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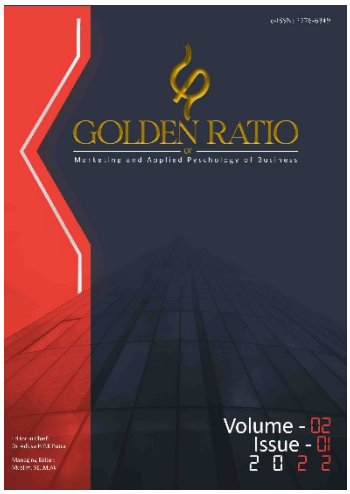

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MARKETING | RESEARCH ARTICLE

The Role of Virtual Communities on Consumer Purchase Decisions with Brand Equity as Mediating Variable

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Abstract: This study aims to analyze the relationship between virtual communities variabel on consumer purchase decision with brand equity as mediating vaiable. The sample in this study was selected with the 100 respondent with Snowball sampling and data colletion with survey. This study uses the PLS method. Next is a hypothesis to test whether there is a relationship between virtual communities, brand equity, and purchasing decisions at PT. Hadji Kalla Toyota Makassar. The analytical tool used in this research is Partial Least Square (PLS). Research using WarpPLS 6.0 program. The result of this study state Virtual communities are established to significantly affect purchasing decisions; Virtual communities are proven to have a significant positive effect on brand equity; The Virtual Communities variable shows a solid and dominant influence on brand equity compared to other variables; This study has provided findings on the effect of Virtual Communities on purchasing decisions through brand equity. Virtual Communities will have a role in delivering information that can produce word of mouth and become a choice for prospective buyers to see reviews and the advantages of products. That can be a consideration for companies in developing their marketing strategies, especially in building customer loyalty to the brand.

Keywords: Virtual Communities, Customer Purchase Decision, Brand Equity, Customer Loyalty.

JEL Classification Code: M19, M16, M0

1. INTRODUCTION

The rapid increase in the world of technology in Indonesia has led to a shift in marketing technology. Many people or consumers explore the benefits of the internet as a medium to get reliable information. The interest of consumers today is to spend a lot of their time surfing in cyberspace, which is a new segment in finding information (Amoncar, 2020; Elsharnouby et al., 2021; Ko et al., 2018). Advances in the role of technology have had many impacts on the world of marketing, especially in shaping consumer behavior. This also affects changes in the conduct of suppliers and consumers in making purchasing decisions for a product, so there are also changes in the field of marketing strategies that are carried out (Li et al., 2017). Many social networks are currently used to market or communicate products such as Facebook, Twitter, Instagram, and other social networks. Through this social network, a discussion forum is also formed which is a reference group that has the same interest and interest in the product or commonly known as the virtual world community or Virtual Communities. The virtual world community gave birth to a marketing communication that was formed effectively, namely word of mouth emerged naturally from opinions that were considered more honest and there were no specific motives in conveying information to other consumers (Hollebeek et al., 2017; Li et al., 2017). The phenomenon of the development of a brand community in a virtual form is increasingly widespread and this is utilized by product marketers. If a virtual community is implemented in a marketing strategy, it can potentially have an exponential effect in disseminating marketing activities and information. It seems that through the dissemination of information through virtual communities also reduces the barriers that existed previously such as distance, time, and cost and makes it a trusted

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reference place to get information. In addition, consumers are also easier to interact to provide solutions to each other. And this is also one of the strengths in the formation of a brand/ brand which ultimately increases the brand of the product

In a study, Antonacci et al. (2017) state that there was a positive influence between Virtual Communities on brand equity studied in a telecommunications company seen that the occurrence of word of mouth created Virtual Communities based on their experience using the product which in the end immediately changed the public perception that the product was a good product. A similar study was conducted by Jiang et al. (2021) state that there is a significant influence between Virtual Communities on brand equity. The existence of antecedents or events that precede behavior where the birth of Virtual Communities has an effect on the brand. Brand equity is an important part of marketing (Pathak & Pathak-Shelat, 2017). Each product must be able to explain its own attributes, these attributes will have consequences on brand equity and consumer preferences for brands.ownership brand is firmly embedded in perceptions and has become a consumer preference, then the brand does not know the crisis period, crises come again and again, competitors attack in various ways, consumers will still choose brand to meet their needs.

PT. Hadji Kalla - Toyota Makassar is one of the largest car sales distributions in Indonesia which is currently one of the market leaders in the East Indonesia region for car sales under the Toyota brand. There are also several active social media accounts from several car communities under the auspices of PT. Hadji Kalla which is fully driven by each car community in delivering information. In 2016 sales performance is estimated to be relatively the same as last year's composition where people's purchasing power tends to be high in the compact entry segment by recording sales in 2016 of 20,523 units for all segments marketed by the company. In the development of the seller, it shows that from year to year there is a decline. However, monthly sales charts have consistently increased sales. The factors that caused the decline in sales were due to intense competition where many competing companies took part in the development of technological trends, especially in the field of information technology. Seeing this phenomenon, by making PT. Hadji Kalla as an dealer that is much-loved and a market leader in serving the needs of the community for the availability of private cars, it is considered necessary to see how the role of virtual communities, brand equity (brand equity) can influence consumer purchasing decisions for products. Toyota in Makassar City, and its relation tovirtual communitiesas a group that is considered to be related to consumers' purchasing decisions indirectly in choosing or meeting their needs for Toyota products. Many studies directly link Virtual Communities with brand equity and brand equity on purchasing decisions (Elsharnouby et al., 2021; Hollebeek et al., 2017; Ko et al., 2018). What is renewed in this research is to see the indirect relationship of the influence of Virtual Communities on purchasing decisions where there is brand equity as a mediating.

2. Literature Review

2.1. Buying Decision

According to Breugelmans & Campo, (2016) states that the buying decision process consists of five, namely the introduction of needs, information search, evaluation of alternatives, buying decisions and actual behavior takes place. (Arasu et al., 2020) also explain that Buyer decision processes are the making processes undertaken by consumers in regard to a potential market transaction before, during, and after the purchase of a product or service. The buying decision process is a decision-making process carried out by consumers in terms of potential market transactions before, during, and after the purchase of a product or service (Bharadwaj & Shipley, 2020; Vredeveld, 2018). According to (Arasu et al., 2020) there are indicators that can be used to measure how strong a person is able to make a decision to buy a product, namely: (1) Stability in a product (Clemente et al., 2004), (2) Habits in buying products (Tiago & Veríssimo, 2014). (3) Provide recommendations to others (Martín et al., 2019). (4) Make repeat purchases (Ancillai et al., 2019; Ma & Sun, 2020).

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2.2. References Group

Reference group is a person or group (society) that influences consumer behavior (Kowalczyk & Mitchell, 2022; Preiksaitis & Dacin, 2021). According to Liljedal & Berg, (2020) and Preiksaitis & Dacin, (2021) reference group is a group that has a certain view of how to act in a situation. According to (Wen & Guo, 2021) reference groups are all groups that have a direct (face-to-face) or indirect influence on people's behavior (attitudes). Types of reference groups according to Sumarwan (2014:306) concluded that the types of reference groups are divided into three, namely formal and informal groups, primary and secondary groups, and aspiration and dissociation groups. Meanwhile, the reference/reference groups based on their grouping are divided into 3 (three) namely groups based on proximity and intensity of interaction, groups based on the legality of existence, and groups based on membership status and influence (Kennedy et al., 2022; Kowalczyk & Mitchell, 2022; Preiksaitis & Dacin, 2021). Reference groups / reference groups that influence consumers in essence can provide information, experience, credibility, attractiveness, strength of the reference group and product prominence (Dalman et al., 2020; Kaur et al., 2020). The various consumer-related reference groups include friendship groups, shopping groups, work groups, virtual communities and consumer action groups (Zhang et al., 2022).

2.3. Virtual Communities

Virtual Communities are groups of people or business partners who interact based on a common interest. Such interactions are at least partly supported and/or mediated by technology and guided by certain protocols and norms (Elsharnouby et al., 2021). Virtual Communities are formed on the basis of a common interest in a product category (cars and cameras), hobbies (rock climbing, music, and chess), or life situations (pension, illness, and pregnancy) (Amoncar, 2020). In addition, Virtual Communities can also be formed from individuals who have the same interests but some are officially formed by the company (Ko et al., 2018). Many definitions explain the meaning of Virtual Communities, so a conclusion is drawn, Virtual Communities are a group of people in virtual world who have the same interests. Members of this community freely exchange ideas, views, and information through various media such as email, chat, mailing lists, or bulletin cards. Intensely and continuously this group of people discuss various things and certain topics ranging from non-formal ones (such as hobbies, hobbies, food, and so on) to formal ones (such as political, social, religious issues, and so on). In contrast to the real world where to be able to meet a group of people, you must make an appointment in advance to determine the time and place, in cyberspace everyone can meet other people anytime and from anywhere (Deng et al., 2020) . In principle, a virtual community is a forum where its members are free to communicate with each other by expressing opinions. If studied seriously, this forum actually has a certain commercial value that can be utilized by e-business actors if the person concerned can really study its characteristics. What happens in the virtual community is a learning mechanism (knowledge sharing) because each member communicates about certain things (Amoncar, 2020). The principle is that a person usually intends to participate in a virtual community if he has certain problems. By participating in virtual communities, those concerned usually expect the "answers" and reliable information needed to the problems at hand, through interaction with other members. In a study by Hollebeek et al. (2017) there are 3 (three) indicators in measuring virtual communities. The indicators are: (1) Integration in Brand Communities, consumer relations with brands, products, companies, and other consumers in the community. These relationships, can develop synergistically so as to strengthen interpersonal bonds and increase appreciation of products, brands, and marketers, so as to generate consumer loyalty (Hollebeek et al., 2017; Jiang et al., 2021). Consumer Knowledge, (Festa et al., 2016) states that consumer knowledge with a high level of product knowledge will be more confident and cause a positive relationship to updated information from a brand community. (3) Community Engagement, Community engagement is simply defined as the continuous reciprocal relationship and intense communication. So that members in the brand community have a strong motivation to participate in showing the brand community (Lowe & Johnson, 2017; Mbilima, 2021; van Heerden & Wiese, 2021).

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2.4. Brand Equity

Zollo et al. (2020) explains that brand equity is a combined measure of brand strength and consists of three sets of metrics, namely knowledge, preferences and finance. Brand equity refers to the value of a brand. Brand equity is based on the extent to which the brand has high brand loyalty, name awareness, quality impression and strong product associations. Brand equity also includes other "intangible" assets such as patents, trademarks and partner relationships. Aaker, in (Kaswengi et al., 2020) classifies brand equity in four dimensions, namely: (1) Brand Awareness , indicating the ability of a potential buyer to recognize or recall that a brand is part of a particular product category. Brand awareness in brand equity depends on the level of awareness in the minds of consumers (Lucassen & Jansen, 2014). (2) Perceived Quality, is a reflection of the customer's perception of the overall quality/superiority of a product or service with respect to the expected intent (Kim et al., 2020). (3) Brand Association, is the imaging of a brand against a certain impression in relation to habits, lifestyle, benefits, product attributes, geography, price, competitors, celebrities, and others (Strübel & Sklar, 2022). (4) Brand Loyalty, is the core dimension of brand equity. Reflects the level of consumer attachment to a product brand (Bazi et al., 2020). Loyal customers will be an obstacle to competitors as well as a bulwark against possible price competition. Based on the theories that have been stated above, it can be concluded that brand equity is a set of attributes attached to a product that is able to distinguish a product from other products circulating in the market and provide its own value in the minds of consumers for products with that brand. What is a measure of the strength and weakness of a brand equity is the brand dimensions attached to the product. The dimensions of the brand are brand awareness (brand awareness), brand association (brand association), perceived quality (perceived quality), brand loyalty (brand loyalty) which will later be used as an indicator to measure the influence of brand equity on purchasing decisions in this study.

2.5. Conceptual Framework and Hypothesis Development

Virtual Communities, brand equity in this study on purchasing decisions are thought to have an influence. Therefore, the conceptual framework of this research can be seen in the following figure 1:

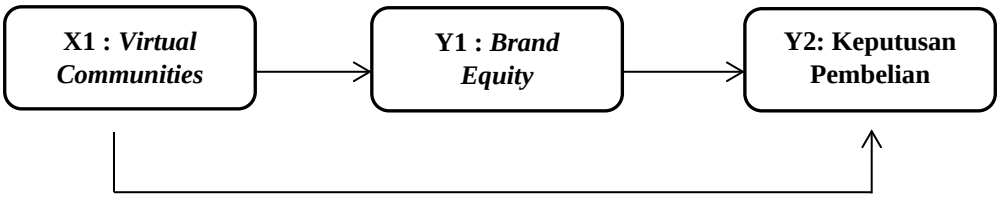

Figure 1: Conceptual Framework

H1 : Virtual Communities affect the Purchase Decision
H2 : Virtual Community affects Brand Equity.

3. Research Method and Materials

3.1. Sample Criteria

This research is an explanatory research that explains that brand equity, virtual communities have an influence or not on purchasing decisions. Explanatory research is a research that highlights the relationship between research variables and tests the hypotheses that have been formulated previously with a focus on explaining the relationship between variables. And this research uses the same structured/systematic questions to many people, then all the answers obtained by the research are recorded, processed, and analyzed. These structured/systematic questions are known as questionnaires

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(Mashur et al., 2020). The population in this study were all customers who bought Toyota cars at PT Hadji Kalla – Toyota Makassar sales area of Makassar City who had made the decision to buy a car. Thus the population is infinite. The sample in this study was selected with the 100 respondent with Snowball sampling , which is a method for identifying, selecting, and taking samples in a network or continuous chain of relationships. Researchers present a network through sociogram images in the form of images of circles that are linked or connected with lines. Each circle represents one respondent or case, and the lines show the relationship between respondents or between cases (Mashur et al., 2020). But still determine the sample of 100 people. The method of distributing questionnaires is by distributing to customers who buy Toyota cars at PT. Hadji Kalla – Toyota Makassar Sales Area Makassar City.

3.2. Measurement

The dependent variable (Y1) in this study is Purchase Decision, the independent variables include Virtual Communities (X1) and Brand equity (Y2). Research instrument is a tool or facility used by researchers in collecting data so that their work is easier and the results are better, in the sense of being more accurate, complete and systematic so that they are easier to process. The research instrument used in the field, by giving questionnaires to customers who bought Toyota cars at PT. Hadji Kalla – Toyota Makassar. The research was conducted at PT. Hadji Kalla – Toyota Makassar. This study is estimated to be about 1 month. The procedure for collecting and collecting data in this study is a field method, namely by the author distributing questionnaires to customers of PT. Hadji Kalla – Toyota sales area in Makassar City. Data collection begins with the preliminary research stage, namely conducting a literature study by studying books and other readings related to the subject of this research. At this stage, an assessment of the required data is also carried out, the availability of data, how to obtain data and an overview of how to obtain data. The next stage is research to collect all the data needed to answer research problems, multiply the literature to support the quantitative data obtained.

This study uses the PLS (Partial Least Square) method. Next is a hypothesis to test whether there is a relationship between virtual communities, brand equity, and purchasing decisions at PT. Hadji Kalla – Toyota Makassar. The analytical tool used in this research is Partial Least Square (PLS). Research using WarpPLS 6.0 program which iseasy to useand user friendly with complete feature support. Partial Least Square technique multivariate that compares between multiple exogenous and endogenous variables with many indicators. The test criteria were carried out on both models: (1) Measurement Model, this model defines the relationship between latent variables and their indicators. It can be said that the outer model defines how indicators relate to their latent variables. Tests performed on the outer model: (a) Convergent Validity.value Convergent Validity is the loading sector value on the latent variable with its indicators. Expected value > 0.7 and p-value > 0.5 (b) Discriminant Validity. This value is the value of the cross loading factor that is useful for determining whether the construct has an adequate discriminant, namely by comparing the loading on the intended construct which must be greater than the loading with other constructs. (c) Composite Reality. Data that has Composite Reliability > 0.8 has high reliability. (d) Average Variance Extracted (AVE). Expected AVE value > 0.5 € Cronbach Alpha. The reliability test was strengthened by Cronbach Alpha. Expected value >0.5 for all constructs. The test carried out above is a test on the outer reflective indicator model. For formative indicators, different tests are carried out. Test of formative indicators, namely: a) Significance of Weights,formative weights with the construct must be significant; b) Multicollinearitytest multicollinearity was conducted to determine the relationship between indicators. To find out whether the formative indicator has multicollinearity is to know the value of VIF. The value of VIF 5-10 can be said that the indicator occurs multicollinearity. Structural Model, test on the structural with PLS. It starts by looking at the R-Square for each endogenous variable as the predictive power of the structural model. The interpretation is the same as the interpretation in OLS regression. Changes in the value of R-Square can be used to explain the effect of certain exogenous latent variables on endogenous latent variables whether they have a substantive effect. R-Square values of 0.75, 0.50, and 0.25 can be concluded that the model is strong, moderate and weak. The results of the R-Square PLS represent the amount of variance from the construct described by the model (Joseph F. Hair, Jr., G.Tomas M. Hult,

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Christian M. Ringle, 2013). The analytical technique that will be used in this research is path analysis which is used to determine the causal relationship, with the aim of explaining the direct and indirect effects of a set of variables, as a causal variable to other variables which are effect variables. Path analysis method is used because the researcher wants to determine whether there is an influence between Virtual Communities on purchasing decisions and brand equity as a mediator. The theoretical framework model that is built describes the existence of mediating variables. F. Hair Jr et al. (2014) explained that to test the effect of the mediating variable, the path analysis method wasused. Path analysis is a development of multiple linear regression analysis, or the use of regression analysis to determine the existence of a causal relationship between variables. Direct and indirect relationships between variables in the model can also be measured using path analysis.

4. Results and Discussion

4.1. Identity of Respondents

In this study, the respondents were customers of PT. Toyota Hadji Kalla. The sampling technique used is Snowball Sampling by taking 100 customer respondents who have bought a Toyota brand car.

Table 1: Respondents by Gender

Information	Total	%
Man	83	83 %
Woman	17	17 %
Total	100	100 %

Based on table 1, it can be seen that the male respondents were 83 people (83% of the total respondents) while the female respondents were 17 people (17% of the total respondents). Thus it can be concluded that the number of male respondents is more than the number of female respondents. The next classification of respondents is based on age.

Table 2: Respondents by Age

Information	Total	%
>20 -30 Year	6	6 %
>30 – 40 Y ear	68	68 %
>40 – 50 Year	19	19 %
>50 Year	7	7 %
Total Respondents	100	100 %

Based on table 2, it can be seen that the classification of respondents aged between > 20 – 30 years is 6 people. Respondents aged >30-40 years were 68 people. Respondents aged > 30-40 years more than respondents aged > 40-50 years. And respondents aged > 50 years were 7 people. Thus, it can be concluded that the largest number of respondents aged >30-40 years is as many as 68 people (68% of the total percentage of respondents). Next is the classification of respondents based on work background.

Table 3: Respondents by Occupation

Information	Total	%
civil servant	20	36 %
Private employees	45	29 %
Self-employed	28	28 %
Others	7	7 %
Total	100	100 %

Based on table 3 it can be seen that the classification of respondents who have jobs as Civil Servants is 20 people, Private Employees are 45 people, are entrepreneurs as many as 28 respondents and who

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have other classifications are 7 people. Thus it can be concluded that the majority of respondents have jobs as private employees as many as 45 people (45% of the total respondents).

4.2. Descriptive Analysis of Research Variables

The following describes the respondent's answers to the questionnaire about the influence of virtual communities on Toyota brand car purchase decisions with brand equity as a mediator at car dealer PT. Hadji Kalla – Toyota Makassar. Based on the respondents' answers, it can be seen that the virtual communities' question item spreads about the Toyota car brand on social media with an average response of 4. In the question item, knowledge about Toyota cars through several social media platforms, I followed with an intermediate answer of 4.5. In the question item, there is virtual communities' involvement in explaining Toyota cars with an average response of 4.2. In the question item, updated and trusted information is distributed by virtual communities with an average of 3.6. The dominant indicator in virtual communities is consumer knowledge with the question item Knowledge of Toyota cars through several social media I follow. Based on the respondents' answers to the brand equity variable, it can be seen for the question item brand awareness with an average answer acquisition of 3.7. On the question item, brand association with an average of 4.3 answers. On the item Perceived Quality questions with an average answer acquisition of 4.2. On the question item Brand Loyalty with an average answer acquisition of 4.2. Based on the respondents' answers to the purchase decision variable, it can be seen that the item stability questions to the product with an average response of 3.8. On the brand knowledge item with an average answer acquisition of 3.8. The question items provide recommendations with an average answer acquisition of 3.9. In the item of updated information questions with an average of 4.1 answers. On the question item, brand awareness with an average answer acquisition of 4.4. The question item suitability of benefits and quality with an average of 3.6 answers. In the item price suitability question with an average answer acquisition of 3.7. In the question item, repeat purchases with an average of 3.8. The dominant indicator of the purchasing decision variable is the question item on brand awareness.

4.3. Statistical Analysis

1. Outer Model Test

The outer model is often also called the (outer relation or measurement model) specifying the relationship between the variables studied and their indicators. Convergent Validity of the measurement model can be seen from the correlation between the indicators and their construct scores (loading factor) with the criteria for the loading factor value of each indicator greater than 0.7 can be said to be valid. However, according to Chin in Latan & Ghozali (2012), in the early stages of development the loading factor value greater (>) than 0.5 – 0.6 can be said to be valid.

a) Convergent Validity for Virtual Communities (X1) construct. In this study, Virtual Communities consists of 4 indicators. The results of the WarpPLS 6.0 output, show the loading factor of the 4 indicators, which is above 0.5. This means that all indicators have met convergent validity. The following is an explanation in table 4:

Table 4: Virtual Communities Construct

No	Indicator	Loading Factor	p-value	Description
1	X1.1	0.826	<0.001	Meets Convergent Validity
2	X1.2	0.867		
3	X1.3	0.868		
4	X1.4	0.792		

b) Convergent Validity for Brand equity construct (Y1). In this study Brand equity consists of 4 indicators. The results of the WarpPLS 6.0 output, show the loading factor of the 4 indicators,

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which is above 0.5. This means that all indicators have met convergent validity. The following is an explanation in table 9.

Table 5: Brand Equity Construct

No	Indicator	Loading Factor	p-value	Description
1	Y1.1	0.867	<0.001	Meets Convergent Validity
2	Y1.2	0.910		
3	Y1.3	0.937		
4	Y1.4	0.893		

c) Convergent Validity for the Purchase Decision construct (Y2). In this study the purchase decision consists of 8 indicators. The results of the WarpPLS 6.0 output, show the loading factor of 8 indicators, which is above 0.5. This means that the convergent validity of all indicators has been fulfilled. The following is an explanation in table 10.

Table 6: Loading Value of Purchase Decision Constructs

No	Indicator	Loading Factor	p-value	Description
1	Y2.1	0.755	<0.001	Meets Convergent Validity
2	Y2.2	0.799		
3	Y2.3	0.758		
4	Y2.4	0.680		
5	Y2.5	0.787		
6	Y2.4	0.733		
7	Y2.4	0.677		
8	Y2.4	0.807		

The overall results above show that the indicators above meet the requirements of convergent validity. This means that all the indicators above are valid and can be used in the model.

d) Discriminant Validity. Discriminant validity is assessed from cross loading measurements with constructs. Latent constructs will predict the indicators better than other constructs. If the correlation of the construct with the main measurement (each indicator) is greater than the size of the other constructs. The first method used to analyze discriminant validity is to see the value of loading the latent construct and the value of loading other constructs. By looking at table 11 it can be seen that the construct loading value of each indicator shows better than the other construct loading values, in other words all indicators meet discriminant validity.

Table 7: Combined Loadings and Cross-Loading

	X1	Y1	Y2	SE	P-Value
X1.1	0.826	-0.428	0.361	0.080	<0.001
X1.2	0.867	-0.046	-0.282	0.079	
X1.3	0.868	0.413	0.094	0.079	
X1.4	0.792	0.044	-0.171	0.081	
Y1.1	0.114	0.867	-0.156	0.079	
Y1.2	-0.197	0.910	0.068	0.078	
Y1.3	-0.062	0.937	0.053	0.078	
Y1.4	0.155	0.893	0.027	0.078	
Y2.1	-0.613	-0.231	0.755	0.081	
Y2.2	-0.316	0.094	0.799	0.080	
Y2.3	-0.641	-0.175	0.758	0.081	
Y2.4	0.642	0.494	0.680	0.083	
Y2.5	0.477	-0.234	0.787	0.081	
Y2.6	0.806	-0.018	0.733	0.082	
Y2.7	0.408	0.206	0.677	0.083	
Y2.8	0.491	-0.057	0.807	0.080	

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The following is presented in a table to make it easier to read the data:

Table 8: Loading Value of Indicator Latent constructs and to other constructs

Indicator	Latent Construct Loading Factor	Cross Effect Loading Factor		Description
X1.1	0.826	-0.428	0.361	Meets discriminant validity
X1.2	0.867	-0.046	-0.282	
X1.3	0.868	0.413	0.094	
X1.4	0.792	0.044	-0.171	
Y1.1	0. 114	0.867	-0.156	
Y1.2	-0.197	0.910	0.068	
Y1.3	-0.062	0.937	0.053	
Y1.4	0.155	0.893	0.027	
Y2.1	-0.613	-0.231	0.755	
Y2.2	-0.316	0.094	0.799	
Y2.3	-0.641	-0.175	0.758	
Y2.4	0.642	0.494	0.680	
Y2.5	0.477	-0.234	0.787	
Y2.6	0.806	-0.018	0.733	
Y2.7	0.408	0.206	0.677	
Y2.8	0.491	-0.057	0.807	

Based on the output results in table 8, it can be concluded that all constructs meet the criteria of discriminant validity, where all latent constructs predict that their indicators are greater than other indicators.

e) Composite Reliability. The next test is a construct reliability test that can be measured by 2 criteria, namely composite reliability and Cronbach's alpha. A construct is declared reliable if the composite reliability value is > 0.7, as well as Cronbach's alpha is > 0.7

Table 9: Latent Variable Coefficients

	X1	Y1	Y2
Composite Realibility	0.905	0.946	0.912
Cronbach's Alpha	0.859	0.923	0.889

Based on table 9, the results show a satisfactory composite reliability of each construct, namely Virtual Communities (X1) 0.905, Brand equity (Y1) 0.946, and Sales Decision (Y2) 0.912. The results of Cronbach's Alpha also show good results, namely Virtual Communities (X1) 0.859, Brand equity (Y1) 0.923 and Purchase decisions (Y2) 0.889. it can be concluded that each construct has high reliability which can be seen from the Composite Realibility and Cronbach's Alpha values for all constructs greater than 0.70.

2. Structural Model

In this study, the model fit test contained 3 test indices, namely Average Path Coefficient (APC), Average R-squared (ARS) and Average Variance Factor (AVIF) with APC and ARS criteria accepted provided that p-value <0.1 and AVIF more smaller than 5. In addition, to see whether the model is good or not, the GoF value is also used. If the GoF value 0.36 then the model is very good, the GoF value 0.25 means the model is quite good and the GoF value 0.1 means the model is not good. For multicollinearity testing, it can be seen from the value of Average Full Collinearity VIF (AFVIF). If the AFVIF value is 3.3, then there is no multicollinearity problem between indicators and between latent variables. The following is the output of the fit indices model from the WarpPLS 6.0 program.

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Table 10: General SEM Analysis Result

	Indeks	p-value
APC	0.556	<0.001
ARS	0.650	<0.001
AVIF	2.223	Acceptable if ≤5, Ideally ≤3.3
Tenenhaus Gof (Gof)	0.672	Small ≥0.1, Medium ≥0.25, Large ≥0.36
AFVIF	3.303	Acceptable if ≤5, Ideally ≤3.3

The table above shows that the APC value is 0.556 and the p-value is <0.001, the ARS value is 0.650 and the p-value is <0.001 and the AVIF is 2.223. Based on the criteria APC has met the criteria because it has a p-value of <0.001 because the condition is a p-value <0.05 as well as ARS has met the criteria because it has a p-value of <0.001 because the condition is a p-value <0.05. Furthermore, based on these data, the AVIF value is 2.223. AVIF has met the criteria, so this research model is fit. Besides that, the GoF value is 0.672, so the research model is said to be very good because it meets the GoF criteria 0.36. And for the value of Average Full Collinearity VIF (AFVIF) of 3.303 already meets the ideal criteria.

4.4. Hypothesis Test Results

Hypothesis testing is also intended to prove the truth by research or hypotheses. The results of the correlation between constructs are measured by looking at the path coefficients and the level of significance which is then compared with hypothesis one to the research objective hypothesis. The level of significance used in this study is 5%. The following is an image of the research model, along with the results obtained based on data processing using the WarpPLS 6.0 program:

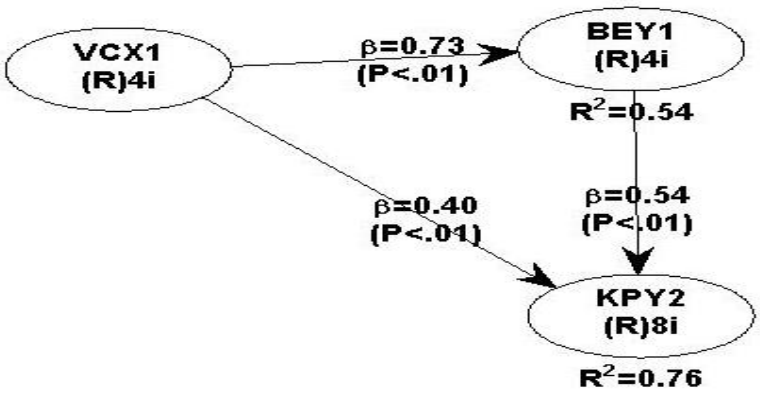

Figure 2: PLS-SEM Analysis of WarpPLS 6.0 . Program

Based on Figure 2 shows that the path coefficients and p-values from virtual communities (X1) to purchase decisions (Y2) are 0.40 and <0.01. The path coefficients and p-values from virtual communities (X1) to brand equity (Y1) are 0.73 and <0.01. The path coefficients and p-values from brand equity (Y1) to purchase decision (Y2) are 0.54 and <0.01. The R-squared value is 0.76 for Virtual Communities (X1), which means that the influence of Virtual Communities on purchasing decisions (Y2) is 76%, and variables outside this research model influence the remaining 24%. The R-squared value for brand equity (Y1) is 0.54. it means that the effect of Virtual Communities (X1) on Brand equity (Y1) implies that the influence of Virtual Communities (X1) on Brand equity (Y1) is 54%, and variables outside this research model influence the remaining 46%.

Table 11: Indirect Effect

	Path	Path Coefficients	P-Values
Indirrect Effect	X1 on Y2	0.395	<0.001

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Based on table 11 Indirect effects show the p-values of the indirect effect of the Virtual Communities (X1) variable on Purchase Decisions (Y2) through Brand equity (Y1) of 0.001 <0.05, this means that Virtual Communities on Purchase Decisions have an indirect effect through Brand Equity, which means that the brand equity variable is a mediating variable between virtual communities on purchase decisions. The Virtual Communities variable significantly affects the Purchase Decision variable because it has a p-value <0.01 and 0.05 as the limit of its significance level. The Virtual Communities variable also positively influences the purchasing decision variable, which can be observed through the path coefficient value, which is positive 0.40. This figure shows that if there is an increase in virtual communities, customer decisions will increase by 0.40 and vice versa. Whenever there is a decrease in virtual communities on purchasing decisions, the assessment of purchasing decisions as measured by virtual communities will decrease by 0.40. The Virtual Communities variable significantly affects the brand equity variable because it has a p-value <0.01 and 0.05 as the limit of its significance level. The Virtual Communities variable also positively influences the brand equity variable, which can be observed through the path coefficient value, which is positive at 0.73. This figure shows that if there is an increase in virtual communities, brand equity will increase by 0.73 and vice versa. Every time there is a decrease in virtual communities' brand equity, the assessment of brand equity as measured by virtual communities will decrease by 0.73. The brand equity variable significantly affects the purchasing decision variable because it has a p-value <0.01 of 0.05 as the limit of its significance level. The brand equity variable also positively influences the purchasing decision variable, which can be observed through the path coefficient value, positive at 0.54. This figure shows that if there is an increase in brand equity, customer decisions will increase by 0.54 and vice versa. Whenever there is a decrease in brand equity on purchasing decisions, the assessment of purchasing decisions as measured by brand equity will decrease by 0.54. The novelty of this study looks at the hypothesis. Virtual communities indirectly influence purchasing decisions with brand equity as a mediating variable. This is evidenced by the p-values of the indirect effect of the Virtual Communities variable on buying decisions of 0.001 > 0.05.

4.5. Discussion

This study aims to examine the effect of Virtual Communities on consumer purchasing decisions for Toyota brand cars with brand equity as a mediator. Based on the results of the analysis, the discussion of the research results is as follows:

1) The Effect of Virtual Communities on Purchase Decision.

Virtual communities have a positive and significant effect on purchasing decisions directly. This identifies a direct relationship between virtual communities and purchasing decisions at PT. Hadji Kalla- Toyota Makassar. If there is an increase in virtual communities, purchasing decisions will also increase, even though the significant effect is minimal. The role of virtual communities increases buying decisions, and this influence can occur because virtual communities can influence people's buying interest in a product, either directly or indirectly. The size of a virtual community lies in how a virtual community creates a reliable delivery of information born from the experiences experienced by consumers, which becomes product knowledge for potential buyers. Variable virtual communities are primarily determined by the magnitude of the role of the indicators that make it up, namely: a) Integration in brand community, virtual communities spreading about the Toyota brand on social media; b) Consumer Knowledge, knowledge about Toyota cars through several social media I follow; c) Community Engagement, there are virtual communities in explaining about Toyota cars; d) Information value, updated and trusted information disseminated by virtual communities.

From several indicators that make up the virtual communities variable, it is found that the leading indicator is the formation of consumer knowledge/consumer knowledge of the respondents who buy cars at PT. Hadji Kalla- Toyota Makassar. Respondents who gave the highest answers from the average value in the descriptions of respondents' answers, then community engagement indicators involving virtual communities in explaining Toyota cars. Furthermore, several other indicators include integration in the brand community and information value. Information value respondents gave the

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smallest value of the average results, then PT. Hadji Kalla – Toyota Makassar must be more vigilant and provide updated information to virtual communities to be more active in helping disseminate information to potential buyers. Thus, virtual communities have a role in improving purchasing decisions, although the significant effect is minimal. Based on the theory of Kotler and Armstrong (2009:179), there are five purchasing decision processes, namely need recognition, information seeking, alternative evaluation, purchase decisions, and post-purchase behavior. In the buying decision process, there are intervening factors in other people's attitudes and unanticipated situational factors that may appear to change the buyer's intention (Kotler and Keller, 2009: 189). The information and suggestions provided by the Virtual/Virtual Communities group influence consumers to buy. Consumers need more than just reliable information and advice to decide to make a purchase (Hayyuna et al.: 2016). Competitors from several brands have begun to create virtual communities with large numbers and several virtual and organic world activities to convey product information. With the presence of virtual world activities on an ongoing basis in this information technology era, of course, it creates a separate image in the community about the knowledge of these products as well as the many product reviews that are born in real terms from customers who are members of the virtual community because they appreciate experience and knowledge. They use the product. The birth of virtual communities for Toyota brand cars at PT. Hadji Kalla-Toyota Makassar started from an organic/real-world community gathered in an ordinary car brand and digital activities on social media under the auspices of PT. Hadji Kalla – Toyota Makassar. These community activities positively impact the company because each community of various Toyota brand cars displays their strengths and interests in the brand. Activities uploaded in cyberspace can be one of the reliable information that becomes additional knowledge of the product to consumers, which potential buyers will see can influence/change the interest of potential buyers either directly or indirectly to buy a Toyota car.

2) The Effect of Virtual Communities on Brand Equity.

Virtual communities have a positive and significant direct effect on brand equity. This means the increasing virtual communities and the increasing brand equity towards Toyota brand car products at PT. Hadji Kalla – Toyota Makassar. The increase that occurs looks very large and significant. The indicators for forming Brand equity include several: (1) Brand Awareness with the question indicator when looking for a car that is right for me, I immediately think of a Toyota brand car. (2) Brand association with question indicators is Toyota cars according to price and lifestyle. (3) Perceived quality with the question indicator is Toyota cars have the best quality. (4) Brand Loyalty with the question indicator: When someone offers another brand of car, I will still choose a Toyota car as my choice. From several indicators that make up the brand equity variable, it is found that the leading indicator is the formation of a Brand Association in which respondents give the highest average value of several other indicators. This explains that Toyota brand car products form brand equity because customers who buy Toyota cars are following their lifestyle.Virtual communities have an essential role in building brand equity for a product, especially in this study of Toyota brand car products. This influence can occur because virtual communities are included in a part of the promotional mix/marketing mix. Information on virtual communities is an advertising medium that creates word of mouth (WOM). Word of mouth (WOM) is a communication process in providing recommendations either individually or in groups for a product or service that aims to provide personal information. Word of mouth (WOM) occurs naturally. People who are satisfied with a product will share their enthusiasm about it. The phenomenon of word of mouth (WOM) is believed to encourage purchases and increase brand equity. It is efficient because it does not require a large budget (low cost), can create a positive image for the product, and touch consumer emotions. Melva's research (2011), word of mouth (WOM) does not only involve good news but also bad news. If there is a bad experience with the brand, it will undoubtedly spread very quickly so that it can injure the brand, especially the indicators of brand equity. Customers who are members of virtual communities show the goodness or advantages of these products to form an image in the minds of potential consumers. When they enter the brand equity stage, the community will continue to remember the product characteristics, advantages, and quality of the products offered. People will have two assumptions about whether this product is good or bad

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at this stage. If members of the virtual community / virtual communities perceive more superiority and product quality, the birth of brand equity directly affects purchasing decisions. PT. Hadji Kalla-Toyota is active in the activities of the Toyota brand car community, whether formed now by the company or indirectly. It aims to build a perception of brand equity for Toyota brand cars in the community. The number of activities carried out by virtual communities positively impacts the company, especially Toyota brand cars. These activities show all people and potential buyers how interested and loyal Toyota car users are, provide positive information for those who enjoy using Toyota brand cars, and create brand loyalty that does not rule out the birth of a repurchase process for the same product and brand.

3) The Effect of Virtual Communities on Purchase Decisions with Brand Equity . Mediating Variables.

The novelty of this research is to see the influence of virtual communities on purchasing decisions with the mediating variable of brand equity showing a positive and significant effect by looking at the positive coefficient value and the p-value meeting the criteria. In this era of information technology development, an innovation is needed for a company to improve the delivery of information and build the image of a product. Where companies no longer have to focus on organic activities but have to start building virtual/electronic activities and information delivery. Aaker in Tjiptono and Diana (2000:43) classifies brand equity into four dimensions, namely brand awareness (brand awareness), perceived quality (perceived quality), brand association (brand association), and brand loyalty (brand loyalty). virtual communities on purchasing decisions through brand equity indicators show results about the quality of the product created to be able to help someone to recognize and recall the Toyota car brand, help strengthen one's memory or associations about the Toyota car brand, and perceptions and loyalty affect the interest of potential consumers. Coupled with the existence of virtual communities / virtual communities, companies can easily place information on the products they sell in virtual communities. WOM information that is born in the form of recommendations, testimonials, product reviews becomes very important, especially written directly by those who are members of virtual communities (Meyliana: 2012). Then the stronger the influence of interest in a consumer's purchase decision. Strong brand equity, reliable information that is born gives a big decision making to buy. As an empirical phenomenon that occurs in society, people spend more time finding reliable information and accurate news about a product through virtual/virtual media. The latest changes in people's behavior, see more directly the advantages of products by visiting virtual community sites or forums to see the advantages of these products. PT. Hadji Kalla-Toyota Makassar began to build and strengthen virtual communities by supporting several major activities from each organic and virtual community and starting to build other digital activities. As a concrete example, we can see the activities of several communities that we can see through social media uploaded by their virtual accounts, product reviews and activities about products through digital media are carried out. The number of customers from several respondents responded that the delivery of information about the latest products, promos and activities they quickly accessed through digital activities carried out. Respondents stated that the existence of virtual communities became a new reference for them to find knowledge about trusted and updated Toyota car products.

5. Conclusion

Based on the analysis of studies and discussions that have been proven qualitatively and quantitatively, the following conclusions can be drawn: Virtual communities are established to significantly affect purchasing decisions. This means that virtual communities can directly influence consumers' interest/buying decisions or potential customers. Judging from the phenomenon of developing technology and the habits of people who want to get more information about product advantages, they are more likely to see or review products before buying through digital portals or several other virtual community forums. Virtual communities are proven to have a significant positive effect on brand equity. This means that virtual communities can have a direct impact on improving

brand image because virtual communities, which are part of the promotional mix, are attached to or attached to a brand image due to the realization of messages or information that are built on an ongoing basis, so that word of mouth is born in the community, directly elevating the brand value of the product itself. The Virtual Communities variable shows a solid and dominant influence on brand equity compared to other variables. This indicates that the more the customers of the product talk and inform about a product that is used, the more the brand product is attached and bound to customers and potential customers. This attachment builds the brand equity of a product so that potential customers/customers do not hesitate to make a product purchase decision.

This study has provided findings on the effect of Virtual Communities on Toyota car brands' consumer purchasing decisions through brand equity. Some suggestions in this study are as follows: virtual Communities on purchasing decisions, although the research results get a minimal value but have a significant and positive influence. Seeing the results of this study and the phenomena that are born today, it is necessary to have sensitivity to these developments, especially in information delivery technology. Companies must have started to build an innovation, one of which is included in the promotional mix group, such as virtual communities. Virtual Communities will have a role in delivering information that can produce word of mouth and become a choice for prospective buyers to see reviews and the advantages of these products. Great for customers and potential buyers. This can be a consideration for companies in developing their marketing strategies, especially in building customer loyalty to the brand. For future research, it is possible to retest the constructs in this study with a similar model or add independent variables to other variables using different analytical techniques, such as using SEM with a large sample, and can expand the object of research.

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