

Customer Engagement, Customer Equity, and Their Influence on Consumer Repurchase Intention in E-Commerce Mobile Applications

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Info Article

History Article:

Submitted 05 September 2022

Revised 03 October 2022

Accepted 05 October 2022

Keywords:

Customer Engagement;

Customer Equity;

Value Equity;

Relationship Equity;

Brand Equity;

Purchase Intention.

Abstract

The focus of this research is to determine the effect of customer engagement on repurchase intention using the customer equity dimension mediating the mobile e-commerce application at Shopee Indonesia company. Customer equity has three dimensions: value equity, brand equity, and relationship equity. The research approach is quantitative, with a purposive sampling technique, and the research sample is 160 respondents. This study identified modeling with Structural Equations Analysis (SEM) with SmartPLS 3.29. This study concludes that the variable customer engagement has a positive and significant effect on the dimensions of customer equity (value equity, brand equity, and relationship equity). Measurements of customer equity (value equity, brand equity, and relationship equity) positively and significantly affect repurchase intention. Customer engagement has an indirect and significant positive effect on repurchase intentions mediated by customer equity dimensions (value equity, brand equity, and relationship equity).

Customer Engagement dan Customer Equity serta Pengaruhnya terhadap Minat Pembelian Ulang Konsumen pada Aplikasi Mobile E-Commerce

Abstrak

Penelitian ini memiliki maksud untuk mengkaji pengaruh customer engagement pada minat pembelian ulang dengan dimensi customer equity sebagai variabel mediasi pada aplikasi mobile e-commerce pada perusahaan Shopee Indonesia. Dimensi customer equity meliputi value equity, brand equity, dan relationship equity. Pendekatan penelitian adalah kuantitatif, dengan pemungutan sampel menggunakan teknik sampling purposive dan sampel penelitian adalah 160 responden. Penelitian ini menetapkan analisis pemodelan persamaan struktural (SEM) dengan SmartPLS 3.29. Temuan penelitian ini adalah variabel customer engagement berpengaruh positif dan signifikan terhadap dimensi customer equity (value equity, brand equity, and relationship equity). Dimensi ekuitas pelanggan (value equity, brand equity, and relationship equity) berpengaruh positif dan signifikan terhadap niat beli ulang. Keterlibatan pelanggan memiliki pengaruh positif tidak langsung dan signifikan terhadap niat pembelian kembali yang dimediasi oleh dimensi ekuitas pelanggan (value equity, brand equity, and relationship equity).

JEL Classification: M30, M31, M37

How to Cite: Dwiviolita, S., & Zuliarni, S. (2022). Customer Engagement, Customer Equity, and Their Influence on Consumer Repurchase Intention in E-Commerce. *Jurnal Dinamika Manajemen*, 14(1), 55-71.

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INTRODUCTION

Indonesia is presently the fourth-largest smartphone user in the world, thanks to the growth of information technology and internet access technologies (Newzoo, 2020). Based on Hootsuite and We Are Social reports, internet usage in Indonesia continued to increase until January 2022, 205 million users were detected. Indonesia's internet penetration rate now reaches 73.7% of the total population. The results of the report also say that users use the internet for 8 hours 52 minutes and 3 hours 14 minutes on social media daily, with an average usage of 98.2% on smartphones (Kemp, 2022).

The rapid growth of internet and smartphone use positively impacts the availability of complete shopping access via e-commerce services. The number of stores that have shifted their trading patterns to an online system demonstrates this. Its presence in e-commerce causes a shift in the consumer shopping system from traditional to online markets and forces any country to grapple with the effects of digitization to avoid severe economic failure (Ilyas et al., 2020).

The Covid-19 epidemic that was endemic in early 2020 was also one of the leading causes of online transactions. With limited mobility, many people are turning to online shopping through mobile smartphone applications, either using e-commerce applications or applications made directly by companies. Responding to this phenomenal trend, companies are now using their capabilities to market their products online. Sometimes, they even provide attractive offers and promos through mobile applications unavailable when customers buy in stores. In addition, the company has recognized the importance of mobile applications as an essential promotional tool for increasing consumer engagement (Megatari, 2021).

Currently, there is fierce business competition from e-commerce companies in Indonesia, namely, competing to reach many customers in Indonesia to be able to visit, view, and buy on their applications. However, based on the Iprice report with data for the second quarter of 2021,

the ranking of e-commerce sites in the Playstore and Appstore applications differs significantly. The report shows that Shopee managed to rank first, which was followed by Tokopedia and Lazada. With the high level of competition in the e-commerce industry, manufacturers are competing with each other by offering various types of attractive marketing to attract consumers to increase engagement that can maintain customer relationships, reach new customers, and generate buying interest.

Shopee is an e-commerce application that can be accessed easily using a smartphone belonging to the Singapore-based SEA Group and has penetrated many ASEAN countries, including Indonesia. The results of research from Hayden Capital (2018), namely Marketplace Business + Shopee (Sea Ltd), explain that e-commerce Shopee has tried to achieve the highest level of customer engagement compared to its competitors to get their customers to come back so they can generate an intention to buy. According to the average session duration, customers spend 19% more time on Shopee than on Lazada and 77% more than on Tokopedia. Then according to the average per visit, 25% more customers visit Shopee than Lazada and 94% more than Tokopedia (Capital, 2018). Shopee has shown remarkable progress in a short period, including its competitive efforts in Indonesia to increase customer engagement. Shopee has done various kinds of tips to increase customer engagement.

Research conducted previously by Ho & Chung (2020) research concerning mobile apps' customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobile apps' customer engagement via various social media communities influences customer equity (brand, value and relationship equity) said that high levels of customer equity can influence high levels of customer engagement. For this reason, in addition to building customer engagement, companies also need to increase customer equity because this customer equity-based marketing strategy is one of the essential tips for companies with three primary drivers, namely equity of value, brand equity, and relationship

equity (Lemon et al., 2001) product manager, or marketing-oriented CEO: How do I manage the brand? How will my customers react to changes in the product or service offering? Should I raise price? What is the best way to enhance the relationships with my current customers? Where should I focus my efforts? Business executives can answer such questions by focusing on customer equity—the total of the discounted lifetime values of all the firm’s customers. A strategy based on customer equity allows firms to trade off between customer value, brand equity, and customer relationship management. We have developed a new strategic framework, the Customer Equity Diagnostic, that reveals the key drivers increasing the firm’s customer equity. This new framework will enable managers to determine what is most important to the customer and to begin to identify the firm’s critical strengths and hidden vulnerabilities. Customer equity is a new approach to marketing and corporate strategy that finally puts the customer and, more important, strategies that grow the value of the customer, at the heart of the organization. For most firms, customer equity is certain to be the most important determinant of the long-term value of the firm. While customer equity will not be responsible for the entire value of the firm (eg., physical assets, intellectual property, and research and development competencies). Therefore, to build high customer engagement, companies must also pay attention to customer equity simultaneously to increase repurchase decisions among groups. Previous studies have confirmed that customer engagement with mobile applications benefits customer equity, increasing consumer repurchase intentions (Ho & Chung, 2020; Corkum et al., 2021; Megatari, 2021). Research concerning mobile apps’ customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobile apps’ customer engagement via various social media communities influences customer equity (brand, value and relationship equity). Thus, it can be seen that customer involvement with mobile applications in forming customer equity actively encourages consumers to make repurchases.

Previous research by Ho & Chung (2020) research concerning mobile apps’ customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobile apps’ customer engagement via various social media communities influences customer equity (brand, value and relationship equity) has been carried out in a Taiwanese company on the Gogoro mobile application and provides recommendations for further research to be carried out in other developing Asian country companies for data generalization or external validity. While a similar study by Corkum et al. (2021). Update on this research was carried out by developing a research model related to marketing on social media through mobile applications in other developing Asian countries, namely Indonesia, at the e-commerce company Shopee by measuring the direct effect and adding the indirect effect to the mediation effect. This study will also provide new aspects of the findings of previous studies because of the differences in several measurement techniques used in the analysis.

Based on this description, this research provides new knowledge in the marketing process of mobile applications that currently beat traditional advertising marketing. Researchers also investigate how companies in Indonesia properly consider marketing programs on social media through mobile applications to stimulate customer engagement through customer equity, which can increase customer repurchase intention along with technological developments, because repurchase intention is one of the keys to successful marketing using mobile applications that not only related to transactional but also customer perceived lasting relationship with brand/company or customer equity.

The main objective of this study is to investigate the extent to which the effect of customer engagement on repurchase intention is mediated by customer equity. Then it is hoped that the research results can provide an overview, information, and suggestions regarding the sig-

nificance of marketing on social media through mobile applications. In addition, consideration for businessmen or companies that can provide positive results is related to how to increase customer engagement.

Hypothesis Development

Customer Engagement Between Dimensions of Customer Equity

According to Pansari & Kumar (2016) we highlight the need and develop a framework for customer engagement (CE), engagement has various meanings in different situations.

Engagement is referred to as a contract in the business world. Engagement is discussed in management literature as a company activity with internal stakeholders. Customer engagement is a term used in marketing to describe a customer's action toward a company (CE).

Kotler & Armstrong (2018) say that customer engagement is immediate and consistent customer involvement in creating brand experiences, brand conversations, and brand community. Triggers affect consumer engagement when customers recognize the need to solve a particular problem or satisfy their desire. Three dimensions are expressions of customer engagement proposed by Brodie et al. (2011) the role of "customer engagement" (CE), namely the cognitive, emotional, and behavioral dimensions.

On the other hand, customer equity is a relationship with a customer that has existed for a long time and is well built from the start as a long-term asset (Kim & Ko, 2012) In addition, customer equity is a value principle that maintains a long-lasting correlation with customers over time, where value for life is added to the current customer value (Wang et al., 2016). Lemon et al. (2001) product manager, or marketing-oriented CEO: How do I manage the brand? How will my customers react to changes in the product or service offering? Should I raise price? What is the best way to enhance the relationships with my current customers? Where should I focus my efforts? Business executives can answer such questions by focusing on customer equity—the total of

the discounted lifetime values of all the firm's customers. A strategy based on customer equity allows firms to trade off between customer value, brand equity, and customer relationship management. We have developed a new strategic framework, the Customer Equity Diagnostic, that reveals the key drivers increasing the firm's customer equity. This new framework will enable managers to determine what is most important to the customer and to begin to identify the firm's critical strengths and hidden vulnerabilities. Customer equity is a new approach to marketing and corporate strategy that finally puts the customer and, more important, strategies that grow the value of the customer, at the heart of the organization. For most firms, customer equity is certain to be the most important determinant of the long-term value of the firm. While customer equity will not be responsible for the entire value of the firm (eg., physical assets), intellectual property, and research and development competencies explained that there are factors that encourage or affect equity, namely value equity, brand equity, and relationship equity. Previous studies say there is a relationship between customer engagement and customer equity where customer engagement strongly influences customer equity (Youssef et al., 2018). In addition, the behavior and emotional attachment of customer involvement can increase customer equity (Pavlova, 2018).

The value equity of a brand is a realistic appraisal based on its understanding of what is given and received. Value equity is the foundation upon which businesses interact with their customers. Customers' demands and expectations must be met or exceeded by the company's services and products. Price, convenience, and quality are the three leading indicators or drivers of value equity analysis to improve company and customer relationships (Lemon et al., 2001).

For e-commerce services, one of the main reasons to engage in online transactions is the customer's perceived value (Zhu & Chen, 2012). Customer engagement broadens consumers' roles by involving them in the value-adding pro-

cess as co-creators of value to boost customer and seller satisfaction, with needs changing over time (Sashi, 2012). Similarly, previous literature states that the company condition requires successful joint value creation, emphasizes strong relationships and high-quality interactions, and contacts with customer engagement behavior (Jaakkola & Alexander, 2014).

Previous literature has shown that premium brands are receptive to direct customer feedback to encourage brand interaction and interaction with fellow users through mobile applications (Liu et al., 2021). Customer engagement affects multiple stakeholders, including customer centricity, brand/company centricity, business partners, and other components. As a result, many factors and elements in the context of a mobile application can influence this relationship (van Doorn et al., 2010) which we define as the customers' behavioral manifestation toward a brand or firm, beyond purchase, resulting from motivational drivers. CEBs include a vast array of behaviors including word-of-mouth (WOM). All decisions are based on customer value. In this situation, customer engagement must first increase value (van Doorn et al., 2010) which we define as the customers' behavioral manifestation toward a brand or firm, beyond purchase, resulting from motivational drivers. CEBs include a vast array of behaviors including word-of-mouth (WOM). Value equity is essential in developing and maintaining company and customer relationships. Further researchers showed a positive influence between customer engagement on value equity (Corkum et al., 2021; Ho & Chung, 2020; Kim et al., 2021; Megatari, 2021) research concerning mobile apps' customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobile apps' customer engagement via various social media communities influences customer equity (brand, value and relationship equity). As a result, the following hypotheses were created.

H1: Customer engagement has a positive influence on value equity.

Furthermore, customer engagement also influences increasing brand equity. Brands become an effective marketing strategy for improving company performance (Liu et al., 2017). Brand equity is becoming a key and strategic asset for most contemporary business organizations in a new and innovative way (Beig & Nika, 2022) particularly in the online shopping industry. This study was carried out in the State of Jammu and Kashmir to examine the influence of brand experience on brand equity. A multi-stage sampling method was employed to target 460 respondents which finally resulted in 403 functional responses. Exploratory Factor analysis (EFA). Brand equity is built through symbols and intentions as values not limited to the customer's subjective perception of the brand.

According to this study, a brand community alignment is created when a brand uses social media through mobile applications to communicate with customers (Zaglia, 2013). It is intended for the relationship between consumers and the company to grow stronger over time. According to González-Mansilla et al. (2019) and Hapsari et al. (2017) firms should learn how to properly manage this process which requires active customer involvement and this paper demonstrates that the level of customer participation said that high brand equity is the cause of customer satisfaction and customer engagement.

Previous researchers examined brands as predictors of customer engagement, stating that customers choose brands with high brand equity, and when customers buy products with a low brand equity it means because the product has a lower price or discounted price (Ou et al., 2020). In addition, Omar et al. (2021) and Youssef et al. (2018) also state that high customer engagement can increase brand equity.

This partnership will help improve brand image and increase brand recognition. Researchers further show a positive influence between customer engagement on brand equity (Corkum et al., 2021; Ho & Chung, 2020; Kim et al., 2021; Megatari, 2021) research concer-

ning mobile apps' customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobile apps' customer engagement via various social media communities influences customer equity (brand, value and relationship equity). As a result, the following hypotheses were created.

H2: Customer engagement has a positive influence on brand equity.

In addition, customer involvement also influences increasing relationship equity. Relationship equity refers to the tendency of customers to remain loyal to a brand, regardless of the customer's subjective assessment of the brand, to build and strengthen customer-company relationships. Relationship equity is a result. Customers develop relationship equity when they compare their results or expectations to their experiences, leading them to believe they have been treated better and have received particular attention (Low & Johnston, 2006; Ramaseshan et al., 2013).

Previous researchers said that higher relationship equity can increase the tendency of consumers to be more loyal to a brand (Ou & Verhoef, 2017; Han et al., 2018). Similarly, a study by Cuong et al. (2020) found that in very high circumstances competitive, relationship equity outcomes greatly influence brand loyalty via the moderating effect of value equity and the mediating effect of brand equity. Surprisingly, these correlations varied depending on the sort of consumer encounter. Thus, customer engagement via social media builds and strengthens customer relationships with a brand. Customer participation can bring a brand closer to the customer and improve brand value by establishing a broad communication channel for users to exchange ideas and information. The growth in relational equity reflects all of this. Further researchers showed a positive influence on customer engagement on relationship equity (Ho & Chung, 2020; Kim et al., 2021; Megatari, 2021) research concerning mobile apps' customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobi-

le apps' customer engagement via various social media communities influences customer equity (brand, value and relationship equity). As a result, the following hypotheses were created.

H3: Customer engagement has a positive influence on relationship equity

Dimensions of Customer Equity Between Repurchase Intention

According to Anggaeni et al. (2015), repurchase intention is the consumer's determination to buy in the future due to past experiences related to satisfaction and expectations. According to Kotler & Keller (2012), some factors can influence purchase intentions, namely psychological factors based on the influence of individual behavior and beliefs about past events through the individual's own experience so that the experience can be a learning and change behavior in the future, personal factors are based on the influence of perceptions and purchasing decisions from a person himself, and social factors are based on the effect of reference groups, family, and individual status.

According to Ferdinand (2014), indicators such as transactional interest can influence repurchase intention, namely the individual's desire to be able to buy a product, referential interest is the individual's desire to refer the outcome of interest to others, preferential interest is the individual's desire to have preferences. The main focus is on the effects of interest, and exploratory demand is the desire of individuals who are always looking for information related to products that interest them.

Based on the point of view on e-commerce, Kim et al. (2012) describe customer repurchase intentions in terms of the utilitarian purchase value, or the amount to which customers believe their buy goals have been met, and hedonic purchase value, or the enjoyment and thrill of the purchasing experience. In addition, previous researchers have found that value equity positively affects purchase intention (Ho & Chung, 2020; Megatari, 2021). As a result, the following hypotheses were made.

H4: Value equity has a positive effect on repurchase intention.

Apart from being tangible, consumers' subjective assessment of a brand must also be considered, related to brand recognition and consumer mindset toward brand success (Lemon et al., 2001) implying that brand equity is an essential element in explaining repurchase intentions.

Katsikeas et al. (2015) identify a unique relationship between customers diagnosed through the firm's marketing approach and the various repurchase decisions that support business firms. Viswanathan et al. (2018) determined that online customer engagement, including social media uploads, can influence client perspectives and repurchase behavior. Consistent with previous findings by Beneke et al. (2016) and Foroudi et al. (2018), there is a considerable association between purchase intention and brand equity. As a result, marketing executives should be concerned with building consumer brand equity because it is directly related to sales volume. Then the company must work to create loyalty to their brand within the consumer group. Furthermore, a past study has demonstrated that brand equity benefits repurchase intention (Corkum et al., 2021; Ho & Chung, 2020; Megatari, 2021). As a result, the following hypotheses were created.

H5: Brand equity has a positive effect on repurchase intention.

The aspirational value of loyalty programs gives an excellent opportunity for businesses to develop ties by generating solid incentives for customers to reconnect to the company for time-to-come purchases (Lemon et al., 2001; Raimondo et al. 2008) discovered in their study that relationship equity is a factor of customer loyalty in a highly competitive setting. Hajipour et al. (2013) show results that relationship equity has a positive and direct effect on brand purchase intentions by consumers. With the firm's and customer's relationship, the impact of the equity link on future purchases grows. Furthermore, a past study has demonstrated that relationship equity has a beneficial effect on Purchase Intention (Ho

& Chung, 2020; Megatari, 2021). As a result, the following hypotheses were created.

H6: Relationship equity has a positive effect on repurchase intention.

Customer Engagement Between Repurchase Intention Through Dimensions of Customer Equity

Customer equity has been defined as a systematic structure that connects customers and brands/companies, creates new revenue circulation as another way for the company's long-term success, and provides strategic recommendations to improve marketing performance (Lemon et al., 2001).

Customer engagement has now become the procedure in the competitive business world, including e-commerce or mobile applications, and customer equity plays a vital role in assessing a company's viability (Kim et al., 2020) traditional retail districts face a serious situation whereby businesses in downtown areas face collapsing as local population declines: resulting in a decrease in self-employed sales and a declining local economy. Traditional retailers use ambiguous accounting and are reluctant to use credit cards, and thus, the overall reliability of their customer data is low. This paper solves this problem by applying the concept of customer equity (CE). When the company's brand equity is higher, it will make the customer's perception of the product better it can affect the customer's intention to buy (Liu et al., 2020).

Previous research by Ho & Chung (2020) established customer equity as the primary mediator of mobile application customer interaction in influencing premium brand repurchase intentions. Furthermore, consumer involvement via mobile applications improves customer equity by improving repurchase intentions through value, brand, and relationship factors (Ho & Chung, 2020) research concerning mobile apps' customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobile apps' customer engagement via various social media communities influences customer equity (brand, value and relationship equity). This stu-

dy is supported by comparing the effect of three drivers of customer equity on purchase intention, value equity, and brand equity, this study found a significant positive impact (Kim & Ko, 2012). As a result, the following hypotheses were created.

- H7: Customer engagement indirectly positively affects repurchase intention through value equity.
- H8: Customer engagement indirectly positively affects repurchase intention through brand equity.
- H9: Customer engagement indirectly positively affects repurchase intention through relationship equity.

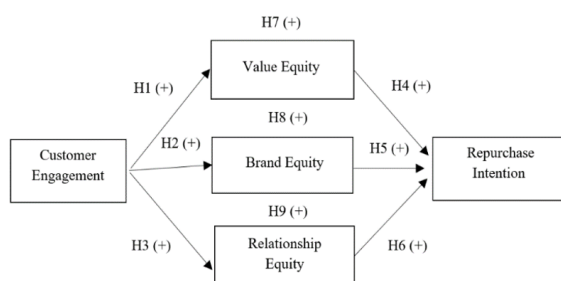


Figure 1. Conceptual Framework

METHOD

This type of causality study will determine whether there is a cause-and-effect relationship between the independent variables that affect the dependent variable (Juliandi et al., 2014). The research variable used an ordinal scale with a Likert scale of 4 points (1 = strongly disagree and 4 = strongly agree). The variables studied include customer engagement, and customer equity dimensions, namely value equity, brand equity, relationship equity, and repurchase intention. Researchers used two sources of data, namely primary data obtained directly from respondents' answers to the questionnaire and secondary data obtained from books, documents, and literature as the completeness of research data. The data collection method is a closed questionnaire in which the respondent selects an alternative answer that has been predetermined (Sugiyono, 2019b) and is distributed online through "google forms."

This study uses 32 statement items. The customer engagement variable adopts 3 indicators developed by Brodie et al. (2011) cognitive, emotional, and behavioral, adapted into 15 statement items from the research (Ho & Chung, 2020; Megatari, 2021). Value equity variable adopts 3 indicators developed by Lemon et al. (2001): price, convenience, and quality, adapted into 4 statement items from the research (Ho & Chung, 2020). The brand equity variable adopts 3 indicators developed by Lemon et al. (2001): brand awareness, brand attitude, and corporate ethics adapted into 4 statement items from the research (Ho & Chung, 2020). The relationship equity variable adopts 3 indicators developed by Lemon et al. (2001) and Ramaseshan et al (2013) namely loyalty, knowledge, and community, adapted into 5 statement items in the research (Ho & Chung, 2020). The variable of repurchase intention adopts 4 indicators developed by Ferdinand (2014) namely: transactional interest, referential interest, preferential interest, and exploratory interest, adapting into 4 statement items in the research (Ho & Chung, 2020).

This study's population comprises Shopee e-commerce mobile app users who have made multiple purchases. Based on specific considerations, purposive sampling is the sampling technique used (Sugiyono, 2019a). In this study, the number of samples is adjusted to the SEM method, where the results of the number of indicators are 32 multiplied by 5, resulting in a minimum sample of 160 respondents with a response rate of 91% of the total of all questionnaires distributed (Ferdinand, 2014). The research data analysis technique used with SmartPLS 3.29 is structural equation model analysis (SEM).

RESULT AND DISCUSSION

The total number of questionnaires distributed online using google forms is 175 questionnaires. Based on the results of data collection that has been carried out, 160 respondents met the criteria with a rate of 91% of

Table 1. Respondents' Characteristics

Respondents Characteristics	Amount (person)	Percentage (%)
Gender:		
Female	107	67%
Male	53	33%
Age:		
18 – 24	116	73%
25 – 31	23	14%
32 – 38	5	3%
39 – 45	7	4%
> 45	9	6%
Level of Education:		
Senior High School	100	63%
Diploma	11	5%
S1	45	29%
S2	4	3%
S3	-	-
Job:		
Student	95	59%
Housewife	9	6%
Civil Servant	4	2,5%
BUMN Employee	7	4%
Private Employee	36	22,5%
Other	9	6%
User level (year):		
< 1 years	21	13%
1 – 3 years	44	28%
3 years or above	95	59%

Source: Primary Data (2022)

all questionnaires distributed. The following are the five characteristics of respondents used in this study: gender, age, education level, occupation, and level of use (years). Table 1 summarizes the grouping of respondents' characteristics.

Outer Model Analysis

An outer model is a form of measurement that aims to see how well the specifications link indicators with latent variables (Suhartanto, 2020). This model is carried out on the level of validity and reliability values in the research model.

Table 2. Outer Model Test Results

Variable	Indicator	Outer Loading (>0.7)	
Customer Engagement	CE2	0.715	
	CE3	0.735	
	CE4	0.747	
	CE5	0.742	
	CE7	0.791	
	CE8	0.754	
	CE10	0.793	
	CE11	0.748	
	CE12	0.796	
	CE13	0.789	
	CE14	0.730	
	Value Equity	VE1	0.721
		VE2	0.765
		VE3	0.846
VE4		0.801	
Brand Equity	BE1	0.807	
	BE2	0.824	
	BE3	0.834	
	BE4	0.797	
Relationship Equity	RE1	0.818	
	RE2	0.891	
	RE3	0.876	
	RE4	0.864	
	RE5	0.788	
Repurchase Intention	RI1	0.848	
	RI2	0.804	
	RI3	0.818	
	RI4	0.828	

Source: Data processed through SmartPLS 3.29 (2022)

Convergent Validity

The outer loading value and the Average Variance Extracted (AVE) value are used to determine convergence validity. Each instrument is declared valid if its outer loading is more significant than 0.7 (Abdullah, 2015). Table 2 shows that each statement item has obtained an outer loading value > 0.7, and the statement item is declared valid.

However, it can also be seen that there are four statements, namely CE1, CE6, CE9, and CE15 which are not in the table. The statement indicator is eliminated from the data processing process, and repeated testing is carried out because it is invalid or has an outer loading value of <0.7.

Table 3. AVE Value

Variable	AVE
Customer Engagement	0.665
Value Equity	0.575
Brand Equity	0.680
Relationship Equity	0.720
Repurchase Intention	0.615

Source: Data processed through SmartPLS 3.29 (2022)

In addition, data is considered valid if it meets the Average Variance Extracted (AVE) value. The required AVE value must be above or equal to 0.5 (Abdullah, 2015). Table 3 represents that each variable's AVE value has met

the rule of thumb requirements, namely having an AVE value > 0.5. As determined by the outer loading value and the AVE value, the indicators in this study are stated to be valid and meet convergent validity. Figure 2 will show the form of a valid model with a correlation value that meets the criteria. There is an outer loading value for each variable > 0.7.

Discriminant Validity

Discriminant validity testing aims to ensure that each research variable has a strong relationship with one other if the value of the discriminant validity coefficient is > 0.7 (Ghozali, 2018).

Table 4 shows that each research variable has a discriminant validity value > 0.7, and the

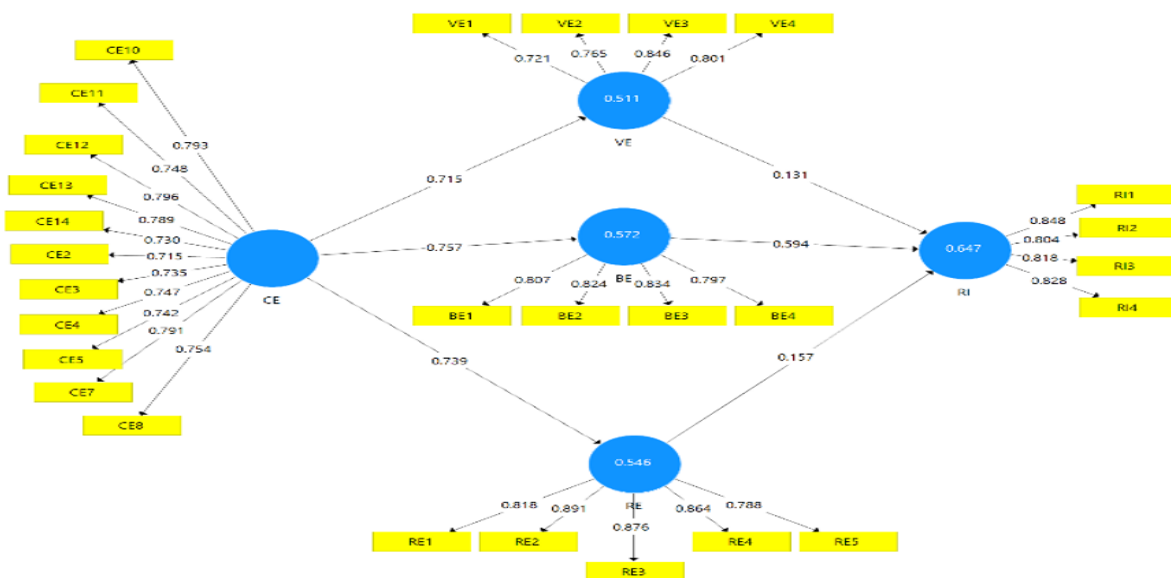


Figure 2. Outer Model

Source: Data processed through SmartPLS 3.29 (2022)

Table 4. Discriminant Validity

Description	BE	CE	RI	RE	VE
BE	0.816				
CE	0.757	0.759			
RI	0.785	0.721	0.825		
RE	0.603	0.739	0.596	0.848	
VE	0.738	0.715	0.666	0.620	0.785

Source: Data processed through SmartPLS 3.29 (2022)

AVE value is more excellent between variables and other variables so that the research variables used have been supported by statement items that are correct and have met discriminant validity.

Reliability Test

Table 5 represents that Cronbach’s alpha and composite reliability are more significant than 0.6. It is proven that the instrument of a variable used has met the basic requirements (rule of thumb). So that this research instrument is declared reliable and valid (Abdullah, 2015; Suhartanto, 2020).

Inner Model Analysis

The inner model test examines the structural framework of the data. The correct structural data consists of reliable and valid statement items; then, data must have a better model accuracy observed from the R-Square value. This test aims to determine how variations in the contribution of exogenous variables affect endogenous variables (Ghozali, 2018). The higher the percentage, the more precise the data test will be.

According to table 6, the value equity va-

riable has an R-Square value of (0.511), implying that it receives a 51.1% contribution from customer engagement and other factors influence the rest. Furthermore, the brand equity variable has an R-Square value of (0.572), implying that customer engagement contributes up to 57.2% of the total, with the remainder influenced by other factors. In addition, the relationship equity variable has an R-Square value (of 0.546). The contribution of customer engagement is 54.6% and other factors influence the remainder. Finally, the repurchase intention variable has an R-Square value of (0.647), indicating that the magnitude of the influence of the customer engagement variable and the dimensions of the customer equity variable as a mediating variable explains 64.7% of the repurchase intention variable, with the remainder explained by other factors accounting for the remaining 35.3%.

Hypothesis Test

This hypothesis test employs the bootstrapping method, as evidenced by the significance test > 0.05 and a t-statistic value > 1.65 for the one-tailed hypothesis. This test is carried out using two tests, namely direct and indirect effects.

Table 5. Reliability Test

Variable	Cronbach’s Alpha	Rho A	Composite Reliability
Customer Engagement	0.926	0.927	0.937
Brand Equity	0.833	0.835	0.888
Value Equity	0.790	0.794	0.864
Relationship Equity	0.902	0.902	0.928
Repurchase Intention	0.843	0.845	0.895

Source: Data processed through SmartPLS 3.29 (2022)

Table 6. Analysis of R Square

Variable	R Square	R Square Adjusted
Value Equity	0.511	0.508
Brand Equity	0.572	0.570
Relationship Equity	0.546	0.543
Repurchase Intention	0.647	0.640

Source: Data processed through SmartPLS 3.29 (2022)

Direct Effect Hypothesis

The following can be seen from the results of hypothesis testing using the bootstrapping method, namely path analysis or path coefficients with direct effects.

According to the direct effect hypothesis test results, the concept of customer engagement in mobile e-commerce applications is positively related to customer equity in terms of value equity, brand equity, and relationship equity (see table 7). These results accept H1, H2, and H3, with t-statistic values more significant than the t-table (1.65) and p-values below 0.05.

The first hypothesis states that customer engagement significantly and positively impacts value equity. The findings of the research are consistent with previous research by Ho & Chung (2020) research concerning mobile apps' customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobile apps' customer engagement via various social media communities influences customer equity (brand, value and relationship equity, Megatari (2021), and Kim et al. (2021). This shows that the higher the customer engagement that is carried out, it will have the impact on increasing the value of equity in the customer. Customer engagement can form value equity, one of which is the use of the Shopee e-commerce mobile application, which makes customers want to know more about what is in the application, thus encouraging more curiosity. This can be seen from the respondents' answers, they feel happy when using the Shopee e-commerce mobile application, whereas anything related to the Shopee e-commerce mobile application seems to attract the attention of the respondents, so respondents always use the application in all their activities for a long time.

The second hypothesis states that customer engagement significantly and positively impacts brand equity. The findings of the research are consistent with previous research by Ho & Chung (2020). Our study, thus, explores how mobile apps' customer engagement via various social media communities influences customer

equity (brand, value and relationship equity, Megatari (2021), Corkum et al. (2021). This shows that the higher the customer engagement that is carried out, it will impact increasing brand equity in these customers. Customer engagement can increase customers' subjective assessment of a brand. If the customer is familiar with the brand, the perception of the brand will also increase. This can be seen from the respondents' answers, where they admit that the Shopee e-commerce mobile application has its characteristics and realizes that Shopee is the leading e-commerce mobile application in the e-commerce industry. In addition, they recognize that Shopee is their choice and know a clear picture of the application.

The third hypothesis states that customer engagement significantly and positively impacts relationship equity. The findings of the research are consistent with previous research by Ho & Chung (2020) research concerning mobile apps' customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobile apps' customer engagement via various social media communities influences customer equity (brand, value and relationship equity), Megatari (2021), and Kim et al. (2021). This shows that the higher the customer engagement, the higher the relationship equity with the customer. Customer engagement can increase the level of customer loyalty to a brand. If the customer is loyal to the brand, it will build and strengthen the relationship between the customer and the company.

In addition, in Table 7, this study shows that customer equity in value equity, brand equity, and relationship equity positively affect consumer repurchase intention. These results accept H4, H5, and H6, with t-statistic values more significant than the t-table (1.65) and p-values below 0.05.

The fourth hypothesis states that value equity significantly and positively impacts repurchase intention. The study's findings are consistent with previous research by Ho & Chung (2020) and Megatari (2021). This means that the repurchase intention will increase if the value of equity also increases. Value equity

Table 7. Paths of Direct Effect

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	TStatistics (O/STDEV)	P Values	Hypothesis Results
CE → VE	0.715	0.715	0.043	16.661	0.000	Accepted
CE → BE	0.757	0.761	0.037	20.343	0.000	Accepted
CE → RE	0.739	0.741	0.043	17.006	0.000	Accepted
VE → RI	0.131	0.135	0.077	1.703	0.045	Accepted
BE → RI	0.594	0.581	0.075	7.865	0.000	Accepted
RE → RI	0.157	0.163	0.059	2.657	0.004	Accepted

Source: Data processed through SmartPLS 3.29 (2022)

is the foundation for a company to always have good relations with their customers where it is expected that the company can always meet customer needs or exceed their expectations which in turn will lead to an attitude to make repeat purchases in the future.

The fifth hypothesis states that brand equity significantly and positively impacts repurchase intention. The findings of the research are consistent with previous research by Ho & Chung (2020), Corkum et al. (2021). This proves that high brand equity means that repurchase intentions will also be high. Brand Equity or brand equity is built through image and meaning.

The sixth hypothesis states that relationship equity significantly and positively impacts repurchase intention. The study's findings are consistent with previous research by Ho & Chung (2020). Our study, thus, explores how mobile apps' customer engagement via various social media communities influences customer equity (brand, value and relationship equity dan Megatari (2021) so the high relationship equity obtained by consumers will increase repurcha-

se intention. With company and customer relationships, the impact of relationship equity on future purchases grows.

Overall, the study findings indicate that customer engagement indirectly affects consumers' repurchase intentions. Then, the focus on customer equity affects consumer repurchase intention positively and significantly.

Indirect Effect Hypothesis

The following can be seen from the results of hypothesis testing using the bootstrapping method, namely path analysis or path coefficients with an indirect effect. The outcomes of the indirect effect hypothesis test are illustrated in table 8 that the statistical relationship that has no direct impact between customer engagement on mobile e-commerce applications and repurchase intention is the role of the total positive mediating impact of all dimensions of customer equity, namely value equity, brand equity, and relationship equity. These results accept H7, H8, and H9, with t-statistic values more significant than the t-table (1.65) and p-values below 0.05.

Table 8. Paths of Indirect Effect

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Hypothesis Results
CE → VE → RI	0.094	0.097	0.056	1.680	0.047	Accepted
CE → BE → RI	0.449	0.442	0.062	7.285	0.000	Accepted
CE → RE → RI	0.116	0.122	0.047	2.475	0.007	Accepted

Source: Data processed through SmartPLS 3.29 (2022)

The seventh hypothesis states that customer engagement significantly and positively impacts repurchase intention mediated by value equity. The results of the research carried out are in line with previous research by Ho & Chung (2020) research concerning mobile apps' customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobile apps' customer engagement via various social media communities influences customer equity (brand, value and relationship equity dan Megatari (2021). It is known that if the value of equity increases, the relationship between customer engagement and repurchase intention will also be higher.

The eighth hypothesis states that customer engagement significantly and positively impacts repurchase intention mediated by brand equity. The results of the research carried out are in line with previous research by Ho & Chung (2020) research concerning mobile apps' customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobile apps' customer engagement via various social media communities influences customer equity (brand, value and relationship equity dan Megatari (2021). It is known that the brand equity dimension variable is a connecting variable between customer engagement variables and repurchase intention, which means that the higher the level of customer engagement with a brand, the higher the interest in repurchasing.

The ninth hypothesis states that customer engagement significantly and positively impacts repurchase intention mediated by relationship equity. The results of the research carried out are in line with previous research by Ho & Chung (2020) research concerning mobile apps' customer engagement and its consequence still awaits to be developed. Our study, thus, explores how mobile apps' customer engagement via various social media communities influences customer equity (brand, value and relationship equity dan Megatari (2021). It is known that the relationship equity dimension variable is a connecting variable between customer engagement variab-

les and repurchase intention, which means that the higher the company's efforts to improve relationships with its customers, the higher the intention in deciding to repurchase.

Thus, the customer engagement variable has a positive and significant indirect effect on repurchase intention through the mediating variables of value equity, brand equity, and relationship equity.

CONCLUSION AND RECOMMENDATION

The customer equity dimension is used as a mediating variable in this research to evaluate the influence of customer engagement on repurchase Intention. Customer equity consists of value equity, brand equity, and relationship equity. This research, in particular, gives an overview of the significance of customer interaction in customer equity and repurchase intention.

According to the conclusions of the study, customer engagement variables have a significantly and positively impact on customer equity dimensions (value equity, brand equity, and relationship equity), and customer equity dimensions (value equity, brand equity, and relationship equity) have a significantly and positively impact on repurchase intention. Consumers and customer engagement significantly and positively affect consumer repurchase intention mediated by customer equity dimensions (value equity, brand equity, and relationship equity).

This study contains limitations based on the research that has been done. These limitations include that the research object is only focused on one e-commerce company in Indonesia, Shopee. Then, the literature on the results of previous research that researchers still lack. In addition, the sample used is a minimum of 160 respondents due to limited time and research personnel. Lastly, the researcher only included 3 factors driving the customer equity variable: value equity, brand equity, and relationship equity.

Hence, researchers' suggestions are expected to be helpful for each party involved and for other parties. Recommendations are expected both practically and theoretically. The

practical suggestions are: First, the company is expected to continue examining customer involvement and equity simultaneously to achieve increased repurchase intention.

Second, the company is expected to continue to maintain and increase continuous efforts in building customer engagement so that the company can continue to reach new customers and retain old customers with various new strategies, to build customer equity and higher repurchase intention among customers.

Third, companies are expected to be able to be actively involved in expanding or maintaining friendship networks and interactions between fellow users and companies in mobile applications to create greater customer engagement and can stimulate more value, brand, and relationships.

Theoretical suggestions are: it is hoped that other researchers who want to carry out the same research topic further develop research by adding or replacing the factors used in the customer equity dimension as mediating variables, such as customer lifetime value, customer acquisition, customer retention, or others. Further researchers are also expected to be able to add or develop appropriate data analysis techniques that are not used or contained in this study. In addition, it is expected to add sources/references from new theories related to the limitations of this research. Lastly, future researchers are expected to consider the experiences of other companies in Indonesia or other than Indonesia.

REFERENCES

- Abdullah, M. (2015). *Metodologi Penelitian Kuantitatif*. Yogyakarta: Aswaja Pressindo.
- Anggaeni, M., Farida, N., & Listyorini, S. (2015). Pengaruh *Perceived Value* dan *Brand Image* terhadap *Repurchase Intention* Melalui *Word of Mouth* sebagai Variabel *Intervening Smartphone Samsung Galaxy Series*. *Journal of Social and Political of Science*, 1–9.
- Beig, F. A., & Nika, F. A. (2022). Impact of Brand Experience on Brand Equity of Online Shopping Portals: a Study of Select E-Commerce Sites in the State of Jammu and Kashmir. *Global Business Review*, 23(1), 156–175.
- Beneke, J., de Sousa, S., Mbuyu, M., & Wickham, B. (2016). The Effect of Negative Online Customer Reviews on Brand Equity and Purchase Intention of Consumer Electronics in South Africa. *International Review of Retail, Distribution and Consumer Research*, 26(2), 171–201.
- Brodie, R. J., Hollebeek, L. D., Juric, B., & Ilic, A. (2011). Customer Engagement: Conceptual Domain, Fundamental Propositions, and Implications for Research. *Journal of Service Research*, 14(3), 252–271.
- Capital, H. (2018). *An Investment Case Study By Hayden Capital*. Available at: http://www.haydencapital.com/wp-content/uploads/Hayden-Capital_ValueAsia_Presentation_SE_May-2019.pdf.
- Corkum, C., Xung Lie, C., Crish, J., Jobb, D., & Andreev, J. (2021). Mobile Apps: Customer Engagement, Brand Equity, and Purchase Intention. *Review of Business, Accounting & Finance*, 1(02), 215–232.
- Cuong, P. H., Nguyen, O. D. Y., Ngo, L. V., & Nguyen, N. P. (2020). Not All Experiential Consumers are Created Equals: the Interplay of Customer Equity Drivers on Brand Loyalty. *European Journal of Marketing*, 54(9), 2257–2286.
- Ferdinand, A. (2014). *Metode Penelitian Manajemen: Pedoman Penelitian untuk Penulisan Skripsi Tesis dan Disertasi Ilmu Manajemen*. Semarang: BP Universitas Diponegoro.
- Foroudi, P., Jin, Z., Gupta, S., Foroudi, M. M., & Kitchen, P. J. (2018). Perceptual Components of Brand Equity: Configuring the Symmetrical and Asymmetrical Paths to Brand Loyalty and Brand Purchase Intention. *Journal of Business Research*, 89, 462–474.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25 Edisi 9*. Semarang: BP Universitas Diponegoro.
- González-Mansilla, Ó., Berenguer-Contrí, G., & Serra-Cantalops, A. (2019). The Impact of Value Co-Creation on Hotel Brand Equity and Customer Satisfaction. *Tourism Management*, 75(3), 51–65.
- Hajipour, B., Bavarsad, B., & Zarei, S. E. (2013). Effect of Marketing Factors on Brand Relationship Equity and Affects the Customers' Purchase Intention. *Journal of Management Research*, 5(1), 317–332.

- Han, H., Nguyen, H. N., Song, H., Chua, B. L., Lee, S., & Kim, W. (2018). Drivers of Brand Loyalty in the Chain Coffee Shop Industry. *International Journal of Hospitality Management*, 72(6), 86–97.
- Hapsari, R., Clemes, M. D., & Dean, D. (2017). The Impact of Service Quality, Customer Engagement and Selected Marketing Constructs on Airline Passenger Loyalty. *International Journal of Quality and Service Sciences*, 9(1), 21–40.
- Ho, M. H. W., & Chung, H. F. L. (2020). Customer Engagement, Customer Equity and Repurchase Intention in Mobile Apps. *Journal of Business Research*, 121, 13–21.
- Ilyas, G. B., Rahmi, S., Tamsah, H., Munir, A. R., & Putra, A. H. P. K. (2020). Reflective Model of Brand Awareness on Repurchase Intention and Customer Satisfaction. *Journal of Asian Finance, Economics and Business*, 7(9), 427–438.
- Jaakkola, E., & Alexander, M. (2014). The Role of Customer Engagement Behavior in Value Co-Creation: a Service System Perspective. *Journal of Service Research*, 17(3), 247–261.
- Juliandi, A., Irfan, & Manurung, S. (2014). *Metodologi Penelitian Bisnis, Konsep dan Aplikasi: Sukses Menulis Skripsi & Tesis Mandiri*. Medan: UMSU Press.
- Katsikeas, C. S., Morgan, N. A., Leonidou, L. C., & Hult, G. T. M. (2015). Assessing Performance Outcomes in Marketing. *Journal of Marketing*, 80(2), 1–20.
- Kemp, S. (2022). *Digital 2022: Indonesia*. Available at: <https://datareportal.com/reports/digital-2022-indonesia>. 28 December 2022.
- Kim, A. J., & Ko, E. (2012). Do Social Media Marketing Activities Enhance Customer Equity? an Empirical Study of Luxury Fashion Brand. *Journal of Business Research*, 65(10), 1480–1486.
- Kim, C., Galliers, R. D., Shin, N., Ryoo, J. H., & Kim, J. (2012). Factors Influencing Internet Shopping Value and Customer Repurchase Intention. *Electronic Commerce Research and Applications*, 11(4), 374–387.
- Kim, K. H., Ko, E., Kim, S. J., & Jiang, Q. (2021). Digital Service Innovation, Customer Engagement, and Customer Equity in AR Marketing. *Journal of Global Scholars of Marketing Science*, 31(3), 453–466.
- Kim, W., Kim, H., & Hwang, J. (2020). Sustainable Growth for the Self-Employed in the Retail Industry Based on Customer Equity, Customer Satisfaction, and Loyalty. *Journal of Retailing and Consumer Services*, 53.
- Kotler, P., & Armstrong, G. (2018). *Principles of Marketing (17 Edition)*. United Kingdom: Pearson Education Limited.
- Kotler, P., & Keller, K. L. (2012). *Marketing Management (14 Edition)*. New Jersey: Prentice Hall.
- Lemon, K. N., Rust, R. T., & Zeithaml, V. A. (2001). What Drives Customer Equity. *Marketing Management*, 10(1), 1–5.
- 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.
- Liu, M. T., Wong, I. A., Tseng, T.-H., & Chang, A. W.-Y. (2017). Applying Consumer-Based Brand Equity in Luxury Hotel Branding. *Journal of Business Research*, 81, 192–202.
- Liu, X., Shin, H., & Burns, A. C. (2021). Examining the Impact of Luxury Brand's Social Media Marketing on Customer Engagement: Using Big Data Analytics and Natural Language Processing. *Journal of Business Research*, 125, 815–826.
- Low, B., & Johnston, W. J. (2006). Relationship Equity and Switching Behavior in the Adoption of New Telecommunication Services. *Industrial Marketing Management*, 35(6), 676–689.
- Megatari, A. (2021). The Effect of Customer Engagement on Customer Equity and Repurchase Intention in Mobile Shopping Applications. *International Conference on Innovations in Social Sciences Education and Engineering (ICOISSEE)*, 1(1).
- Moreira, A. C., Fortes, N., & Santiago, R. (2017). Influence of Sensory Stimuli on Brand Experience, Brand Equity and Purchase Intention. *Journal of Business Economics and Management*, 18(1), 68–83.
- Newzoo. (2020). Top Countries by Smartphone Penetration and Users. Available at: <https://newzoo.com/insights/rankings/top-countries-by-smartphone-penetration-and-users/>. 28 December 2022.
- Omar, N. A., Kassim, A. S., Shah Alam, S., & Zainol, Z. (2021). Perceived Retailer Innovativeness and Brand Equity: Mediation of Consumer Engagement. *Service Industries Journal*, 41(5–6), 355–381.

- Ou, J., Wong, I. K. A., Prentice, C., & Liu, M. T. (2020). Customer Engagement and Its Outcomes: the Cross-Level Effect of Service Environment and Brand Equity. *Journal of Hospitality and Tourism Research*, 44(2), 377–402.
- Ou, Y. C., & Verhoef, P. C. (2017). The Impact of Positive and Negative Emotions on Loyalty Intentions and Their Interactions with Customer Equity Drivers. *Journal of Business Research*, 80, 106–115.
- Pansari, A., & Kumar, V. (2016). Customer Engagement: the Construct, Antecedents, and Consequences. *Journal of the Academy of Marketing Science*, 45(3), 294–311.
- Pavlova, D. (2018). Customer Equity Management through Customer Engagement: a Critical Review. *Global Economic Observer*, 6(1), 94–100.
- Raimondo, M. A., Miceli, G., & Costabile, M. (2008). How Relationship Age Moderates Loyalty Formation: the Increasing Effect of Relational Equity on Customer Loyalty. *Journal of Service Research*, 11(2), 142–160.
- Ramaseshan, B., Rabbanee, F. K., & Hui, L. T. H. (2013). Effects of Customer Equity Drivers on Customer Loyalty in B2B Context. *Journal of Business and Industrial Marketing*, 28(4), 335–346.
- Sashi, C. M. (2012). Customer Engagement, Buyer-Seller Relationships, and Social Media. *Management Decision*, 50(2), 253–272.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif*. Bandung: Alfabeta.
- Suhartanto, D. (2020). *Analisa Data untuk Riset Bisnis: SPSS, AMOS, PLS Edisi 2*. Bandung: Politeknik Negeri Bandung.
- van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer Engagement Behavior: Theoretical Foundations and Research Directions. *Journal of Service Research*, 13(3), 253–266.
- Viswanathan, V., Malthouse, E. C., Maslowska, E., Hoornaert, S., & Van den Poel, D. (2018). Dynamics between Social Media Engagement, Firm-Generated Content, and Live and Time-Shifted TV Viewing. *Journal of Service Management*, 29(3), 378–398.
- Wang, H., Kim, K. H., Ko, E., & Liu, H. (2016). Relationship between Service Quality and Customer Equity in Traditional Markets. *Journal of Business Research*, 69(9), 3827–3834.
- Wu, H. C., Cheng, C. C., & Ai, C. H. (2016). A Study of Exhibition Service Quality, Perceived Value, Emotion, Satisfaction, and Behavioral Intentions. *Event Management*, 20(4), 565–591.
- Youssef, Y. M. A., Johnston, W. J., AbdelHamid, T. A., Dakrory, M. I., & Seddick, M. G. S. (2018). A Customer Engagement Framework for a B2B Context. *Journal of Business & Industrial Marketing*, 33(1), 145–152.
- Zaglia, M. E. (2013). Brand Communities Embedded in Social Networks. *Journal of Business Research*, 66(2), 216–223.
- Zhu, Y. Q., & Chen, H. G. (2012). Service Fairness and Customer Satisfaction in Internet Banking: Exploring the Mediating Effects of Trust and Customer Value. *Internet Research*, 22(4), 482–498.