

# The Effects of Customer Value and Customer Trust on Customer Retention: An Empirical Study in Indonesia

Wiji DEWOBROTO<sup>1</sup>, Umar NIMRAN<sup>2</sup>, Zainul ARIFIN<sup>3</sup>, Edy YULIANTO<sup>4</sup>

Received: July 31, 2020 Revised: May 22, 2021 Accepted: June 01, 2021

## Abstract

The purpose of this study is to analyze the role of customer value and customer trust as a mediator of flexibility influence on customer retention. The study applies SEM tools with WarpPLS analysis and translates customer value and customer trust as mediation. This study was organized into three parts: exploratory research, descriptive research, and explanatory research. The quantitative approach in this study uses a survey method by taking samples from the population. This is a latent variable that is measured using a research instrument in the form of a questionnaire. The survey was conducted by distributing questionnaires to respondents. This research was conducted at PT. Nusa Prima Logistics Terminal Teluk Lamong by taking primary data, in the form of assessments or perceptions from respondents, so a survey was conducted by submitting a questionnaire directly to 194 respondents. Quantitative data analysis was performed using Structural Equation Modeling (SEM) to answer the research hypothesis. Flexibility is very influential in increasing customer retention so to develop customer retention, it is necessary to increase flexibility, customer value, and customer trust. The novelty in this research lies in identifying the role and position of customer value and customer trust as mediation that affect customer retention.

**Keywords:** Flexibility, Customer Value, Customer Trust, Customer Retention

**JEL Classification Code:** A11, A13, A14, C12

## 1. Introduction

PT. Nusa Prima Logistik is a combination of three large commodity importers and animal feed producers, namely, PT.FKS Multi Agro, Tbk, PT. Charoen Pokhpan Indonesia, Tbk., and PT. Japfa Comfeed Indonesia, Tbk.

Those three companies agreed to run PT. Nusa Prima Logistik as a terminal manager and transit warehouse commodity grains and meals. Considering that animal feed is related to the availability and stability of food, especially the availability of livestock meat, so diversity is seen as very strategic and essential.

PT. Nusa Prima Logistik in collaboration with PT. Teluk Lamong Terminal as a subsidiary of PT. Pelindo III is an alternative solution to the problems in the logistics world, especially the port. This becomes a particular concern because the existing port, especially Tanjung Perak, will lack capacity and result in cessation of sea traffic because all activities will pile up and become very ineffective and inefficient.

In 2018, Nusa Prima Logistics and the Teluk Lamong Terminal recorded 2.5 million metric tons (MT) of the commodity out of a total of 3.5 million MT or 75% of the existing market share, while the other 25% was spread across three other ports such as Sinar Maspien Terminal, Manyar (JIPE), and Tanjung Perak. This number is a significant achievement from the 2018 projected target of 1.9 million MT or equivalent to 130% of the actual achievement of the target set. This is an outstanding achievement and needs

<sup>1</sup>First Author and Corresponding Author. Department of Business Administration, Faculty of Administrative Sciences, Brawijaya University, Indonesia [Postal Address: St. Veteran, Lowokwaru, Malang, East Java, 65145, Indonesia]  
Email: wijidewobroto@student.ub.ac.id

<sup>2</sup>Lecturer, Department of Business Administration, Faculty of Administrative Sciences, Brawijaya University, Indonesia.  
Email: umar.nimran.ub@gmail.com

<sup>3</sup>Lecturer, Department of Business Administration, Faculty of Administrative Sciences, Brawijaya University, Indonesia.  
Email: zainul.a.ub@gmail.com

<sup>4</sup>Lecturer, Department of Business Administration, Faculty of Administrative Sciences, Brawijaya University, Indonesia.  
Email: e.yulianto.ub@gmail.com

to be maintained. A well-managed company can engender customer satisfaction and customer value. Only company that are consumer-oriented and can provide superior value to their customers alone will survive in the business arena where competition is fierce like today (Ilyas, Rahmi, Tamsah, Munir, & Putra, 2020). Customer loyalty plays a key role in the development of company for expanding their market share (Phuong, Luan, Dong, & Khanh, 2020). Therefore, attention to customer retention is critical.

Customer retention is a long-term relationship with customers and the company's strategic goal. The level of customer retention depends on the company's efforts. From the customer's side, the intention to survive or leave the company depends on various factors: service quality, satisfaction level, customer value, customer experience, commitment, trustworthiness, company image, company reputation, and others (Boohene, Agyapong, & Gonu, 2013; Danesh, Tabari, Hosseinpourpia, Nazarnezhad, & Shams, 2012; Edward & Sahadev, 2011; Cohen & Grifo, 2007; Nguyen & Leblance, 2001). Relationship marketing is also an essential factor in increasing and maintaining customer retention.

Customer retention in marketing is critical, including marketing terminal logistics services. This study focuses on the middle range for consumer behavior. According to Solomon (2002), consumer behavior is the study of the processes carried out by a person or group of people in choosing, buying, using or determining an item, service, idea or experience to satisfy their desires or fulfill their needs. Consumer behavior is the process a person goes through to find, buy, use, evaluate, and act after consuming products, services, and ideas expected to meet their needs.

Flexibility is believed to relate to customer retention. Flexibility is the ability to adapt and work effectively in different situations and with various individuals or groups. Flexibility requires the ability to understand and appreciate different and conflicting views on an issue and adjusts its approach to change the situation, and readily accept changes in the organization.

Customer retention, as described earlier, relates to relationship marketing. Lupiyoadi (2013) stated that relationship marketing is an implementation of the customer orientation that enables companies to retain customers through loyalty and commitment from consumer. The holistic marketing concept model also shows a shift in the marketing approach from transactional to relationship marketing, but it does not negate the transactional approach, especially the use of 4P as the primary marketing tool. As explained by Gummesson (1994), combined marketing is still needed, but it is no longer effective in creating long-term relationships with customers.

Based on the things that have been described, this in-depth research is focusing on PT. Nusa Prima Logistics' marketing conditions. The development of concepts and/or customer

retention theories is through setting the conditions. This research builds on various studies about flexibility, customer value, and customer trust because there is a research gap. Many studies have documented a significant positive effect of flexibility on customer retention. However, the role and position of the customer value and customer trust have yet to be investigated.

The theoretical benefit of this research is the development of consumer behavior theory, precisely the customer retention concept or model. While the practical benefits of this research are information on seaport companies to formulate and implement marketing strategies and policies, especially strategies on how to retain customers.

## 2. Literature Review

### 2.1. Flexibility

Flexibility is the ability to adapt and work effectively in different situations and with various individuals or groups. Flexibility requires the ability to understand and appreciate different and conflicting views on an issue, adjust its approach due to a change in the situation, and can easily accept changes in the organization. Manufacturing flexibility is the company's ability to respond effectively to the changes in the current condition, both in the company's internal (operations) and in the company's external environment (Gerwin, 1993). Four areas of the company environment affect manufacturing flexibility: strategy, environmental factors, technology, and organizational attributes (Gerwin et al., 1987). Strategic flexibility is generally considered to be a construct with multiple dimensions (Evans 1991) and has been defined as the ability to adapt to environmental changes (Aaker & Macarenhas 1984), to change game plans (Harrigan, 1985), to precipitate intentional changes, to continuously respond to unanticipated changes, and to adjust to the unexpected consequences of predictable changes (Young-Ybarra & Wiersema, 1999). In production and operation, flexibility is very difficult to implement. Usually, the word flexibility is used in many ways, especially in things that describe the quality and capabilities of a system.

A flexible manufacturing system is one or more production machines that are integrated with automatic material transfer where the settings are controlled by a computer. Another definition states that the flexible manufacturing system (FMS) is an integrated production system where there is a number of systems that support the system to react to any changes both predicted and unexpected. Flexibility in a manufacturing system is often described as:

- 1) Ability to adapt to engineering changes;
- 2) An increase in the number of equal parts produced in a system;

- 3) Ability to accommodate route changes that allow a portion of the product to be produced by different machines;
- 4) Ability to change system setups quickly from one production type to another.

Various kinds of flexibility in FMS are Machine Flexibility, Routine Flexibility, Process Flexibility.

## 2.2. Customer Value

Nowadays, customer value occupies more attention, both among academics and researchers and business practitioners. One of the triggers is the smarter the customer, the easier the access to verify company's claims and look for superior alternatives. In making purchasing choices, customers are more value-oriented in consuming services because they have various choices (Slater, 1997; Woodruff, 1997). In defining customer value, Kotler and Keller (2009) compare the total benefits received and the total costs incurred by customers. Therefore, both define the value perceived by customers as the difference between the prospective customer's assessment of all benefits and costs of an alternative offer. What is meant by total customer benefit is monetary value, a collection of economic, functional, and psychological benefits that customers expect from a market offering caused by the products, services, personnel, and image involved.

## 2.3. Customer Trust

Trust is the specific belief in integrity, benevolence, and ability of a buyer with a seller. Ability is a belief in the skills and capabilities of company to provide the right quality products and services (Nguyen & Khoa, 2019). Consumer trust is consumer knowledge about an object, its attributes, and its benefits. Based on this concept, consumer knowledge is closely related to the discussion of attitudes because consumer knowledge is consumer trust. Consumer trust or consumer knowledge concerns the belief that a product has various attributes and the benefits of these various attributes. Trust, in general, can be interpreted as trusting others because they can be trusted. Kim (2017) states that consumer trust affects whether the consumer will use the products or services offered by the company for the long term. A person or company can be trusted because they have high integrity associated with qualities such as being consistent, competent, honest, fair, responsible, very helpful, and kind (benevolent). According to Mowen and Minor (2002), consumer trust is "All knowledge held by consumers and all conclusions consumers make about objects, its attributes, and its benefits. Objects can be products, people, companies, and everything where a person has trust and attitude." Attributes are characteristics or features that may be or not owned by

the object. While the benefits are positive results provided to consumers.

## 2.4. Customer Retention

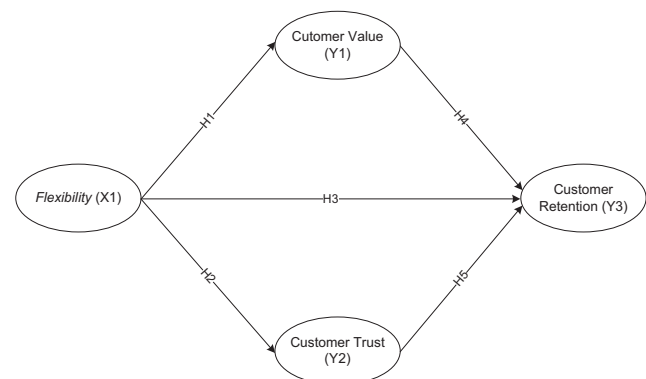
Limitation on customer retention can be seen from two points of view, namely, the company's point of view and the customer's point of view. From a company's perspective, Buttle (2004) defines customer retention as the number of customers doing business with a company at the end of the financial year expressed by the percentage of active customers at the beginning of the book year. Exact intervals for retention periods should be measured in one year. However, it also depends on the repurchase cycle found in the industry. While Kaplan and Norton (1996) define customer retention as activities aimed at being able to maintain ongoing interaction with customers through ongoing relationships, marketing loyalty, database marketing, permission marketing and others.

The conceptual framework of this study connects the relationship between variables, where flexibility has an influence on customer retention with customer value and customer trust as a mediator (Figure 1).

Referring to the conceptual framework and the hypothesized model of research that has been stated above, the theoretical influence between variables in research can be explained as follows.

## 2.5. The Effect of Flexibility on Customer Value

Yang and Ahn (2020) conducted a study entitled "The Effects of Attitude, Subjective Norm, and Behavioral Intention on Perceived Values in Traditional Marketplaces". Traditional markets have served as important locations for social-cultural and economic activities. It is a hub of economic transactions where people gather and exchange information and goods, while also serving as the center of social activities, including commercial exchanges.



**Figure 1: Conceptual Framework**

To analyze the proposed model, data was collected from 456 respondents and analyzed with SPSS 21.0 and AMOS 21.0. The data was analyzed with structural equation modeling (SEM) using path analysis. Through this study, the value the traditional markets need to provide to consumers have been identified. Traditional markets should develop into places that can provide value for their consumers. Brozovic, Nordins and Kindström (2016) conducted a study entitled “Service Flexibility: Conceptualizing Value Creation In Service.” The purpose of this study was to analyze the subject-specific literature about service and flexibility and to formulate a conceptualization of the relationship between provider flexibility and customer value creation. The authors analyze existing perspectives on service and flexibility and propose a relationship between provider flexibility and customer value creation. Drawing on the service logic literature and using real-world examples, this paper proposes propositions and conceptual models of how flexibility can contribute to value creation, so that hypothesis 1 can be formulated as follows:

**H1:** *Flexibility had a significant effect on customer value.*

## 2.6. The Effect of Flexibility on Customer Trust

Tran, Tran, and Pham (2020) explore a new approach of relationship assessment by partially employing attitudinal commitment to measure the influence on perception of cooperation within the Vietnamese rice supply chains, which begins from commercial enterprises up to the retailers in the Vietnamese market. The quantitative research is first built around the measurement instruments for the constructs of relationship quality (RQ) and its dimensions; next, a questionnaire is designed; finally, we deal with sample issues and analyze the data to answer the research questions. Appropriately, the results point to a significant influence of attitudinal factors on trust and satisfaction. In addition, with the involvement of perceived trust and satisfaction, that combination showed the mediating effect between the attitudinal factors and the relationship quality. The ad-hoc analysis indicated the significant role of the two mediators. To be more specific, the high degree of trust and satisfaction has a positive impact on the formation of the relationship between participants in the sector. Guzman et al. (2017) conducted a study entitled “Logistics Flexibility and Customer Satisfaction in Spain’s Furniture Industry.” Flexibility has been analyzed and discussed in the literature as a strategy producing competitive advantages and as an essential resource in companies for decades. However, logistics flexibility is a rather new construct and a variable that has also been considered a business strategy that results in a higher competitive advantage and a higher level of customer satisfaction. Although logistics flexibility has several benefits for a company, there is still a high level of

ignorance from a large number of organizations about the effect of logistics flexibility on customer satisfaction. For this reason, this empirical study’s main objective was to analyze the effect of logistics flexibility on logistics related to customer satisfaction using a sample of 322 companies in the furniture industry in Spain. The results obtained provide empirical evidence about the positive and significant impact of logistics flexibility on logistics related to customer satisfaction, so that hypothesis 2 can be formulated as follows:

**H2:** *Flexibility marketing had a significant effect on customer trust.*

## 2.7. The Effect of Flexibility on Customer Retention

Shin, Hwang, Lee, and Cho (2020) analyze franchise coffee shop service quality factors based on pilot research. In the proposed analysis, store atmosphere is added as one of the service quality factors. They aim to examine how franchise coffee shop service quality and store atmosphere influence customer satisfaction and loyalty. Data was collected from 482 Korean coffee shop franchises and analyzed using frequency analysis, reliability/validity assessments, correlation analysis, and regression analysis with the software program SPSS 19.0. The results are as follows. First, taste is revealed to be the most influential factor among components that have an impact on service quality. Second, taste also turned out to have the most impact on service quality among components influencing customer loyalty. Last, customer satisfaction affected customer loyalty. This study’s findings show that taste was the most influential factor on service quality. The conclusion here is that most of the coffee shop customers are very familiar with coffee taste and this is influencing their loyalty. Vidal-Salazar, Córdón-Pozo, and José (2016) conducted a study entitled “Flexibility of Benefit Systems and Firms’ Attraction and Retention Capacities.” This research focuses on the specific design variable of the benefit system: its level of flexibility. For this job, benefit flexibility refers to the level of freedom employees in choosing their benefits. In this paper, we pay special attention to the Spanish context. In particular, although Spain’s benefits system has increased their level of flexibility in recent years, the empirical studies analyze some of these effects do not exist. In testing the hypotheses, data were collected through a self-structured questionnaire design about the characteristics and effectiveness of a company’s benefits system. Edenred S.A sent an email to 13,522 Spanish companies to request a visit to the website to participate in this research. A total of 429 managers answered the questionnaire. The hypothesis was tested by OLS regression analysis. We can see that the estimated coefficients for



flexible benefits systems and flexible plans are definite and statically significant. Our results show that only companies with a very flexible social benefits system are reported to have a higher retention capacity than companies that offer a fixed benefit system, so that hypothesis 3 can be formulated as follows:

**H3:** *Flexibility had a significant effect on customer retention.*

## 2.8. The Effect of Customer Value on Customer Retention

El-Adly (2019) conducted research entitled “Modeling the Relationship Between Hotels Perceived Value, Customer Satisfaction, and Customer Loyalty.” This study used structural equation modeling (SEM) to examine the relationship between the perceived value of customers, customer satisfaction, and customer loyalty in hotel services. The results of this study showed that the value of customer perception does not have a direct significant positive effect both on customer satisfaction and customer loyalty, so that hypothesis 4 can be formulated as follows:

**H4:** *Customer value had a significant effect on customer retention.*

## 2.9. The Effect of Customer Trust on Customer Retention

Anggasta (2014) conducted a study to determine the effect of customer trust, perceived value, and switching barriers. The design of this study used convenience sampling. Data were collected using a questionnaire. The analytical method used was multiple linear regression. The results of this study were customer trust, and the influence of perceived value variables is insignificant, and the switching barriers variables significantly influence customer retention, so that hypothesis 5 can be formulated as follows:

**H5:** *Customer trust had a significant effect on customer retention.*

## 3. Research Methods and Materials

Based on the degree of scientific depth, this study was an explanatory research. The purpose of this study was to explain the increase in customer retention. This research was conducted at PT. Nusa Prima Logistics Terminal Teluk Lamong. The unit of analysis of this study was a customer of PT Nusa Prima Logistik. The manufacturer has three departments, and the trading company has two departments that interact with PT Nusa Prima Logistik. Accordingly, the

population size in this study was  $N = (3 \times 27) + (2 \times 8) = 97$  departments.

The sampling technique used in this study was saturated sampling. Saturated sampling refers to taking all members of the research sample. Thus, the sample size in this study was  $n = N = 97$  departments. The variable under study is perceptual, so that in the same variable condition, when it is perceived by different respondents, it can result in a different assessment or perception. If this result is averaged, information loss will occur. Therefore, the unit of analysis used in this study is an individual.

The respondents of this study were personnel from each department who understand the variables being studied and recognized the company's condition thoroughly. Therefore, every department sent two respondents. Thus, the respondents in this study were 194 people. Quantitative data analysis was performed using Structural Equation Modeling (SEM) to test the research hypotheses. The data collection method used survey techniques. The survey was conducted directly by sending questionnaires directly to respondents. Data collection uses the single blind principle, namely, the study knows who the research respondents are, and vice versa, the respondents do not know who is doing the research. This is done to ensure the objectivity of the respondents in filling out the questionnaire so that valid data can be obtained. Data were analyzed using PLS (Partial Least Square) analysis model through the WarpPLS computer program package (Solimun, Fernandes, & Nurjannah, 2017). The reasons are explained as follows: (1) The analysis model is tiered, and the structural equation model meets the recursive model; (2) The measurement of latent variables means any variable cannot be measured directly.

## 4. Results and Discussion

This study used the SEM WarpPLS approach to estimate the parameters of the model. Before estimating the parameters, it is necessary to check the validity and reliability of each questionnaire item on each variable. Validity testing is needed to ensure that the data is correct, while reliability is used to ensure that the instruments used are correct in measuring variables (Table 1).

All variables have been analyzed for validity and reliability, and it can be concluded that flexibility (X1), customer value (Y1), customer trust (Y2) and customer retention (Y3) are valid and reliable (see Table 1).

Table 2 indicates that all latent variables have excellent and satisfactory indicators aimed to find out the most dominant contributing indicators. The worst indicator for creating the flexibility variable is X11, having the smallest loading factor of 0.710. The best indicator for creating the customer value variable is Y13, with the most significant loading factor of 0.777. The best indicator for creating the

**Table 1:** The Results of Validity and Reliability Test

Variables	Indicator	Item	Correlation	Conclusion	Cronbach's Alpha	Conclusion
Flexibility (X1)	X11	X111	0.545	Valid	0.803	Reliable
		X121	0.502	Valid		
	X12	X122	0.449	Valid		
		X131	0.411	Valid		
	X13	X132	0.417	Valid		
		X133	0.583	Valid		
		X134	0.465	Valid		
		X141	0.614	Valid		
Customer Value (Y1)	Y11	X142	0.486	Valid	0.822	Reliable
		Y111	0.317	Valid		
		Y112	0.513	Valid		
		Y113	0.419	Valid		
	Y12	Y114	0.375	Valid		
		Y121	0.423	Valid		
		Y122	0.377	Valid		
		Y123	0.499	Valid		
	Y13	Y124	0.368	Valid		
		Y131	0.337	Valid		
		Y132	0.403	Valid		
		Y133	0.601	Valid		
	Y14	Y134	0.711	Valid		
		Y141	0.460	Valid		
		Y142	0.403	Valid		
		Y143	0.308	Valid		
Customer Trust (Y2)	Y21	Y211	0.585	Valid	0.681	Reliable
		Y212	0.324	Valid		
	Y22	Y221	0.341	Valid		
		Y222	0.534	Valid		
	Y23	Y231	0.326	Valid		
		Y232	0.371	Valid		
Customer Retention (Y3)	Y31	Y311	0.338	Valid	0.791	Reliable
		Y312	0.342	Valid		
		Y313	0.350	Valid		
	Y32	Y321	0.485	Valid		
		Y322	0.425	Valid		
		Y323	0.319	Valid		
	Y33	Y331	0.543	Valid		
		Y332	0.324	Valid		
		Y333	0.413	Valid		
	Y34	Y341	0.425	Valid		
		Y342	0.321	Valid		
		Y343	0.460	Valid		
		Y344	0.501	Valid		
		Y345	0.447	Valid		

**Table 2:** Measurement Model Evaluation

Variables	Indicator	Result	p-value	Conclusion
Flexibility (X1)	(X11)	0.710	<0.001	Significant
	(X12)	0.736	<0.001	Significant
	(X13)	0.746	<0.001	Significant
	(X14)	0.808	<0.001	Significant
Customer Value (Y1)	(Y11)	0.708	<0.001	Significant
	(Y12)	0.659	<0.001	Significant
	(Y13)	0.777	<0.001	Significant
	(Y14)	0.765	<0.001	Significant
Customer Trust (Y2)	(Y21)	0.810	<0.001	Significant
	(Y22)	0.783	<0.001	Significant
	(Y23)	0.781	<0.001	Significant
Customer Retention (Y3)	(Y31)	0.676	<0.001	Significant
	(Y32)	0.755	<0.001	Significant
	(Y33)	0.750	<0.001	Significant
	(Y34)	0.778	<0.001	Significant

**Table 3:** The Result of Estimation and Direct Effect Testing

Hypothesis	Effect Between Latent Variables	Coefficient	p-value	Conclusion
	Exogenous Variable → Endogenous Variable			
H1	Flexibility (X1) → Customer Value (Y1)	0.279	0.002	Significant
H2	Flexibility (X1) → Customer Trust (Y2)	0.300	<0.001	Significant
H3	Flexibility (X1) → Customer Retention (Y3)	0.190	0.025	Significant
H4	Customer Value (Y1) → Customer Retention (Y3)	0.365	<0.001	Significant
H5	Customer Trust (Y2) → Customer Retention (Y3)	0.425	<0.001	Significant

customer trust variable is Y21, with the most significant loading factor of 0.810. The worst indicator for creating the customer retention variable is Y31, with the smallest loading factor of 0.676.

Parameters evaluation indicates a causal relationship to other latent variables. A causal relationship is declared insignificant if the *p*-value is < 0.05. Table 3 is a summary of the coefficient calculation results in SEM WarpPLS analysis.

*The effect of flexibility on customer retention.* Due to the *p*-value is < 0.005, H0 is rejected, meaning that the flexibility (X1) had a significant effect on the customer value (Y1). Therefore, the higher the flexibility, the higher the customer value. It can be seen from the path coefficient by 0.279 with a *p*-value of 0.002.

*The effect of flexibility on customer trust.* Due to the *p*-value is < 0.005, H0 is rejected, meaning that the flexibility

(X1) had a significant effect on customer trust (Y2). Therefore, the higher the flexibility, the higher the customer trust. It can be seen from the value of the path coefficient by 0.300 with a *p*-value < 0.001.

*The effect of flexibility on customer retention.* Due to the *p*-value is < 0.005, H0 is rejected, meaning that the flexibility (X1) had a significant effect on the customer retention (Y3). Therefore, the higher the flexibility, the higher the customer retention. It can be seen from the path coefficient value by 0.145 with a *p*-value of 0.025.

*The effect of customer value on customer retention.* Due to the *p*-value is < 0.005, H0 is rejected, meaning that the customer value (Y1) had a significant effect on the customer retention (Y3). Therefore, the higher the customer value, the higher the customer retention. It can be seen from the path coefficient value by 0.365 with *p*-value < 0.001.

*The effect of customer trust on customer retention.* Due to the  $p$ -value is  $< 0.005$ ,  $H_0$  is rejected, meaning that the customer trust (Y2) had a significant effect on the customer retention (Y3). Therefore, the higher the customer, the higher the customer retention. It can be seen from the value of the path coefficient by 0.425 with a  $p$ -value  $< 0.001$ .

*The indirect effect of flexibility on customer retention and customer value mediation.* Table 4 indicates that the flexibility (X1) had a significant effect on the customer retention (Y3) with mediated customer value (Y1). Since the  $p$ -value is  $> 0.05$ ,  $H_0$  is accepted, meaning that the customer value (Y1) is able to mediate the flexibility (X1) and the customer retention (Y3) score is 0.101.

*The indirect effect of flexibility on customer retention and customer trust mediation.* Table 4 indicates that flexibility (X1) had a significant effect on the customer retention (Y3) mediated by customer trust (Y1). Since the  $p$ -value is  $> 0.05$ ,  $H_0$  is accepted, meaning that the customer trust (Y1) is able to mediate the flexibility (X1) and the customer retention (Y3) score is 0.123.

Flexibility has four indicators: temporal (X21), range (X22), focus (X23), and intention (X24). Among the four indicators, the intention (X24) variable, as the most dominant one, has a score of 0.808. The flexibility variable measured by two indicators has an average total score of 3.34 categorized as medium (average score around 2.50–3.50). This shows that in general, according to consumers of PT Nusa Prima Logistik, the flexibility is in a moderate condition, but is approaching the high category. This is because there are still consumers who disagree. For example, there are 30 people (31.96%) who disagree about the indicator of focus (X23) is for item X232 (working process in the company can keep up with the changing times), and there are 30 people (31.96%) who disagree about the intention (X24) indicator is for item X241 (companies can take an establishment to survive). For the flexibility variable, there are no consumers who strongly disagree. The results revealed that PT Nusa Prima Logistik can give more serious attention that the focus (X23) indicator is for item X232 (working process in the company can keep up with changing times) and the intention (X24) indicator is for item X241 (companies can take an establishment to survive). Some consumers judge that the flexibility of the company is less than optimal. PT Nusa Prima Logistik should have good flexibility and can have an impact on customer value, customer trust, and customer retention.

The customer value variable has four indicators, namely, perceived service usefulness (Y11), perceived strategic usefulness (Y12), personal benefit (Y13), and perception about the sacrifice provided (Y14). Among the four indicators, the usefulness (Y13), as the most dominant one, has a score of 0.777. The customer value variable measured by two indicators has an average total score of 3.35 categorized as the medium but approaches the high category (average score around 2.50–3.50). This matter showed that, according to the consumers of PT Nusa Prima Logistik, the customer value variable is quite good. However, there are still consumers who disagree. There are 31 people who disagree (31.96%) about the perceived strategic usefulness (Y12) indicator is for item Y121 (the company has expertise in accordance with customer desires) and personal benefit (Y13) indicator is for item Y133 (customers assess that products/services are good). The results revealed that PT. Nusa Prima Logistik is expected to give more serious attention that the perceived strategic usefulness (Y12) indicators is for item Y121 (the company had expertise in accordance with customer desires) and that the indicators of personal benefit (Y13) is for item Y133 (customers assess good product/service). Some consumers judged that the services provided are less than optimal. PT Nusa Prima Logistik should be able to provide good service and can have an impact on customer retention.

The customer trust variable has three indicators, namely, integrity (Y21), goodness (Y22), and competence (Y23). Among the three indicators, integrity (Y21), as the most dominant one, has a score of 0.810. The customer trust variable measured by three indicators has an average total score of 3.37 categorized as medium but approaches the high category (average score around 2.50–3.50). This shows that, according to the consumers of PT Nusa Prima Logistik, customer trust variable is in good condition. However, there are still consumers who disagree. There are 29 people who disagree about the goodness indicator (Y22) is for item Y221 (the company pays special attention to consumers). The results revealed that PT Nusa Prima Logistik is expected to give more serious attention that the goodness (Y22) is for item Y221 (the company pays special attention to consumers). According to some consumers, the attention is not good. PT Nusa Prima Logistik should be able to increase customer trust in order to have an impact on customer retention.

Customer retention has four indicators, namely, the strength of the relationship between someone's relative attitude (Y31), customer satisfaction (Y32), customer value

**Table 4:** The Result of Estimation and Indirect Effect Testing

Mediation Effect	Coefficient	$p$ -value
Flexibility (X1) → Customer Value (Y1) → Customer Retention (Y3)	0.101	0.009
Flexibility (X1) → Customer Trust (Y2) → Customer Retention (Y3)	0.123	



(Y33), and brand image (Y34). Among the four indicators, brand image, as the most dominant one, has a score of 0.778. The customer retention variable measured by four indicators has an average total score of 3.36 categorized as medium but approaches the high category (average score around 2.50–3.50). The results revealed that, according to the customers of PT Nusa Prima Logistik, the customer retention is in good condition. However, there are still consumers who disagree. There are 29 people who disagree (29.90%) and there is no consumer who disagree that the customer value indicator (Y33) is for item Y331 (the suitability of products/services bringing pleasure). The results revealed that PT Nusa Prima Logistik is expected to give more serious attention that the customer value (Y33) is for item Y331 (the suitability of products/services that bring pleasure). Some consumers feel that the suitability of the services is not satisfying.

## 5. Conclusion

The measurement of flexibility as a dynamic construct causes respondents to have different points of view. It is possible that the applicable flexibility is confusing in the interpretation of respondents when viewing PT Nusa Logistik as a unit of organizational entity with the condition of the company. Therefore, it is prone to have misunderstandings in the acceptance and interpretation of each statement in the questionnaire, even though validity and reliability have been checked.

From hypothesis testing for the direct effect, it can be concluded that:

- 1) Flexibility had a significant effect on the customer value. Therefore, the higher the flexibility, the higher the customer value.
- 2) Flexibility had a significant effect on customer trust. Therefore, the higher the flexibility, the higher the customer trust.
- 3) Flexibility had a significant effect on the customer retention. Therefore, the higher flexibility, the higher the customer retention.
- 4) Customer value had a significant effect on the customer retention. Therefore, the higher the customer value, the higher the customer retention.
- 5) Customer trust had a significant effect on the customer retention. Therefore, the higher the customer, the higher the customer retention.

From hypothesis testing for the indirect effect it can be concluded that flexibility had a significant effect on the customer retention with mediated customer value. This shows that the better the customer value, the greater the influence of flexibility applied by PT Nusa Prima Logistik to customer retention. Flexibility also had a significant

effect on the customer retention mediated by customer trust. This shows that the better the customer trust, the greater the influence of flexibility applied by PT Nusa Prima Logistik to customer retention.

According to the previous results and discussion, one concludes that this research produces a more integrated and simultaneous customer retention model, and the elaboration of the concept into a flexibility variable results in that the variable is a driver of customer value and customer trust. Customer value and customer trust play a central role in the model (concept), namely, as an attractor of flexibility and driving of customer retention. Therefore, the role of customer value and customer trust as a mediator is ascertained to have an effect on flexibility on customer retention.

## References

- Anggasta, I. (2014). *Influence of Customer Trust, Perceived Values and Obstacles Switch to Customer Retention in Apple warp Users in Surabaya*. Doctoral dissertation, STIE Perbanas Surabaya.
- Boohene, R., Agyapong, N. O., & Gonu, E. (2013). Factors influencing the retention of customers of the Ghana Commercial Bank within the Agona Swedru Municipality. *International Journal of Marketing Studies*, 5(4), 82. <https://10.5539/ijms.v5n4p82>
- Brozovic, D., Nordin, F., & Kindström, D. (2016). Service flexibility: conceptualizing value creation in service. *Journal of Service Theory and Practice*, 26(6), 868–888. <https://10.1108/JSTP-09-2014-0219>
- Buttle, F. (2004). *Customer relationship management*. London: Routledge.
- Cohen, J., & Grifo, J. A. (2007). Multicentre trial of preimplantation genetic screening reported in the New England Journal of Medicine: an in-depth look at the findings. *Reproductive Biomedicine Online*, 15(4), 365–366. [https://10.1016/S1472-6483\(10\)60358-6](https://10.1016/S1472-6483(10)60358-6)
- Danesh, M. A., Tabari, H. Z., Hosseinpourpia, R., Nazarnezhad, N., & Shams, M. (2012). Investigation of the morphological and thermal properties of waste newsprint/recycled polypropylene/nanoclay composite. *Bio Resources*, 7(1), 936–945.
- Edward, M., & Sahadev, S. (2011). Role of switching costs in the service quality. perceived value. customer satisfaction and customer retention linkage. *Asia Pacific Journal of Marketing and Logistics*, 23(3), 327–345. <https://doi.org/10.1108/13555851111143240>
- El-Adly, M. I. (2019). Modeling the relationship between hotel perceived value, customer satisfaction, and customer loyalty. *Journal of Retailing and Consumer Services*, 50, 322–332. <https://10.1016/j.jretconser.2018.07.007>
- Gerwin, B. I., Lechner, J. F., Reddel, R. R., Roberts, A. B., Robbins, K. C., Gabrielson, E. W., & Harris, C. C. (1987). Comparison of production of transforming growth factors- $\beta$  and platelet-

- derived growth factors by normal human mesothelial cells and mesothelioma cell lines. *Cancer Research*, 47(23), 6180–6184.
- Gerwin, D. (1993). Manufacturing flexibility: a strategic perspective. *Management Science*, 39(4), 395–410. <http://dx.doi.org/10.1287/mnsc.39.4.395>
- Gummesson, E. (1994). Service management: an evaluation and the future. *International Journal of Industry Management Services*, 5(1), 77–96. <https://doi.org/10.1108/09564239410051920>
- Guzman, R. H., Chepfer, V., Noel, T., Vaillant, D. G., Je, K. P., Raberanto, G., Cesana, M. A., Vaughan., & Winker, D. M. (2017). Direct atmosphere opacity observations from CALIPSO provide new constraints on cloud-radiation interactions. *Journal of Geophysical Research*, 122(2), 1066–1085
- 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. <https://doi.org/10.13106/jafeb.2020.vol7.no9.427>
- Kaplan, H., & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, 74(1), 75–85. <https://doi.org/10.17265/2328-2185/2018.01.001>
- Kim, P. J. (2017). The analysis of the factors in customer trust and revisit decision in traditional market. *Journal of Industrial Distribution & Business*, 8(7), 71–81. <https://doi.org/10.13106/ijidb.2017.vol8.no7.71>
- Kotler, P. & Keller, K. L. (2009). *Marketing Management*. Jakarta: Erlangga.
- Lee, J. Y. (2018). The effects of job characteristics on the team creativity of distribution companies: Moderating effects of transformational leadership. *Journal of Asian Finance, Economics, and Business*, 5(4), 161–172. <https://doi.org/10.13106/jafeb.2018.vol5.no4.161>
- Lupiyoadi, C. (2013). *Competency Based Service Marketing Management*. Jakarta: Salemba Empat.
- Mowen, J. C., & Minor, M. (2002). *Consumer Behavior*. Jakarta: Erlangga.
- Nguyen, H. M., & Khoa, B. T. (2019). The Relationship between the Perceived Mental Benefits, Online Trust, and Personal Information Disclosure in Online Shopping. *Journal of Asian Finance, Economics and Business*, 6(4), 261–270. [doi:10.13106/jafeb.2019.vol6.no4.261](https://doi.org/10.13106/jafeb.2019.vol6.no4.261)
- Nguyen, N., & Leblanc, G. (2001). Corporate image and corporate reputation in customers' retention decisions in services. *Journal of Retailing and Consumer Services*, 8(4), 227–236. [https://doi.org/10.1016/S0969-6989\(00\)00029-1](https://doi.org/10.1016/S0969-6989(00)00029-1)
- Nguyen, T. H., & Tu, V. B. (2020). Social responsibility, organizational commitment, and organizational performance: Food processing enterprises in the Mekong River Delta. *Journal of Asian Finance, Economics and Business*, 7(2), 309–316. <https://doi.org/10.13106/jafeb.2020.vol7.no2.309>
- Phuong, N. N. D., Luan, L. T., Dong, V. V., & Khanh, N. L. N. (2020). Examining Customers' Continuance Intentions towards E-wallet Usage: The Emergence of Mobile Payment Acceptance in Vietnam. *Journal of Asian Finance, Economics and Business*, 7(9), 505–516. <https://doi.org/10.13106/jafeb.2020.vol7.no9.505>
- Shin, C. S., Hwang, G. S., Lee, H. W., & Cho, S. R. (2015). The impact of Korean franchise coffee shop service quality and atmosphere on customer satisfaction and loyalty. *Journal of Business Economics and Environmental Studies*, 5(4), 47–57. <https://doi.org/10.13106/eajbm.2015.vol5.no4.47>
- Slater, D. (1997). *Consumer culture and the politics of need*. London: Routledge.
- Solimun, Fernandes, A. A. R., & Nurjannah, N. (2017). *Multi-variate Statistical Method: Structural Equation Modeling Based on PPLS*. Malang: UB Press.
- Solomon, M. R. (2002). *Consumer Behavior: Buying. Having and Being*. Hoboken, NJ: Prentice Hall.
- Tran, T. T., Tran, A. T., & Pham, T. N. (2020). Mediation Role of Satisfaction and Trust on Attitudinal Commitment and Relationship Quality. *Journal of Asian Finance, Economics and Business*, 7(10), 275–281. <https://doi.org/10.13106/jafeb.2020.vol7.n10.275>
- Vidal-Salazar, M. D., Cordon-Pozo, E., & José, M. (2016). Flexibility of benefit systems and firms' attraction and retention capacities. *Employee Relations*, 38(4), 487–504. <https://doi.org/10.1108/ER-07-2015-0152>
- Vu, T. M. T., Tran, C. Q., Doan, D. T., & Le, T. N. (2020). Determinants of capital structure: The Case in Vietnam. *Journal of Asian Finance, Economics and Business*, 7(9), 159–168. <https://doi.org/10.13106/jafeb.2020.vol7.no9.159>
- Woodruff, R. B. (1997). Customer value: the next source for competitive advantage. *Journal of the academy of marketing science*, 25(2), 139. <http://dx.doi.org/10.1007/BF02894350>
- Yang, J. J., & Ahn, S. C. (2020). The Effects of Attitude, Subjective Norm, and Behavioral Intention on Perceived Values in Traditional Marketplaces. *The Journal of Distribution Science*, 18(10), 25–38. <https://doi.org/10.15722/jds.18.10.202010.25>
- Young-Ybarra, C., & Wiersema, M. (1999). Strategic Flexibility in Information Technology Alliances: The Influence of Transaction Cost Economics and Social Exchange Theory. *Organization Science*, 10(4), 439–459. <https://doi.org/10.1287/orsc.10.4.439>