

ASSESSING CUSTOMER SATISFACTION OF CUSTOMER RELATIONSHIP MANAGEMENT SYSTEM IN AN E-COMMERCE COMPANY IN INDONESIA

ROBERT MARCHELINO TAJIB¹, SFENRIANTO²

^{1,2} Information System Management Department, BINUS Graduate Program – Master of Information Systems Management, Bina Nusantara University, Jakarta Indonesia

E-mail: ¹robert.tajib001@binus.ac.id, ²sfenrianto@binus.ac.id

ABSTRACT

This research aims to explore the customer satisfaction of customer relationship management system (CRMS) in Tokopedia, Indonesia. The growth of e-commerce in Indonesia is big, with Tokopedia as the top e-commerce company with largest visitors. However, there are still many customers that does not feel satisfied with their services which customers to move to other e-commerce platforms and downgrade the ratings of Tokopedia. The variables used in this study are perceived ease of use, perceived usefulness, system quality, user support, and social influence. A sample of 113 respondents of Tokopedia's customers that lives in Jakarta was gathered from online questionnaire. This study uses the partial least square–structural equation modeling (PLS-SEM) method to analyze the collected data. The SmartPLS 4 4.0.8.7 software was used to perform the data analysis. Based on the research, perceive ease of use, system quality, and user support influence the customer satisfaction, while perceive of usefulness and social influence do not influence the customer satisfaction.

Keywords: CRM, Customer Satisfaction, E-commerce, System Quality, User Support.

1. INTRODUCTION

Customers are one of the most important aspects for every business organization. Without customers, a company can't stand their existence because they must sell their services or products to gain profit. Many companies or business organizations believe that it's more important to build good relationships with their customers first rather than doing cost cutting on their business activities [1]. Handling the relationship between a company and its customer is not easy, a company or business organizations must find the best IT strategy to develop their company or organizations to be better every day.

As information technology becomes more advanced, e-commerce business has been starting to use Customer relationship management is being used by businesses to raise the caliber of their services. Customer relationship management is a business-to-consumer strategy that focuses on both customers and technology. Customer relationship management systems are state-of-the-art tools that make it easier to attract, nurture, and maintain ties with and satisfaction from customers [2]. CRM is defined as "building and managing customer relationships at the organizational level, which include understanding, anticipating, and managing

customer needs based on the knowledge gained about them in order to increase the effectiveness and efficiency of the organization and, thereby, increase its profitability" [3].

To maintain positive, long-lasting relationships with their clients, businesses or business organizations utilize customer relationship management systems. The CRM system is important for companies to improve their quality of services and profits. However, having a good CRM system will help every company to hold its customers and greatly impacts its capacity to gather information ([4]; [5]). Many e-commerce companies in Indonesia use the CRM system to support their employees to communicate with their customers.

There are three prominent e-commerce companies in Indonesia: Tokopedia, Shopee, and Lazada. Tokopedia is one of the big marketplaces in Indonesia that implementing Customer Relationship Management strategies in maintaining good relations with their customers. Tokopedia also provides opportunity for others to expand their business reach throughout Indonesia in the marketplace and provides customers with different type of services in the competitive market.











Merchant	Monthly Web Visits	AppStore Rank	PlayStore Rank	Twitter	Instagram	Facebook	Number of Employees
1  Tokopedia	158,346,667	#2	#5	1,000,000	5,263,104	6,517,950	7,976
2  Shopee	131,296,667	#1	#1	842,900	8,727,742	25,778,184	6,781
3  Lazada	26,640,000	#3	#2	475,900	3,156,231	32,137,440	1,506
4  Bukalapak	21,303,333	#7	#6	252,500	2,110,525	2,505,675	2,962
5  Blibli	19,736,667	#5	#3	613,700	2,258,064	8,689,266	2,952
6  Orami	16,176,667	#NA	#NA	5,685	20,085	350,042	251
7  Ralali	10,830,000	#24	#NA	3,736	50,778	90,396	204
8  Zalora	2,990,000	#4	#9	69,400	772,558	8,021,418	258
9  Klik Indomaret	2,846,667	#8	#8	NA	443,893	79,369	NA
10  JD ID	2,343,333	#9	#7	62,100	649,824	1,036,192	1,566

Figure 1: The Map of E-Commerce in Indonesia

Source: iPrice. 2022

Based on the top 10 e-commerce map data gathered from iPrice, in the Q2 of 2022, Tokopedia is the number one e-commerce marketplace with the most visitors among the other e-commerce companies. However, it is also showed that even though Tokopedia has the largest visitors, the ranking of Tokopedia from both Appstore and PlayStore are still number two, with Shopee on the number one ranking. This shows that Shopee, with less visitors than Tokopedia, has the better performance and being rated the best by the e-commerce platform users. This indicates that there are still a lot of users who don't match with Tokopedia. This problem indicates that the implementation of CRM System in Tokopedia, which is supposed to be the technology-based system to maintain customer relationship between company and customers, is failed to satisfy the customers in Tokopedia. This problem is important for Tokopedia because there is a hole that why users are leaving them and move to other e-commerce platforms. As a result, the purpose of this study is to examine the customer satisfaction of Tokopedia's CRM systems in Indonesia with selected factors.

2. LITERATURE REVIEW

2.1 Overview of CRM Concepts

CRM is used to manage every organization's relationship needs with their customers. It usually requires the use of technology to improve business processes and strategies in order to satisfy customers and increase profit and sales growth for the organization ([6]; [7]).

CRM system is the methodology, strategy, and technology used by business organizations or companies to manage their relationship with the customers [8]. CRM is the gathering, analyzing, and application of customer knowledge in order to sell goods and services more effectively and efficiently, resulting in profits for businesses and their customers [9].

CRM is the management of a customer's knowledge, which includes understanding their needs and how to serve them. It is a concept that places customers at the center of a business. CRM's primary component is customer service. CRM is also concerned with coordinating customer relationships across all business functions, interactions, and audiences [10].

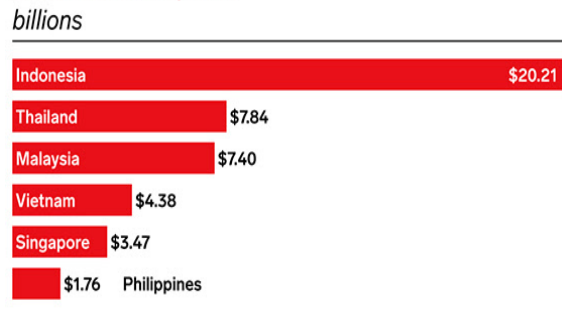
CRM has technology that allows companies or business organizations to provide fast and effective services to their customers by developing a relationship with every customer through the effective use of database information systems.

Customer relationship management is also referred to as a business strategy because it is a method of conducting business. Being customer-driven and customer-focused means managing all part of the business to satisfy customers, meet their wants and requirements for all goods and services, and offer responsive, high-quality customer service. Such businesses are said to as customer-centric as opposed to product-centric. Business organizations are now looking for ways to improve their business processes by utilizing previously collected data. CRM is intended to be more of a business process than a technology-based process. However, implementing CRM to business is not easy, according to [11], the success rate of implementing CRM is small, there is high failure rate on it. Furthermore, the failure of implementing CRM may bring either a huge loss to company who can't manage it well or bring a huge profitable opportunity and trust from its customers satisfaction for those who can run it well.

2.2 E-commerce in Indonesia

Nowadays, information technology has had an impact on many fields, including the economy and business. The internet has been used to market, sell, and promote goods and services. This is referred to as e-commerce. E-commerce is the main platform of the digital economy. E-commerce offers transaction processing that is easy, fast, and practical. Consumers no longer need to come to a physical store to view goods and bid prices, simply visit the intended e-commerce via smartphone, tablet or PC to see online product catalogue. Everything is done online, starting from view products, bid, payment, and to choose a delivery service.

Retail Ecommerce Sales in Select Countries in Southeast Asia, 2021



Note: includes products or services ordered using the internet, regardless of the method of payment or fulfillment; excludes travel and event tickets, payments such as bill pay, taxes, or money transfers, food services and drinking place sales, gambling, and other vice goods sales; total retail ecommerce sales in the 6 countries listed=\$45.07 billion in 2021
Source: eMarketer, May 2021

266710 eMarketer | InsiderIntelligence.com

Figure 2: Retail Ecommerce Sales in Select Countries in Southeast Asia, 2021

Source: eMarketer, May 2021

Based on the Figure 2 above, Indonesia is a country with the largest digital economy development in Southeast Asia (SEA). Based on data from eMarketer, in 2021 the retail sales via e-commerce in six countries in the Southeast Asia reached US\$45.07 billion, of that amount US\$20.21 billion came from Indonesia.

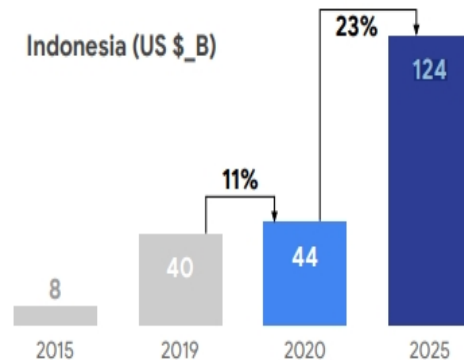


Figure 3: e-Conomy Report (In Billion US Dollar)

Source: Google, Temasek Holdings, and Bain & Co

Based on Figure 3, the data shows that the growth of digital economy in Indonesia is expected to have valuation of US\$124 billion in 2025, and the biggest digital economy's driving is from the e-commerce

E-commerce will be the most important aspect in the Indonesia's digital economy growth, with over 10 percent of the country's 270 million people already engaging in online shopping. The sales data

shows that it valued more than US\$40 billion by the end of 2020, an increase of 54% y-o-y from 2019 (US\$21 billion) and it is predicted to grow to US\$83 billion by 2025 [12]. The e-commerce industry in Indonesia is very competitive. There are some foreign e-commerce platforms that have taken advantages of Indonesia's large market, which are the Singapore's Lazada and Shopee, who gained more than 140 million monthly visits between on their platforms [12]. Compared to the Lazada and Shopee, there is Tokopedia as the top e-commerce company with the largest visitors in Indonesia. Tokopedia is an e-commerce company from Indonesia that brings huge digital transformation of digital economy as e-commerce platform with large marketplaces with more than 100 million users in Indonesia.

average active user of 100 million each the moon. Tokopedia was first released on August 17, 2009 and founded by William Tanuwijaya & Leontinus Alpha Edison. First time When it was released, the market response was quite good, it only took Tokopedia's first 12 minutes get the first order. Along with its development, now Tokopedia is one of largest Unicorn in Indonesia that has an estimated valuation of US\$8 billion to US\$10 billion in the early 2021 or equivalent with IDR 112 trillion (exchange rate of IDR 14,100). Tokopedia is also an online marketplace the most frequently visited, especially in Indonesia. The number of visitors to the Tokopedia website up to the second quarter of 2021 reached 147.8 million, the number increased by 9.4%. 2021), the previous quarter was 135.1 million visits [13].

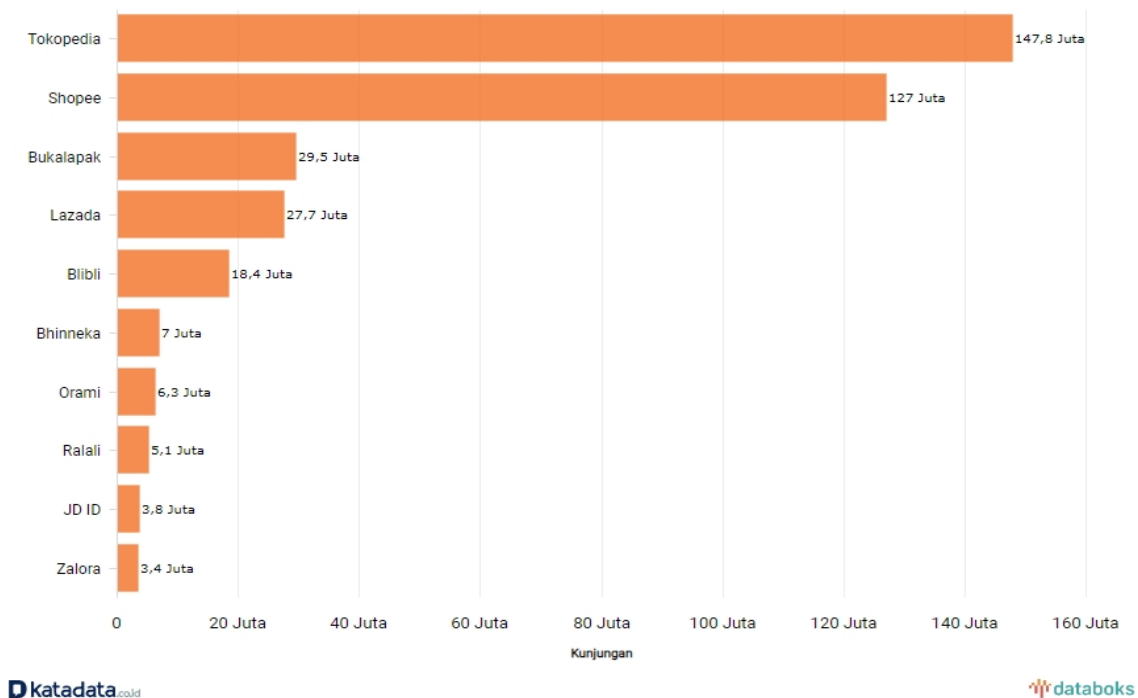


Figure 4: Top 10 E-commerce with the Highest Monthly Web Visitors (Quarter II-2021)

Source: databoks, September 2021

Based on Figure 4 above, there are 10 top e-commerce companies in Indonesia which are Shopee, Tokopedia, Bukalapak, Lazada Indonesia, Blibli, JD.id, Orami, Bhinneka, Zalora Indonesia, and Matahari. Based on the top 10 e-commerce companies in Indonesia, Tokopedia is one of the local e-commerce works of the nation's children who managed to steal community attention with an

[14]. Customer satisfaction is a condition where customers are satisfied with the quality of product,

or the overall interaction experienced by the customers [15]. Customer satisfaction contributes to a better understanding of consumer behavior [16]. Customers are the most important players in the microenvironment of the company. The overall system value's goal is to serve customers and build strong relationships with them [17]. Customer satisfaction can keep the business brand ahead of the competitors by ensuring the customer's delight with the products or services. If the company

manages to provide satisfaction to customers, it gives you an advantage over competitors who offer the same products or services but cannot satisfy their customers [18], [19]. It is very important why the business organization must make sure the customers are satisfied with products or services [20]. Customer satisfaction serves as a forerunner of customer loyalty and repurchase intentions. In order to determine if a customer will become a repeat customer or suggest the business to others, it can be observed from the level of satisfaction by having them score it on a scale of 1 to 10 [21]. Considering that customers satisfaction is important to every business as explained by [20], business companies, especially e-commerce companies need to manage their customer satisfaction level with high effort and performance. Even the business is doing well, like in Tokopedia, the customers might leave and change to other e-commerce platforms because of the decrease of customer satisfaction with the CRMS.

2.4 Perceived ease of use and perceived usefulness

Customer satisfaction is influenced by perceived ease of use, therefore if a technological system is simple to use, it will be easily accepted by everyone. The term "perceived ease of use" describes how someone perceives using a particular technology or system to be simple, not difficult, and requiring little effort [22]. Users are more likely to believe in the significance of a system if they feel it to be useful since it can speed up their learning and increase their performance [23]. Perceived usefulness refers to a level where a person believes the use of certain technologies can improve their performance [22].

Therefore, based on prior studies, it is hypothesized that:

H1: Perceived ease of use has a positive impact on customer satisfaction with the CRM system.

H2: Perceived usefulness has a positive impact on customer satisfaction with the CRM system.

2.5 System quality

System quality refers to the quality of the system itself, which includes software and the data components. System quality is a measure of success to tell how the system is technically sound. System quality is measured by if there are bugs in the system, the quality of user interface, ease of use,

quality of documentation, and sometimes, quality and program code maintenance [24].

System quality is determined by adaptability, availability, dependability, response time, and usability. The impact of a Web site design on the customer purchase process in E-commerce cannot be fully comprehended unless the usability of the Web site and the relevance of the information provided to the prospective purchaser for purchasing decisions are evaluated [25].

System quality has been proposed as one of the main driving factors that affect customer perceptions and their online behavior [26]. If the customers perceive that a web site has a high quality, they are about to have high trust in their beliefs about the web retailer's competence, integrity, and benevolence; and agree to develop a willingness to depend on the web retailer [27].

Therefore, based on prior studies, it is hypothesized that:

H3: System quality has a positive impact on customer satisfaction with the CRM system.

2.6 User support

User support is the technical assistance and guidance that a company provides to users or clients in order for them to use specific systems [22]. Software, computers, and other electronic and computer assets could all be used to support users. Numerous conveniences have been added to our daily lives because of advances in digital technology. Nowadays, dealing with a variety of information can be challenging, especially for the elderly who are less comfortable with information technology [28]. User support is an important factor in achieving the universal usability goal of web information systems [29]. However, other studies have found that user support influences users' satisfaction with using different systems [30].

H4: User Support has a positive impact on customer satisfaction with the CRM system.

2.7 Social Influence

Social influence refers to how a person's behaviors are affected by other individuals, it has impacts on how someone influences the other individuals to make decision on using a new system [31]. Social impact has a critical part in determining whether new technologies are successful or not as they evolve, especially social technologies [32]. Prior research has long recognized the significance of the influence of social factors on general human

behavior and the uptake of information technology [33]. Therefore, based on prior studies, it is hypothesized that:

H5: *Social influence has a positive impact on customer satisfaction with the CRM system.*

H4: *User Support has a positive impact on customer satisfaction with the CRM system.*

H5: *Social influence has a positive impact on customer satisfaction with the CRM system.*

3. METHODOLOGY

3.1 Framework

This research model will use *Perceived Ease of Use*, *Perceived Usefulness*, *System Quality*, *User Support*, and *Social Influence* as variables. The conceptual framework will be shown in this following figure:

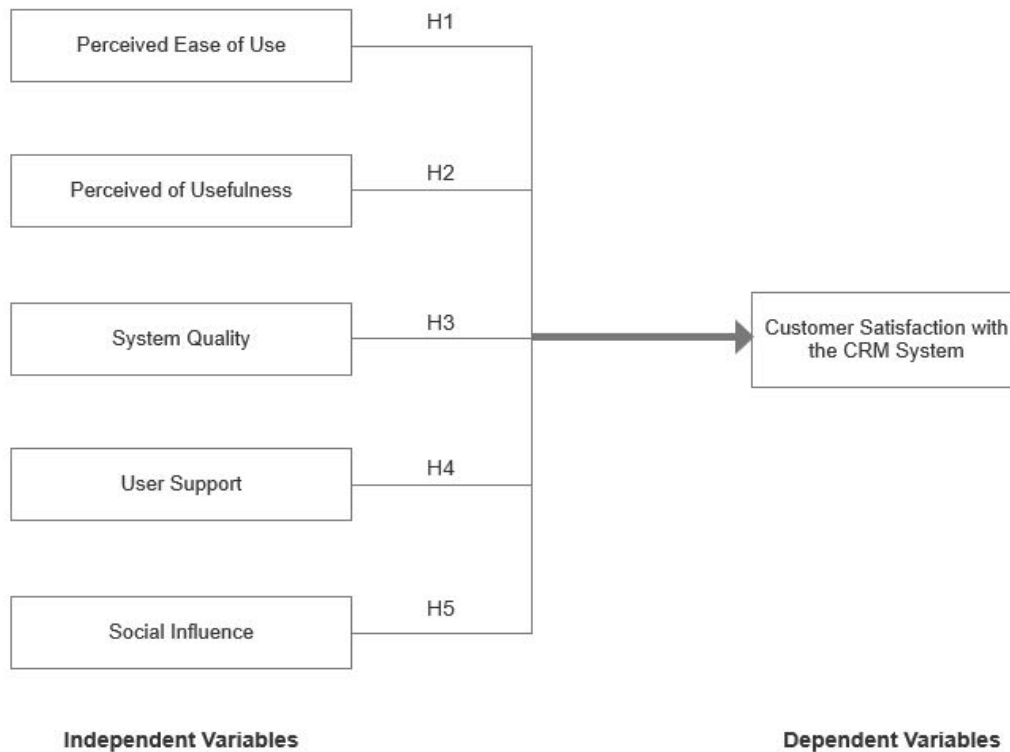


Figure 5: Conceptual Framework

Based on the research model that has been described previously, then in this research will propose the following hypothesis:

H1: *Perceived ease of use has a positive impact on customer satisfaction with the CRM system.*

H2: *Perceived usefulness has a positive impact on customer satisfaction with the CRM system.*

H3: *System quality has a positive impact on customer satisfaction with the CRM system.*

Table 1: Measurement Model

No	Item	Code	Reference
1.	Perceived Ease of Use		
	The CRM system is easy to use.	PU2	[1]
	When using the CRM system, less	PE2	

	effort is required.		
	The CRM system offers flexibility	PE3	
	The CRM system is user-friendly.	PE4	

2. Perceived Usefulness			
	I have better control over my work thanks to the CRM system.	PU1	[1]
	I can fulfill my work more rapidly thanks to the CRM system.	PU2	
	After I began using the CRM system, my performance is improved.	PU3	
3. System Quality			
	I can use the system properly without experiencing errors	SQ1	[34], [35], [25]
	I didn't experience any bugs when using the system	SQ2	
	The system has a very fast processing speed	SQ3	
	The system is well controlled by the company with proper maintenance	SQ4	
4. User Support			
	The organization offers CRM system training programs.	US1	[1]
	When I run into a difficulty, other CRM system users help me out right away.	US2	
	The company sends out experts to assist us with problems with	US3	

	the CRM system.		
5. Social Influence			
	My coworkers encourage me to use the CRM system.	SI1	[1]
	The organization's administration encourages me to use the CRM system.	SI2	
	Generally, the company encourages its employees to use the CRM system.	SI3	
6. Customer Satisfaction with the CRM System			
	I am impressed with the features provided by the CRM system.	CS1	[1]
	I enjoy working with the CRM system.	CS2	
	Using the CRM system in my job is a fantastic idea.	CS3	
	When they use the CRM system, I believe the overall company performance improves.	CS4	

4. FINDING

4.1 Data Collection

This research aims to gather data from Tokopedia's users that live in Jakarta. To measure the customer's satisfaction in Tokopedia's CRM system, this study collected data by using an online questionnaire on google form. According to [36], the Likert scale is one of the scales used in marketing research that focuses on the level of Five categories which are used to categorize agreement or disagreement: strongly disagree (1), disagree (2), neutral (3), agree (4), and highly agree (5).

Respondents in this study are 63.7% male and 36.3% female of 113 Tokopedia users that lives in Jakarta. Most respondents are undergraduate students with the age range at 21-30 years consist of 59.3% data.

4.2 Respondent Profile

Respondents in this study are 63.7% male and 36.3% female of 113 Tokopedia users that lives in Jakarta. Most respondents are undergraduate students with the age range at 21-30 years consist of 59.3% data. The respondent profile will be shown in this table below:

Table 2: Respondent Profile

Gender	Number	Percentage
Male	72	63.7%
Female	41	36.3%
Age	Number	Percentage
15-20 years old	4	3.5%
21-30 years old	97	85.8%
31-40 years old	7	6.2%
41-50 years old	4	3.5%
Above 50 years old	1	1%
Education	Number	Percentage
Senior High School	45	39.8%
Diploma Degree	0	0%
Bachelor's Degree	67	59.3%
Master's degree	1	0.9%
Postgraduate	0	0%
Job	Number	Percentage
Student	78	69%
Entrepreneur	13	11.5%
Housewife	2	1.8%
Employee	20	17.7%
Teacher	0	0%
Total	113	100%

The population in this study are all customers who are users of Tokopedia in Jakarta. Data collection used an online questionnaire which was distributed through the Google form and obtained as many as 113 respondents who met the criteria. Through the questionnaires distributed, there are 4 indicators of perceived ease of uses, 3 indicators of perceived usefulness, 4 indicators of system quality, 3 indicators of user support, 3 indicators of social

influence, and 4 indicators of customer satisfaction. These indicators will be presented in this following Figure 6 below.

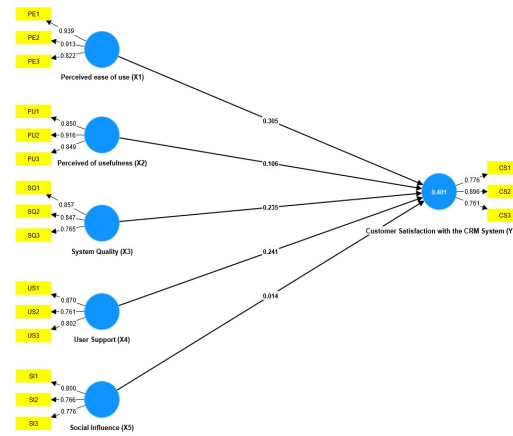


Figure 6: PLS Structural Equation Modelling

Outer Model Analysis. According to [37], the purpose of this analysis is to determine the indicators' ability to accurately represent and measure variables, as well as its consistency in generating reliable measurements when examined repeatedly through the collected data. To perform data analysis, validity and reliability requirements must be met. According to [37], validity is a test of how accurately the indicators used can represent and measure variables in research through the data that has been collected. The validity test consists of measuring convergent validity (loading factor and AVE) and discriminant validity (cross loading). Furthermore, according to (Bougie and Sekaran 2020), reliability is a measuring tool to prove the level of consistency and stability of the research instrument scale. The measurement of convergent validity is said to be valid if the loading factor value used is 0.7 or more and the Average Variance Extracted (AVE) value of the variable is 0.5 or more than 0.5 [38]. Furthermore, discriminant validity can be measured by cross loading. The cross-loading value of each indicator from a construct must be higher than the cross-loading value in other constructs. This study also uses Cronbach's alpha and can be said to be reliable if the value is above 0.7 and does not exceed 0.95 and composite reliability is 0.7 or more than 0.7 (≥ 0.7) [38].

4.2 Results of Loading Factor and Average Variance Extracted (Convergent Validity) Analysis

Table 3: Convergent Validity and Reliability Analysis Result

Variable	Code	Factor Loadings	Cronbach's Alpha	C.R	AVE
Perceived Ease of Use	PE1	0.939	0.874	0.909	0.797
	PE2	0.913			
	PE3	0.822			
Perceived of Usefulness	PU1	0.850	0.843	0.859	0.761
	PU2	0.916			
	PU3	0.849			
System Quality	SQ1	0.857	0.762	0.762	0.679
	SQ2	0.847			
	SQ3	0.765			
User Support	US1	0.870	0.743	0.770	0.659
	US2	0.761			
	US3	0.802			
Social Influence	SI1	0.800	0.683	0.685	0.610
	SI2	0.766			
	SI3	0.776			
Customer Satisfaction with the CRM System	CS1	0.776	0.745	0.786	0.661
	CS2	0.896			
	CS3	0.761			

The test results in Table 2 show that each indicator used meets the criteria because it has a loading factor value above 0.7. However, there were several indicators that were eliminated, namely PE4, SQ4, CS4 because they did not meet the specified values, so a re-test was carried out without these two indicators and a loading factor value above 0.7 and an AVE value of more than 0.5 was carried out, which means that they met the criteria and valid.

4.3 Discriminant Validity Analysis Result

The data collected for this study was obtained from an online questionnaire that was distributed to respondents by using the Google Form. A total of 21 items of indicators were utilized to measure all variables in this study.

Table 4: Discriminant Validity Analysis Result

	PE	PU	SQ	US	SI	CS
Perceived Ease of Use						0.553
Perceived of Usefulness	0.580					0.477
System Quality	0.401	0.422			0.725	0.603
User Support	0.207	0.345	0.468		0.539	0.549
Social Influence	0.334	0.430				0.455
Customer Satisfaction with the CRM System						

As shown in Table 3 and Table 4, the results of the outer model analysis in this study have met the requirements, which means that all the variables are valid and reliable to use. Afterward, an analysis of the inner model is conducted.

Inner Model Analysis. If the outer model, namely validity and reliability, has been fulfilled in a study, then an inner model analysis test is carried out which aims to find out the relationship between variables related to the study [38]. The inner model analysis test consists of the R2 test, f2 test (effect size), and analysis of hypothesis testing.

The results of the coefficient of determination (R²) analysis showed that the R² value on the customer satisfaction variable is 0.401 where 40.1% of the customer satisfaction variable can be explained by the variables; Perceived Ease of Use, Perceived of Usefulness, System Quality, User Support, Social Influence, which means it has influence moderate (moderate) and the remaining 59.9% is explained by other variables outside this research model.

As examined in the effect size (f^2) analysis, the results shows that the f^2 value in the Perceived of Usefulness and Social Influence variables on Customer Satisfaction is 0.013 and 0.000, which means that there is no effect on customer satisfaction because it has an f^2 value below 0.02. Furthermore, the f^2 value of the Perceived Ease of Use, System Quality, and User Support variables has a small effect on Customer Satisfaction because the f^2 value is between 0.02 and 0.15.

According to the test results utilizing the PLS algorithm and bootstrapping method, the outcomes of path coefficient analysis and hypothesis testing are compiled in Table 5 below.

Table 5: T-Statistics Result and Significance

	Path-coefficient	t-statistics	p-values	Result
Perceived Ease of Use → Customer Satisfaction	0.305	2.636	0.008	Significant
Perceived of Usefulness → Customer Satisfaction	0.106	0.989	0.323	Not Significant
System Quality → Customer Satisfaction	0.235	2.072	0.038	Significant
User Support → Customer Satisfaction	0.241	2.612	0.009	Significant
Social Influence → Customer Satisfaction	0.014	0.101	0.920	Not Significant

According to Table 5, perceived ease of use, perceived of usefulness, system quality, user support and social influence all positively affect how satisfied customers are with the CRM system

with respective path coefficient values of 0.305, 0.106, 0.235, 0.241, and 0.014. Based on this value, it can be interpreted that the perceived ease of use has the most positive impact on customer satisfaction with the CRM System with a value of 0.305.

The research hypothesis testing is seen through the value of t-statistics with a 95 percent confidence level. According to [38], it was explained that if the t-statistics is lower than 1.96 and the p-value is greater than 0.05 then the research hypothesis is rejected, where if the t-value is more than 1.96 and the p-value is less than 0.05 then the research hypothesis is not rejected.

Hypothesis testing in Table 5 revealed that hypothesis (H1) shows a t-statistic of 2.636 and a p-value of 0.008. This indicates that H1 is not rejected, meaning that perceived ease of use has a positive effect on customer satisfaction with the CRM System. The hypothesis (H2) test shows a t-statistic of 0.989 and a p-value of 0.323. This indicates that H2 is rejected, which confirms that perceived of usefulness does not have positive impact on customer satisfaction with the CRM System. The result of the hypothesis (H3) test shows a t-statistic of 2.072 and a p-value of 0.038. It can be concluded that H3 is not rejected, thereby system quality has a positive effect on customer satisfaction with the CRM System. In testing the hypothesis (H4), it is known that the t-statistic is 2.612 and the p-value is 0.009. Therefore, H4 is not rejected, indicating that user support has a positive effect on customer satisfaction with the CRM System. The hypothesis testing on H5 generates a t-statistic of 0.101 and a p-value of 0.920, it means H5 is rejected. It can be concluded that social influence does not have a positive impact on customer satisfaction with the CRM System.

The results of the research hypothesis testing described earlier are summarized in Table 6 below.

Table 6: Results of Hypothesis Testing

	Hypothesis	Result
H1	Perceived Ease of Use → Customer Satisfaction with the CRM System	Supported
H2	Perceived of Usefulness → Customer Satisfaction with the CRM System	Not Supported

H3	System Quality → Customer Satisfaction with the CRM System	Supported
H4	User Support → Customer Satisfaction with the CRM System	Supported
H5	Social Influence → Customer Satisfaction with the CRM System	Not Supported

5. DISCUSSION

The current study aims to examine how customer satisfaction with the CRM system in an Indonesian e-commerce company (Tokopedia) is impacted by perceived usefulness, perceived simplicity of use, system quality, user assistance, and social influence.

The present study found a positive and significant impact of perceived ease of use (H1) on customer satisfaction with the CRM system. These findings are in line with the prior studies of [22], who explained that perceived ease of use is the perception that an individual can use a particular technology or system easily, and requires little effort, supporting the claim that perceived ease of use positively affects customer satisfaction with the CRM System. However, this study has the same result with the former studies of [1], which described that customer satisfaction with customer relationship management at a telecommunications company in the Kingdom of Bahrain is positively impacted by perceived ease of use. In result, perceived ease of use allows customers to use the system with easily with less effort and not complicated.

The current research found that perceived usefulness (H2) had no positive or significant impact on customer satisfaction with the CRM system. These findings contradict previous studies of [23], who that users are more likely to trust in the value of a system if they feel it to be useful since it speeds up their learning and improves their performance and [22], who described that perceived usefulness refers to a level where a person believes the use of certain technologies can improve their performance. However, this present study has a same result with prior studies of [39], who described that perceived of usefulness does not have the significant impact on user's satisfaction in the *Analysis of System Quality, Information Quality*

and Perceived of Usefulness to User Satisfaction. Otherwise, customers did not find that CRM System in Tokopedia enhances their performance.

The present study found a positive and significant impact of system quality (H3) on customer satisfaction with the CRM system. These findings are in line with the prior studies of [26], who described that system quality has been proposed as one of the important drivers of consumer perceptions and subsequent online behavior, and [25], who stated that system quality is determined by adaptability, availability, dependability, response time, and usability. Likewise, system quality is also important to a technology-based system where according to [24], System quality is measured by if there are bugs in the system, the quality of user interface, ease of use, quality of documentation, and sometimes, quality and program code maintenance. However, this study has the same result as the former studies of [40], which stated that system quality has a positive and significant effect on Health Information System (HIS) User Satisfaction.

The present study found a positive and significant impact of user support (H4) on customer satisfaction with the CRM system. These findings are in line with the prior studies of [22], who explained that the term "user support" refers to the technical assistance and support that a company offers customers or clients to use a certain system, and [30] who stated that user support influences users' satisfaction in using various systems. This present study is also supporting the statement of [29], who explained that user support is an important factor in achieving the universal usability goal of web information user support is one of the most important factors to influence users of a technology-based system. This study has the same result with [1], which described customer satisfaction with customer relationship management at a telecommunications company in the Kingdom of Bahrain is positively impacted by user support.

The present study did not find a significant impact of social influence (H5) on customer satisfaction with the CRM system. These findings are not in line with the prior studies of [32] who described how, as new technologies emerge, particularly social technologies, social influence plays a critical role in determining which technologies succeed or fail. According to [31], Social influence refers to how a person's beliefs or behaviors are affected by other individuals, it has impacts on how someone influences user's decision on using new system. In result, this study has found that social influence

does not carry the significant impact of customer satisfaction with the CRM system. However, this present study has the same result as former studies of [41], where social influence does not have positive and significant impact to User Satisfaction UTAUT. Otherwise, users or customers would like to trust the system performance by their own experience while using the CRM System to produce satisfaction with the CRM System.

5.1 Research Implications

Organizations can use these study findings to better understand customer satisfaction levels. The services and customer service face of a firm must be developed and improved. Additionally, it enables the business to assess and enhance the system in order to strengthen customer relationships and increase performance. Finally, business companies must invest heavily in the creation of technologies that will improve the CRM system and offer the greatest customer service.

By examining the findings of the analysis and the theories discussed in the previous chapter with regard to the role of perceived ease of use, perceived usefulness, system quality, user support, and social influence on customer satisfaction with the CRM system in Tokopedia, then it can be concluded that the company must pay more attention to and improve those factors that affect customer satisfaction with the CRM System in Tokopedia, especially on the variables that have great impact on the customer satisfaction factors. The results of the study indicate that the impacts from the largest to the smallest are Perceived Ease of Use, User Support, System Quality, Perceived of Usefulness, and the last one is Social Influence.

6. CONCLUSION

CRM system is an important factor for companies or organizations to build sustainable relationships with customers, CRM also allows them to make more profitable relationships with customers which increase their market and satisfaction among the customers. The variables being used in this study are Perceived Ease of Use, Perceived Usefulness, System Quality, User Support and Social Influence. Furthermore, Perceived Ease of Use, System Quality, and User Support has a significant effect on Customer Satisfaction in Tokopedia, while Perceived of Usefulness and Social Influence has no significant effect to the Tokopedia customer satisfaction. The customer satisfaction with the CRMS in Tokopedia is impacted by Perceived Ease of Use, System

Quality and User Support. Therefore, Tokopedia needs to improve those factors that affecting Customer Satisfaction on Tokopedia, especially on the variables that have great impacts and needs to pay more attention to develop Perceived of Usefulness and Social Influence to improve the customer satisfaction with the Customer Relationship Management System in Tokopedia.

6.1 Future Research directions

The researcher also realizes that this research is far from perfect. In further research, there is a need for development. It is advised that future studies collect data across Indonesia. Additional research could investigate other variables in the relationship between selected characteristics and customer satisfaction with the CRM system to gain a better understanding of the phenomenon. Finally, the Indonesian e-commerce company is the focus of this investigation. As a result, it is recommended that this model be researched in other e-commerce companies in Indonesia or in companies in other countries.

REFERENCES:

- [1] M. Al-Shammari, "CRM Paper," *International Journal of eBusiness and eGovernment Studies*, vol. 13, pp. 97–116, Jan. 2022.
- [2] S.-Y. Hung, W.-H. Hung, C.-A. Tsai, and S.-C. Jiang, "Critical factors of hospital adoption on CRM system: Organizational and information system perspectives," *Decis Support Syst*, vol. 48, no. 4, pp. 592–603, 2010, doi: <https://doi.org/10.1016/j.dss.2009.11.009>.
- [3] M. du Plessis and J. A. Boon, "Knowledge management in eBusiness and customer relationship management: South African case study findings," *Int J Inf Manage*, vol. 24, no. 1, pp. 73–86, 2004, doi: <https://doi.org/10.1016/j.ijinfomgt.2003.10.002>.
- [4] A. Y. Toyese, "Customer relationship management and customer loyalty in Nigerian telecommunication industry," *Journal of Business and Retail Management Research*, vol. 8, pp. 1–7, Apr. 2014.
- [5] V. Guerola-Navarro, H. Gil-Gomez, R. Oltra-Badenes, and J. Sendra-García, "Customer relationship management and its impact on innovation: A literature review," *J Bus Res*, vol. 129, pp. 83–87, 2021, doi: <https://doi.org/10.1016/j.jbusres.2021.02.050>.

- [6] Y. Baashar *et al.*, "Customer relationship management systems (CRMS) in the healthcare environment: A systematic literature review," *Comput Stand Interfaces*, vol. 71, p. 103442, 2020, doi: <https://doi.org/10.1016/j.csi.2020.103442>.
- [7] T. Chen and J. Zhao, "A Big-Data Based Customer Relationship Management Model in Customer-to-Business E-Business," 2018.
- [8] N. Woodcock, A. Green, M. Starkey, and Framework™ The, "Social CRM as a business strategy," *The Journal of Database Marketing & Customer Strategy Management*, vol. 18, pp. 50–64, Mar. 2011, doi: 10.1057/dbm.2011.7.
- [9] R. Bose, "Customer relationship management: key components for IT success," *Industrial Management & Data Systems*, vol. 102, no. 2, pp. 89–97, Jan. 2002, doi: 10.1108/02635570210419636.
- [10] R. Bose and V. Sugumaran, "Application of knowledge management technology in customer relationship management," *Knowledge and Process Management*, vol. 10, pp. 3–17, Jan. 2003, doi: 10.1002/kpm.163.
- [11] A. R. Zablah, D. N. Bellenger, and W. J. Johnston, "Customer relationship management implementation gaps," *Journal of Personal Selling & Sales Management*, vol. 24, no. 4, pp. 279–295, 2004.
- [12] A. F. Medina, "Opportunities for Foreign Investors in Indonesia's Digital Economy," *ASEAN Briefing*, 2021. <https://www.aseanbriefing.com/news/opportunities-for-foreign-investors-in-indonesias-digital-economy/> (accessed Jan. 25, 2023).
- [13] D. H. Jayani, "Bukan Shopee, Tokopedia Juara E-commerce Terpopuler Kuartal II 2021," *Katadata*, Sep. 17, 2021. <https://databoks.katadata.co.id/datapublish/2021/09/17/bukan-shopee-tokopedia-juara-e-commerce-terpopuler-kuartal-ii-2021> (accessed Jan. 25, 2023).
- [14] M. I. Gomez, E. W. McLaughlin, and D. R. Wittink, "Customer satisfaction and retail sales performance: an empirical investigation," *Journal of retailing*, vol. 80, no. 4, pp. 265–278, 2004.
- [15] W.-H. Kim, J.-L. Cho, and K.-S. Kim, "The relationships of wine promotion, customer satisfaction, and behavioral intention: The moderating roles of customers' gender and age," *Journal of Hospitality and Tourism Management*, vol. 39, pp. 212–218, 2019, doi: <https://doi.org/10.1016/j.jhtm.2019.03.001>.
- [16] K. Seiders, G. B. Voss, D. Grewal, and A. L. Godfrey, "Do satisfied customers buy more? Examining moderating influences in a retailing context," *International Retail and Marketing Review*, vol. 8, no. 1, pp. 38–60, 2012.
- [17] P. Kotler, "Philip Kotler: some of my adventures in marketing," *Journal of Historical Research in Marketing*, vol. 9, no. 2, pp. 203–208, Jan. 2017, doi: 10.1108/JHRM-11-2016-0027.
- [18] A. A. Razaka, M. F. Shamsudin, R. M. Abdul, and Aziz, "The Influence of Atmospheric Experience on Theme Park Tourist's Satisfaction and Loyalty in Malaysia," 2019.
- [19] M. Shamsudin, S. Esa, and A. Ali, "Determinants of customer loyalty towards the hotel industry in Malaysia," *International Journal of Innovation, Creativity and Change*, vol. 6, no. 9, pp. 21–29, 2019.
- [20] A. Haji Ahmad, K. Baharudin, and M. Shamsudin, "Review of Customer Adoption on Mobile Payment," Oct. 2019.
- [21] A. Ali, A. Abu Hassim, and M. F. Shamsudin, "Exploring factors attracting purchase intention of imported automobile among consumers' in Malaysia," *Asia Pacific Journal of Social Science Research-ABRN@ Sia*, vol. 2, no. 1, 2017.
- [22] F. D. Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *MIS Quarterly*, vol. 13, no. 3, pp. 319–340, 1989, doi: 10.2307/249008.
- [23] S. Weerasinghe and M. C. B. Hindagolla, "Technology acceptance model and social network sites (SNS): a selected review of literature," *Global Knowledge, Memory and Communication*, vol. 67, no. 3, pp. 142–153, Jan. 2018, doi: 10.1108/GKMC-09-2017-0079.
- [24] P. B. Seddon, "A respecification and extension of the DeLone and McLean model of IS success," *Information systems research*, vol. 8, no. 3, pp. 240–253, 1997.
- [25] W. H. DeLone and E. R. McLean, "The DeLone and McLean model of information systems success: a ten-year update,"

- Journal of management information systems*, vol. 19, no. 4, pp. 9–30, 2003.
- [26] K. A. Saeed, Y. Hwang, and Y. Y. Mun, “Toward an integrative framework for online consumer behavior research: a meta-analysis approach,” *Journal of Organizational and End User Computing (JOEUC)*, vol. 15, no. 4, pp. 1–26, 2003.
- [24] D. H. McKnight, V. Choudhury, and C. Kacmar, “The impact of initial consumer trust on intentions to transact with a web site: a trust building model,” *The journal of strategic information systems*, vol. 11, no. 3–4, pp. 297–323, 2002.
- [27] B. E. Borenstein, “User Support: Exploring How Mobile Technology Interaction Influences Consumer Wellbeing,” University of Miami, 2021.
- [28] J. Aberg and N. Shahmehri, “An Empirical Study of Human Web Assistants: Implications for User Support in Web Information Systems,” in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 2001, pp. 404–411. doi: 10.1145/365024.365305.
- [30] S. Jun, A. C. Plint, S. M. Campbell, S. Curtis, K. Sabir, and A. S. Newton, “Point-of-care cognitive support technology in emergency departments: a scoping review of technology acceptance by clinicians,” *Academic Emergency Medicine*, vol. 25, no. 5, pp. 494–507, 2018.
- [31] V. Venkatesh, M. G. Morris, G. B. Davis, and F. D. Davis, “User acceptance of information technology: Toward a unified view,” *MIS quarterly*, pp. 425–478, 2003.
- [32] L. Graf-Vlachy, K. Buhtz, and A. König, “Social influence in technology adoption: taking stock and moving forward,” *Management Review Quarterly*, vol. 68, no. 1, pp. 37–76, 2018, doi: 10.1007/s11301-017-0133-3.
- [33] A. D. Beldad and S. M. Hegner, “Expanding the Technology Acceptance Model with the Inclusion of Trust, Social Influence, and Health Valuation to Determine the Predictors of German Users’ Willingness to Continue using a Fitness App: A Structural Equation Modeling Approach,” *Int J Hum Comput Interact*, vol. 34, no. 9, pp. 882–893, Sep. 2018, doi: 10.1080/10447318.2017.1403220.
- [34] J. S. Mtebe and C. Raphael, “Key factors in learners’ satisfaction with the e-learning system at the University of Dar es Salaam, Tanzania,” *Australasian Journal of Educational Technology*, vol. 34, no. 4, 2018.
- [35] A. M. Baabdullah, A. A. Alalwan, N. P. Rana, H. Kizgin, and P. Patil, “Consumer use of mobile banking (M-Banking) in Saudi Arabia: Towards an integrated model,” *Int J Inf Manage*, vol. 44, pp. 38–52, 2019.
- [36] P. Shukla, *Essentials of marketing research*. Bookboon, 2008.
- [37] R. Bougie and U. Sekaran, *Research methods for business: A skill building approach*. John Wiley & Sons, 2019.
- [38] J. F. Hair, W. C. Black, B. J. Babin, R. E. Anderson, W. C. Black, and R. E. Anderson, “Multivariate Data Analysis (Eighth),” *Cengage Learning EMEA*, 2019.
- [39] T. Tiana, B. Sugiharto, and I. Umiyati, “Analysis of System Quality, Information Quality and Perceived Usefulness to User Satisfaction,” *JASS (Journal of Accounting for Sustainable Society)*, vol. 1, no. 01, p. 62, 2019.
- [40] R. Gaardboe, T. Nyvang, and N. Sandalgaard, “Business intelligence success applied to healthcare information systems,” *Procedia Comput Sci*, vol. 121, pp. 483–490, 2017.
- [41] B. F. Hutabarat and others, “Analisis penerimaan pengguna learning management system Menggunakan Model UTAUT,” *JUSS (Jurnal Sains dan Sistem Informasi)*, vol. 3, no. 1, pp. 19–25, 2020.