Quality	Quickness	H5a: Quickness has a positive influence on utilitarian shopping value	Not Supported
		H5b: Quickness has a positive influence on hedonic shopping value	Not Supported
	Receptiveness	H6a: Receptiveness has a positive influence on utilitarian shopping value	Not Supported

	H6b: Receptiveness has a positive influence on hedonic shopping value	Not Supported
Utilitarian Shopping Value	*H7a*: Utilitarian Shopping Value has a positive influence on customer satisfaction	**Supported**
	H8a: Utilitarian Shopping Value has a positive effect on repurchase intention	Not Supported
Hedonic Shopping Value	*H7b*: hedonic shopping value has a positive influence on customer satisfaction	**Supported**
	H8b: hedonic shopping value has a positive effect on repurchase intention	Not Supported
Customer Satisfaction	H9: Customer Satisfaction has a positive effect on repurchase intention.	**Supported**

IV. RESULT AND DISCUSSION

1. Conclusion

Based on the results obtained in the analysis, it can be said that, repurchase intention on purchasing digital products in online games in Indonesia is directly affected by customer satisfaction or satisfaction from these customers, where two things influence satisfaction in this study, namely hedonic shopping value and utilitarian shopping value or how the customers or in this case gamers who make these purchases are fond of making digital product purchases. They also have a goal in making purchases that were achieved or not, and the goal is to determine the utilitarian shopping value. Then it is also proven that in the case where it can be seen that the hedonic shopping value and the utilitarian shopping value are each affected by 1 thing, namely, the hedonic shopping value is influenced by the Information Quality Currency which symbolizes the quality of information on existing digital products, and how information these are accepted by gamers who make these purchases. Whereas for utilitarian shopping value is influenced by the system quality accessibility that represents the quality of the system or in this case the website of the online game or the platform used by the game, where the quality of the system or more precisely how access to the website is fast, responsive, etc. which affects the utilitarian shopping value.

If we look at hypotheses that are rejected or unsupported, we can look at hypotheses 1a and 1b regarding System Quality Security, where in previous studies Security also did not affect hedonic shopping value, but not like that of utilitarian shopping value. In other studies, also indeed prove that this Security does not have a significant effect on hedonic shopping value [19]. In the next hypothesis that is rejected is in hypothesis *2b* regarding the system's quality accessibility to hedonic shopping value, this is the same as in previous studies, where the system's quality accessibility does not affect hedonic shopping value.

Next, what's interesting is how this Information Quality hypothesis, where the Variety dimension or diversity of information here does not affect both Hedonic and utilitarian shopping value, but on the Currency side effects it actually affects both Hedonic and utilitarian shopping value, where here when viewed from the side of gamers those who purchase their digital products are more concerned with the information they get about the products they want to buy than the amount of information about various products, which indeed is one of the characters of utilitarian customers as well as find out what the product can do for them, where they need that information [12].

Then, if seen from the Service Quality variable and its two dimensions, namely Quickness and Receptiveness which do not affect any variables, here it is also contrary to previous research used as a reference in this study, this is due to differences in the product or transaction under study, which in this study Digital products purchased by customers or gamers are already using the system, where problems rarely occur so as to the speed of delivery as well as the protests faced by customers against the developers of the game. It has also been proven that the service or customer service process does not have a significant relationship with online shopping [36].

In addition, if we see from the results also obtained that in the purchase of digital products on online games through the official website of the online game, to increase utilitarian shopping value, what is important is the system of quality accessibility and currency quality information, while in increasing hedonic shopping value then what plays a role is information quality currency only.

2. Managerial Implication

Based on the results of this study, the researcher can suggest to the company a couple of things be able to help the company increase sales of their digital products through repurchase, i.e.

- Based on the results obtained, Information Currency plays a vital role in increasing Hedonic and utilitarian shopping value, to increase it can be with several things, namely
- The use of words that are understood by people who are the target of this information, in this case, are gamers, using words that they understand will facilitate the delivery of information.
- Always do regular updates to the online game website about the latest product information that can be purchased by gamers.
- Actively provide the latest information via email to registered gamers.
- Convey information only or not convoluted, so that the information conveyed is accessible and quickly digested or understood
- Put the information to be given in a place that is seen by the target so that information quickly reaches the customer.
- The quality accessibility system in this study also proved to influence utilitarian shopping value, were to improve this, companies can also do several things, namely
- For online games that use websites as a medium for purchasing digital products, they must make the website easy to remember.
- Pay extra attention to the connections and limits of the online game website in receiving access, do not let the customer try to access the website when there is a failure due to insufficient limits, especially when the event is taking place because of the traffic from the customer will increase.
- Design the website thoroughly. If the design is not done well, then it will make it difficult for customers to make transactions and even difficulty in choosing products.

3. Research Limitation

In this study, some limitations occur during the research process, including

- The number of variables used in this study, based on the results obtained, there are more hypotheses rejected in this study so that it can be predicted that there will be other variables that affect repurchase intention in purchasing digital online game products in Indonesia.
- This study was conducted with JABODETABEK area boundaries in Indonesia. However, as is well known, Indonesia is a country with a large population and consists of thousands of islands, so maybe the results of this research in other regions will be different from the results obtained here.
- In this study, online digital game products studied were only online games that were on PCs or laptops, not including those played on SmartPhone, which is even though there are still bigger online games on PCs. However, the actual number of online games on Smartphone also continues to grow as time goes by time.

- In this study, the nature/character of the digital product under study is not considered, whether the product is more hedonic or utilitarian.
- Access to digital product purchasing websites is not distinguished between computers or smartphones as long as the device or device can access the internet and have a browser to open the website for purchasing digital products.

4. Suggestion

For the next researcher, some things can be developed further from this study because there are limitations in this research, some things that can be developed better are as follows:

- Add the number of variables in this study, the variables are seen are System Quality, Information Quality, and Service Quality, which are seen from 2 dimensions per variable, which are connected to Hedonic and Utilitarian Shopping values, which are then connected to customer satisfaction and repurchase intention. However, in this case, another variable can be added for subsequent research, for example, the value of the product, for example in terms of the Emotional Value of gamers that can be measured in two dimensions, namely Aesthetics and Playfulness [21], because the game at the beginning was intended to be the morning entertainment of the players.
- Expanding the area of research is not only limited to JABODETABEK, to obtain even more diverse data, and can describe the situation more broadly regarding this case.
- Add new media to research in digital product transactions on online games such as smartphones, which are also growing.
- Need to differentiating access when making purchases of digital products, whether through websites, applications, or other media.

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