



## The Effect of Customer Relationship Management and Service Innovation on Customer Loyalty Through Customer Satisfaction Case Study: PT. Sayap Mas Utama

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**Abstract:** With customer satisfaction acting as a crucial mediating variable, this study attempts to learn a great deal about CRM variables and service innovation at PT. Sayap Mas Utama in order to promote customer loyalty. Our study's focus is at Sayap Mas Utama, PT. This research employs a survey methodology and a quantitative approach, incorporating participants from a range of industrial sectors. Questionnaires that have been verified for validity and reliability were used to gather data. Multiple regression approaches and path analysis were employed in the data analysis process to examine the direct and indirect correlations between the variables under investigation. The results showed that CRM and service innovation have a significant positive effect on customer satisfaction. In addition, customer satisfaction, as a mediating variable, is proven to play a key role in the relationship between CRM and customer loyalty and between service innovation and customer loyalty. This study concludes that to increase customer loyalty, companies need to focus on two main things, namely, building strong relationships with customers through CRM and continuing to innovate in the services offered. Customer satisfaction is the key to achieving these goals.

**Keywords:** Customer Relationship Management, Service Innovation, Customer Satisfaction, Customer Loyalty, Strategy

### INTRODUCTION

In the current era of globalization, maintaining customer loyalty is not just a challenge, but a strategic imperative for companies. Customer loyalty not only contributes to improved financial performance, but also builds sustainable relationships. One strategic approach that has proven effective in achieving this goal is the implementation of customer relationship management (CRM). According to Muhari (2012) that customers are loyal or not seen from the consistency of their purchasing behavior towards a brand. (Gultom et al., 2020)

Customer relationship management (CRM) is a strategic approach aiming to build and maintain strong relationships with customers by deeply understanding their needs and preferences. Effective customer relationship management (CRM) implementation, accompanied by innovative services, allows companies to provide a more personalized customer experience and additional value, thereby increasing customer satisfaction and loyalty. Customer Relationship Management is a management strategy management strategy that discusses handling the relationship between the school and parents, or in other words Customer Relationship Management changes the philosophical view of educational institutions that used to be service-oriented only but now educational institutions must also pay attention to consumers (customer focused) (Kumalasari, 2013). (Kusumawati, 2021)

Customer satisfaction is not just a key factor, but the linchpin that links CRM and service innovation to customer loyalty. Satisfied customers tend to have a close relationship with the company and are more likely to remain loyal and recommend the company to others. Therefore, an in-depth understanding of how CRM and service innovation affect customer satisfaction and loyalty is not just essential, but pivotal for companies that want to remain competitive in the market. This study aims to explore the influence of CRM and service innovation on customer loyalty by considering the mediating role of customer satisfaction. By knowing the relationship between these variables, companies can formulate more effective strategies to increase customer satisfaction and loyalty, which in turn can support sustainable business growth. According to Kotler in Tjiptono (Tjiptono, 2011) states that in measuring customer satisfaction there are four methods, namely: (1) Complaints and suggestions system, (2) Customer satisfaction surveys, (3) Ghost shopping, and (4) Lost customer analysis. Customer satisfaction has been widely researched by previous researchers including Al Rasyid, Harun. (2017), Rinaldi, Edza, Sumarwan, Ujang, and Yulianti, Lilik N. (2012), Sahabuddin, Romansyah. (2019), Zakaria et al (2014), Noyan, Fatma & Simsek, Gulhayat. (2011), Ozatac et al (2014). (Sambodo Rio Sasongko, 2021)

## Literature Review

### Customer Relationship Management (CRM)

"CRM is a core strategy in business that integrates internal processes and functions with all external networks to create and realize value for target consumers profitably," states Buttle (2007: 48) in his definition. In the meantime, Temporal and Troot (2002: 7) contend that "CRM is fundamentally a partnership with every customer who can establish a circumstance that benefits both parties (win-win scenario). (Fauzi, Anatasha Onna Carissa Achmad, 2014)

According to Lin, Chen, and Chiu (2009), in their journal entitled *Customer Relationship Management and Innovation Capability: An Empirical Study*, the definition of CRM is as follows: "CRM is defined as a producer's activity to understand customer needs and increase customer satisfaction. A customer-centered approach is an important success factor for businesses. A good CRM strategy can increase sales by improving customer relationships, thereby increasing customer loyalty". (Oktariana et al., 2012)

Customer Relationship Management (CRM), according to Newell, cited by *terapibisnis.com* (2009), is treating customers properly, modifying and learning from every interaction, and strengthening the bond between customers and businesses. Customer Relationship Management (CRM) is defined by Gordon (2002) as "a series of strategies and processes that create new and mutual value for individual customers, build preference for their organizations, and improve business results over a lifetime of association with their Customers." Kotler and Keller (2009) define CRM as the process of managing detailed information about each customer and carefully managing all customer "touch points" to maximize customer loyalty. According to Gordon (2002), there are four primary strategic capabilities in CRM: technology (the technology that underpins CRM); people (the

competencies, aptitudes, and dispositions of those managing CRM); processes (the methods by which businesses access and engage with customers to generate new value and satisfaction); and knowledge and understanding (the strategies by which companies add value to consumer data to obtain the knowledge and experience required to deepen a relationship). (Cristea & Mocuta, 2018)

Each business unit strives to maintain good relationships with customers as a strategy to build performance and competitiveness. In order to do that, Customer Relationship Management with customers or Customer Relationship Management (CRM), including Customer Relationship Management port management with service providers land transportation service providers, namely the process of building and maintaining good relationships with customers through the delivery of value and high satisfaction for customers, with indicators: service delivery service delivery, fulfillment of individual customer needs and and wants of customers individually, and partnership programs (Sheth, Parvatiyar and Shainesh, 2009).

### **Service Innovation**

Changkaew et al. (2012) define service innovation as the facilities offered, new ways of working adopted by the company, and the use of old technology provided to buyers to satisfy their needs. The technology utilized in the following developments streamlines the facilities offered to buyers. On the other hand, according to Delafrooz et al. (2013), service renewal is a new activity that creates new services, practices, or processes by adding value to the services they provide. Corporate innovation develops company performance. (Prasetya et al., 2022)

Innovation is the introduction of new things, inventions that differ from those already in use or previously known (ideas, processes, or instruments). Novel approaches to work organization, known as organizational innovation, are used within a company to foster and advance a competitive edge. The core of organizational innovation is the necessity to modify or enhance a suitable procedure or service (Dhewanto et al., 2014). Innovation is defined as using new ideas to produce products, processes, and services rather than just being restricted to building and updating (Indradewa et al., 2015). (Qomariah et al., 2023)

Service innovation (IL) is interpreted as the extent to which MSMEs achieve a competitive advantage based on service innovation (Storey et al., 2016), which is why many people call IL a development strategy that is considered necessary for the sustainability of many people in managing companies (Zhang et al., 2018). IL mainly refers to changes in service characteristics. The core procedure for the sustainability of a development company is to create value from the company's assets by recreating or improving products, services, or methods in an innovative way to develop and maintain its competitive advantage by integrating the company's resources. Service innovation encourages companies to turn environmental changes into opportunities (Hsieh & Chou, 2018). (Yulianto & Hasan, 2019)

### **Customer Satisfaction**

According to Gounaris, Dimitriadis, and Stathakopoulos (2010), customer satisfaction is a "post-consumption" feeling that results directly from cognitive assessments of prior experiences. Buyers will feel assured and satisfied if their expectations are fulfilled. Customer evaluation of a product, including whether it makes them happy or unhappy, is also related to satisfaction (Moliner et al., 2007). In the highly competitive world of e-commerce, shoppers' perceptions of their experiences as pleasant and satisfying are seen as critical factors in establishing and preserving long-term relationships with brands (Omar, 2009; Ong & Lin, 2013). Numerous research works (e.g., Gounaris et al., 2010; Omar, 2009; Zhang et al., 2011) have confirmed how loyalty, trust, and satisfaction interact regarding online purchasing and selling. When a customer is satisfied, they are more likely to believe that they will receive the same level of service or product in the future. According to Mosavi and

Ghaedi (2012), loyalty is positively impacted by overall consumer satisfaction with the online shopping experience. "A person's feeling of pleasure or disappointment resulting from comparing the perceived performance (or results) of a product with expectations" is what Kotler and Keller (2016) define as satisfaction. When performance meets expectations, customers will be happy (Kotler & Keller, 2016). Consumers are more satisfied when they receive superior service (Kotler & Keller, 2016). However, discontent will surface when performance falls short of the client's expectations (Kotler & Keller, 2016). (Rafiah, 2019)

When a customer is satisfied, the business and the customer can have a positive relationship; the customer will make more purchases until they become loyal, and the customer will spread the word about the business, all of which are advantageous (Tjiptono, 2014). (Abdul Gofur, 2019)

Happy customers are anticipated to use the product occasionally. According to Kotler (2009), customer satisfaction is a multifaceted notion encompassing several variables such as products, costs, facilities, technical aspects, interpersonal aspects, and ultimate results. (Familiar & Ida, 2015)

This is in accordance with research conducted by Maylina, (2003); Widyaningtyas, (2010a), with satisfaction having a significant positive influence on brand loyalty in consumers.

### **Customer Loyalty**

In its literal sense, loyalty refers to a person's allegiance to an object. According to Mowen and Minor (1998), brand loyalty is when consumers regard a brand favorably, are devoted to it, and plan to keep buying from it. Loyal customers consistently utilize a particular brand (Dharmmesta, 1999). This implies that a customer's preferences and purchases are constantly connected to loyalty. (Mardalis, 2005)

According to Kotler, Hayes, and Bloom (2002), there are six reasons why a business needs its patrons' loyalty. First, the institution will gain a lot from having devoted consumers since they are more likely to become new ones. Second, keeping and retaining current consumers is far less expensive than bringing in new ones. Third, clients who have faith in the organization in one area will do so in other areas as well. Fourth: If the establishment has many devoted patrons, its running expenses will be effective. Fifth: Because returning consumers have had many incredible encounters with the establishment, institutions can lower their psychological and social expenses. Sixth: devoted patrons will constantly defend the establishment and even try to draw in new clients and offer advice to others. (Mardalis, 2005)

Loyal consumers will consistently use goods or services from the same business. In addition to providing a solid foundation for the company, loyalty indicates its potential for future expansion (Widyawati, 2008). Muhari (2012) asserts that the consistency of a consumer's purchase behavior toward a brand indicates whether or not the customer is loyal. (Gultom et al., 2020)

According to Peter and Olson (2000: 162), brand loyalty motivates engaging in and making additional purchases. According to Mowen and Minor (2002: 108), a customer's brand loyalty is determined by how well they feel about a brand, how committed they are to it, and how likely they are to purchase it. (Satryawati, 2018)

### **Conceptual Framework**

#### **H1: Customer Relationship Management has a positive and significant impact on Customer Satisfaction**

Customer Relationship Management on Customer Satisfaction is 0.517, T statistic 3.892 is more significant than 1.96, p-value 0.000 <0.05, then it is declared accepted. This research is in line with Zineldin (2005) and Lin, Chen and Chiu (2009) that CRM will improve relationships with customers in the sense of increased customer satisfaction. The

cause of this increase can be something tangible or intangible, while in Lin, Chen and Chiu (2009) the role of CRM in terms of technology is a factor that contributes a lot to increasing innovations that can improve relationships with customers. In the research on the relationship between CRM and Customer Satisfaction of PT Sayap Mas Utama, it was found that the factor of computerization of data collection and online product socialization contributed significantly to increasing Customer Satisfaction. It's just that the role of technology does not occupy a dominant factor in Customer Satisfaction. (Oktariana et al., 2012)

## **H2: Service Innovation has a positive and significant impact on Customer Satisfaction**

Customer Satisfaction through Service Innovation p value  $0.006 < 0.05$ , T statistic 2.752 greater than 1.96, and a result of 0.322, the outcome is accepted. This it can be concluded that the service innovation carried out by PT Sayap Mas Utama can increase visitor satisfaction. Therefore, service innovation must continue so that visitors feel satisfied. This study has significant similarities in results with previous research conducted (Rahman, 2019) which states that innovation has a significant effect on satisfaction. (Qomariah et al., 2023)

## **H3: Customer Satisfaction has a positive and significant impact on Customer Loyalty**

Customer Satisfaction on Customer Loyalty is 0.549, the T statistic 4.537 is better than 1.96, and the p-value is  $0.000 < 0.05$ , so it is accepted. Satisfaction with customer loyalty in this study has 3 indicators, namely the choice to use this service is a wise thing, I think that I am doing the right thing when using this service, and this facility is the right and satisfying choice. This research is in line with Jahanshahi et al (2011), which shows that customer satisfaction has a positive and significant effect on loyalty, this proves that customers who are loyal to the company always pay attention to their satisfaction. (Familiar & Ida, 2015)

## **H4: Customer Relationship Management has a non-positive and insignificant impact on Customer Loyalty**

Customer Relationship Management on Customer Loyalty is 0.067, the T statistic 0.450 is smaller than 1.96, and the p-value is  $0.663 > 0.05$ , so it is not accepted.

## **H5: Service Innovation has a positive and significant impact on Customer Loyalty**

Service Innovation on Customer Loyalty is 0.313, T statistic 2.669 is more significant than 1.96, p-value  $0.008 < 0.05$ , then the result is declared accepted. Hal ini didukung oleh hasil penelitian Dachyar & Fatkhurrohman (2011) membuktikan bahwa inovasi berpengaruh positif terhadap loyalitas pelanggan. Pernyataan yang sama juga disampaikan oleh Hu & Huang (2011) yang menyatakan bahwa inovasi berpengaruh positif terhadap loyalitas pelanggan, perusahaan dapat memperkuat loyalitas pelanggan melalui layanan yang unik sehingga dapat memenuhi kebutuhan pelanggannya. (Familiar & Ida, 2015)

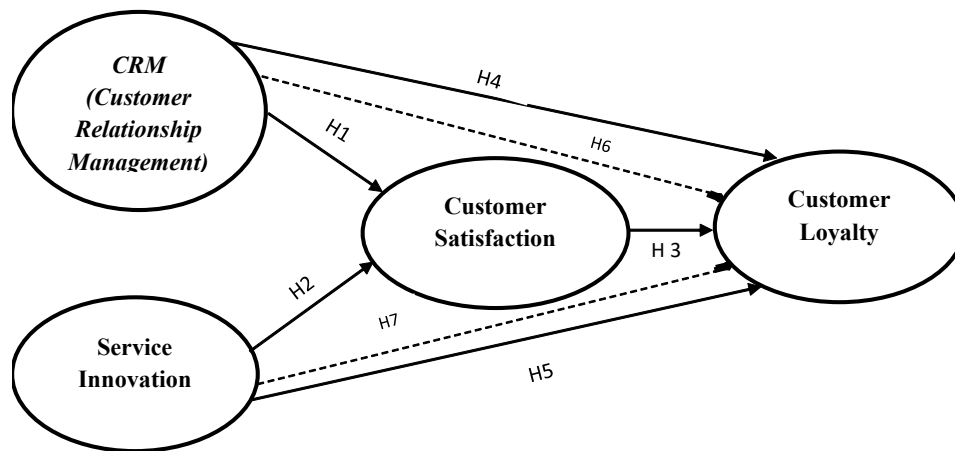
## **H6: There is a negative influence between CRM on Customer Loyalty**

The value of the indirect effect obtained by the CRM variable on Customer Loyalty through customer satisfaction with a T-statistic of  $3.224 > 1.96$  and a P-value of  $0.001 < 0.05$ , customer relationship management also indirectly impacts customer loyalty through the mediation of customer satisfaction.

## **H7: There is a positive influence between Service Innovation on Customer Loyalty**

The value of the indirect effect by the Service Innovation variable on Customer Loyalty through customer satisfaction. As can be observed from the above table, service innovation influences customer happiness, which in turn influences customer loyalty indirectly (T-Statistic value:  $2.172 > 1.96$ , P-Value:  $0.030 < 0.05$ ).

The conceptual framework is critical in this research. It will be the basis for determining how the variables affect each other.



**Fig 1. Conceptual Framework**  
(Source: processed by the author)

**HYPOTHESIS**

- H1: It is believed that customer satisfaction is a result of customer relationship management.
- H2: Customer satisfaction is believed to be a result of service innovation.
- H3: Customer satisfaction is believed to influence customer loyalty development positively.
- H4: The development of customer loyalty is believed to be positively impacted by customer relationship management.
- H5: It is believed that service innovation fosters the development of customer loyalty.
- H6: With customer pleasure acting as a mediating variable, customer loyalty is assumed to benefit from customer relationship management.
- H7: Customer happiness mediates between service innovation and customer loyalty.

**METHOD**

**Research Design**

This study, which uses customer satisfaction factors as mediation at PT Sayap Mas Utama, intends to ascertain the impact of customer relationship management and service innovation on customer loyalty based on Figure 1 above. This study design employs a quantitative methodology that verifies hypotheses using reliable statistical data. By utilizing non-probability sampling approaches and delivering questionnaires to PT Sayap Mas Utama clients, the sampling strategy intends to collect data from 120 respondents. The relationship between the independent variable (customer relationship management, service innovation) and the dependent variables (customer satisfaction and loyalty) is tested using the Structural Equation Modeling-Partial Least Square (SEM-PLS) technique. This study computation employs a quantitative methodology aided by the Smart PLS version 4.0 software. Respondents were asked to use a Likert scale of 1 to 5, with "Strongly Disagree" to "Strongly Agree," to score each item according to their own experiences.

**Tabel 1. Indicator**

Variable	Indicator	Statement	Source
Customer Relationship Management (CRM) (X1)	1. Information Technology 2. Use of customer database	1. PT Sayap Mas Utama uses sophisticated	(Cristea & Mocuta, 2018)

	<p>application</p> <ol style="list-style-type: none"><li>3. Professionalism</li><li>4. Service</li><li>5. Relationship</li><li>6. Sales Process</li><li>7. After Sales Process</li><li>8. Knowledge of the customer</li></ol>	<p>information technology to manage customer relationships.</p> <ol style="list-style-type: none"><li>2. The customer database application used by PT. Sayap Mas Utama makes it easy for me to interact with PT. Sayap Mas Utama.</li><li>3. The staff of PT. Sayap Mas Utama shows high professionalism in every interaction with customers.</li><li>4. I feel satisfied with the services provided by PT. Sayap Mas Utama.</li><li>5. PT. Sayap Mas Utama maintains excellent and sustainable relationships with its customers.</li><li>6. The sales process at PT. Sayap Mas Utama is easy and efficient.</li><li>7. The after-sales service</li></ol>	
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		<p>provided by PT. Sayap Mas Utama is very satisfying.</p> <p>8. PT. Sayap Mas Utama has good knowledge of customer needs and preferences .</p>	
Service Innovation (X2)	<ol style="list-style-type: none"> <li>1. Neighborhood level</li> <li>2. Organizational level</li> <li>3. Innovation level</li> </ol>	<ol style="list-style-type: none"> <li>1. The resources available at PT Sayap Mas Utama's workplace are sufficient to develop service innovation.</li> <li>2. The culture at the PT. Sayap Mas Utama organization encourages each individual to innovate in service.</li> <li>3. The service process in the workplace of PT. Sayap Mas Utama is continuously improved and enhanced.</li> </ol>	(Qomariah et al., 2023)
Customer Satisfaction (Z)	<ol style="list-style-type: none"> <li>1. Quality of the product</li> <li>2. Cost</li> <li>3. Quality of service</li> <li>4. Emotional aspects</li> </ol>	<ol style="list-style-type: none"> <li>1. The products offered by this company are of consistent quality.</li> <li>2. The price of the products I</li> </ol>	(Abdul Gofur, 2019)

	5. Practicality Irawan (2008)	<p>buy depends on the quality I receive.</p> <ol style="list-style-type: none"> <li>3. The service I received during the purchase process was beneficial and friendly.</li> <li>4. I feel comfortable shopping at this company.</li> <li>5. Information about products and services is easy to find and understand.</li> </ol>	
Customer Loyalty (Y)	<ol style="list-style-type: none"> <li>1. Repurchase</li> <li>2. Making cross-line purchases of goods and services</li> <li>3. Making mention to others</li> <li>4. Exhibit resistance to pulls from competitors</li> </ol>	<ol style="list-style-type: none"> <li>1. I plan to buy products/services from PT. Sayap Mas Utama again in the future</li> <li>2. I buy products/services from other companies offered by this company.</li> <li>3. I recommend this company's products/services to my friends and family.</li> <li>4. I am not interested in switching to products/services from competitors, even if they laugh at promotions or discounts.</li> </ol>	(Cristea & Mocuta, 2018)

Source: Processed by author

## RESULT AND DISCUSSION

### Validity and Reability Testing

**Table 2. Square Root of AVE and Corellation Between Variable**

Variable	AVE
Customer Relationship Management	0.614
Service Innovation	0.732
Customer Satisfaction	0.637
Customer Loyalty	0.662

Source: Processed Data (Smart PLS 4.0)

All of the variables are deemed genuine since, as seen from the data table above, the Average Variance Extracted value for each variable question is more significant than 0.5. This indicates that every variable can be used in this research.

### Reliability Testing

**Table 3. Reliability Indicator**

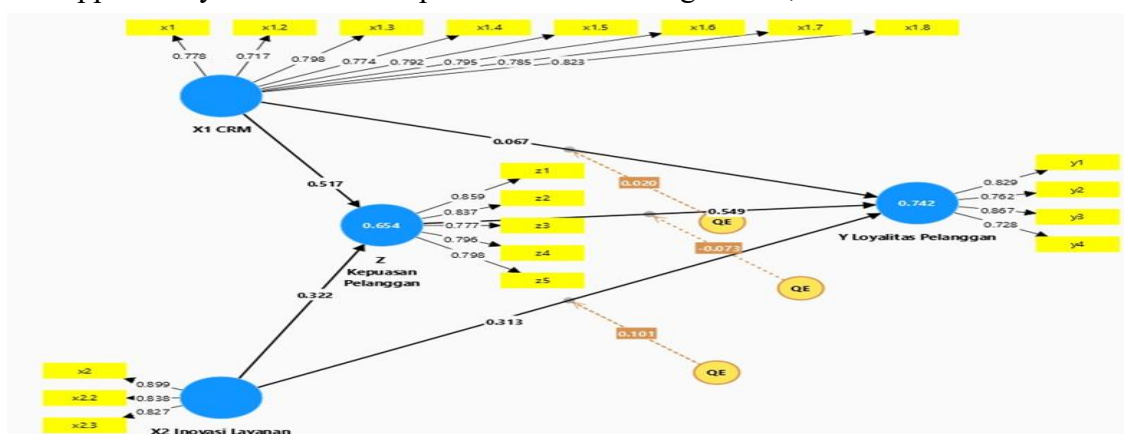
Variable	Composite Reliability	Cronbach's Alpha	Result
Customer Relationship Management	0.927	0.910	Reliable
Service Innovation	0.891	0.816	Reliable
Customer Satisfaction	0.875	0.811	Reliable
Customer Loyalty	0.907	0.872	Reliable

Source: Processed Data (Smart PLS 4.0)

The table above indicates that each variable measured has Composite Reliability and Cronbach's Alpha values greater than 0.7. Furthermore, to evaluate the relationship between constructs, a structural test analysis is conducted, which produces an R-Square value for each equation (Hair et al., 2019). This, there are good reliability values for each research variable. Each dimension's loading factor value has a loading factor value of at least 0.70, according to the validity test in the table. These findings indicate that it satisfies the requirements for convergent validity.

### Validity Testing

Tests supported by Smart PLS 4.0 provide the following results;



**Figure 2. PLS Algorithm Results**

Source: processed by the author

Based on figure 2 above shows that Customer Relationship Management has a direct effect on Customer Satisfaction with a value of 0.517, Service Innovation has a direct effect on Customer Satisfaction with a value of 0.322, Customer Satisfaction has a direct effect on Customer Loyalty with a value of 0.549, Customer Relationship Management has an effect on Customer Loyalty with several 0.067, and finally Service Innovation affects Customer Loyalty with several 0.313.

**Discriminant Validity**

**Table 4. Cross Loading**

	X1 CRM	X2 Service Innovation	Y Customer Loyalty	Z Customer Satisfaction	QE(X1 CRM)	QE(Z Customer Satisfaction)	QE(X2 Service Innovation)
x1	0.778	0.723	0.578	0.603	-0.469	-0.424	-0.487
x1.2	0.717	0.529	0.511	0.510	-0.327	-0.323	-0.286
x1.3	0.798	0.685	0.542	0.628	-0.410	-0.370	-0.416
x1.4	0.774	0.687	0.581	0.623	-0.485	-0.485	-0.462
x1.5	0.792	0.642	0.557	0.649	-0.505	-0.535	-0.493
x1.6	0.795	0.675	0.580	0.670	-0.536	-0.476	-0.492
x1.7	0.785	0.647	0.578	0.620	-0.418	-0.375	-0.442
x1.8	0.823	0.714	0.642	0.636	-0.488	-0.445	-0.498
x2	0.751	0.899	0.696	0.680	-0.414	-0.379	-0.406
x2.2	0.758	0.838	0.622	0.621	-0.452	-0.389	-0.446
x2.3	0.669	0.827	0.615	0.649	-0.469	-0.462	-0.444
y1	0.625	0.622	0.829	0.795	-0.376	-0.501	-0.360
y2	0.452	0.559	0.762	0.519	-0.238	-0.304	-0.194
y3	0.697	0.673	0.867	0.756	-0.390	-0.448	-0.391
y4	0.522	0.545	0.728	0.528	-0.240	-0.316	-0.219
z1	0.646	0.606	0.760	0.859	-0.408	-0.511	-0.414
z2	0.687	0.609	0.657	0.837	-0.486	-0.562	-0.494
z3	0.611	0.641	0.653	0.777	-0.363	-0.434	-0.373
z4	0.625	0.631	0.622	0.796	-0.388	-0.479	-0.372
z5	0.647	0.612	0.688	0.798	-0.365	-0.453	-0.339
QE (X1 CRM)	-0.584	-0.519	-0.401	-0.494	1.000	0.851	0.954
QE(Z Customer Satisfaction)	-0.550	-0.478	-0.504	-0.600	0.851	1.000	0.804
QE(X2 Service Innovation)	-0.575	-0.504	-0.379	-0.490	0.954	0.804	1.000

Source: Processed Data (Smart PLS 4.0)

The above table shows an average of greater than 0.7 for every item. This indicates that every tool employed in the research satisfies the requirements for discriminant validity.

**Direct Effect**

**Table 5. Direct Effect**

	Original sample (O)	T Statistics	P Values	F Square	Result

<b>X1 CRM -&gt; Y Customer Loyalty</b>	0.067	0,450	0.663	0.004	Not Accepted
<b>X1 CRM -&gt; Z Customer Satisfaction</b>	0,517	3,892	0.000	0.217	Accepted
<b>X2 Service Innovation - &gt; Y Customer Loyalty</b>	0,313	2,669	0.008	0.095	Accepted
<b>X2 Service Innovation - &gt; Z Customer Satisfaction</b>	0,322	2,752	0.006	0.084	Accepted
<b>Z Customer Satisfaction -&gt; Y Customer Loyalty</b>	0.549	4,537	0.000	0.315	Accepted

Source: Processed Data (Smart PLS 4.0)

It is possible to state that the Hypothesis Test employs a significance level value of 0.05 or 5% based on the direct effect analysis. The hypothesis is accepted if the P value is less than 0.05 and the T statistic is more significant than 1.96. The results of the bootstrapping hypothesis test in the SmartPLS application, shown in Table 5 above, demonstrate this.

According to Table 5 above, the statistical T value and T table are used in this study's hypothesis testing; if the statistical T value obtained is more than the T table, the hypothesis is supported (accepted). Customer Relationship Management on Customer Satisfaction is 0.517, T statistic 3.892 is more significant than 1.96, p-value 0.000 <0.05, then it is declared accepted; Service Innovation on Customer Loyalty is 0.313, T statistic 2.669 is more significant than 1.96, p-value 0.008 <0.05, then the result is declared accepted. Alternatively, it can be stated that Customer Relationship Management on Customer Loyalty is 0.067, the T statistic 0.450 is smaller than 1.96, and the p-value is 0.663 > 0.05, so it is not accepted. Next, Customer Satisfaction through Service Innovation p value 0.006 <0.05, T statistic 2.752 greater than 1.96, and a result of 0.322, the outcome is accepted. Lastly, it can be deemed acceptable if Customer Satisfaction on Customer Loyalty is 0.549, the T statistic 4.537 is better than 1.96, and the p-value is 0.000 <0.05.

**Indirect Effect**

**Table 6. Indirect Effect**

<b>Effect</b>	<b>Original sample (O)</b>	<b>T Statistic</b>	<b>P Value</b>	<b>Upsilon V</b>	<b>Result</b>
<b>X1 CRM -&gt; Z Customer Satisfaction -&gt; Y Customer Loyalty</b>	0.284	3.224	0.001	0.000	Accepted
<b>X2 Service Innovation -&gt; Z Customer Satisfaction -&gt; Y Customer Loyalty</b>	0.176	2.172	0.030	0.041	Accepted

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Source: Processed Data (Smart PLS 4.0)

As can be observed from the above table, service innovation influences customer happiness, which in turn influences customer loyalty indirectly (T-Statistic value: 2.172 > 1.96, P-Value: 0.030 < 0.05). Then, with a T-statistic of 3.224 > 1.96 and a P-value of 0.001 < 0.05, customer relationship management also indirectly impacts customer loyalty through the mediation of customer satisfaction.

**Model Fit**

**R Square and Q Square**

**Table 7. R square and Q square**

Variable	R <sup>2</sup>	Q <sup>2</sup>
Customer Loyalty	0,742	0.548
Customer Satisfaction	0,654	0.628

Source: Processed Data (Smart PLS 4.0)

Table 7 shows that the customer loyalty's R Square and Q Square values are 0.742, 74.2%, and 0.548, or 54.8%, respectively. This demonstrates the extent to which customer loyalty has an impact. However, the customer satisfaction R Square and Q Square values of 0.654, or 65.4%, and 0.628, or 62.8%, respectively, further demonstrate the extent of the impact provided by customer loyalty, service innovation, and customer relationship management.

**SRMR (Standardized Root Mean Square Residual)**

**Table 8. SRMR**

	Saturated model	Estimated model
SRMR	0.072	0.072

Source: Processed Data (Smart PLS 4.0)

According to Karin Schmelleg et al. (Andria et al., 2023), the SRMR value is between 0.08 and 0.10. The structural equation model has met the suitability requirements and is predictive. The PLS algorithm can calculate the average value of variation in variable changes in the model.

**Linearity Test**

**Table 9. Linearity Test**

Squared Effect	Path coefficient	P-value	Description
Customer Relationship Management → Customer Loyalty	0.020	0.852	Linearity fulfilled
Customer Satisfaction → Customer Loyalty	-0.073	0.269	Linearity fulfilled
Service Innovation → Customer Loyalty	-0.101	0.346	Linearity fulfilled

Source: Processed Data (Smart PLS 4.0)

The purpose of the Linearity Test in the above table is to ascertain whether or not there is a linear relationship between the independent and dependent variables. This test aims to ascertain whether or not the variables are situated in a straight line. According to the processing results, the system effect of customer relationship management and service innovation on customer satisfaction is not significant; therefore, the relationship between

customer loyalty, service innovation, and customer satisfaction is linear or follows a straight line.

## CONCLUSION

Berdasarkan dari judul penelitian, pokok permasalahan, tujuan penelitian, hipotesis, hasil penelitian dan pembahasan maka dapat diambil kesimpulan dari penelitian ini adalah sebagai berikut:

1. The first hypothesis states that Customer Relationship Management (CRM) has a positive and significant effect on customer satisfaction of PT. Sayap Mas Utama can be accepted. This means that there is an influence between the application of CRM on customer satisfaction of PT. Sayap Mas Utama. Therefore, if the application of CRM by the management of PT. Sayap Mas Utama is developed and maximized both at the operational level and in the management aspect of PT. Sayap Mas Utama, it will further increase customer satisfaction.
2. The second hypothesis states that Service Innovation has a positive and significant effect on customer satisfaction at PT. Sayap Mas Utama can be accepted. This means that there is an influence from the implementation of Service Innovation on customer satisfaction at PT. Sayap Mas Utama. The better the implementation of Service Innovation from PT. Sayap Mas Utama, the more customer satisfaction will increase from customers of PT. Sayap Mas Utama.
3. The third hypothesis states that Customer Satisfaction has a positive and significant effect on Customer Loyalty and this can be accepted. This means that there is an influence from customer decisions on customer loyalty of PT. Sayap Mas Utama. So the more satisfaction felt by customers increases, the more loyalty from customers of PT. Sayap Mas Utama.
4. The fourth hypothesis states that Customer Relationship Management (CRM) has no effect and is not significant on customer loyalty. This means that there is no influence from CRM on customer loyalty. Therefore, even though we organize how to maintain relationships with customers as well as possible, it does not affect customers to be loyal to PT Sayap Mas Utama. However, in the database the influence of CRM and customer loyalty is almost close to the level of influence. It is certain that at any time CRM will affect Customer Loyalty if CRM can be improved.
5. The fifth hypothesis states that Service Innovation on Customer Loyalty has a positive and significant effect. This means that there is an influence from the application of Service Innovation on customer satisfaction. The more we innovate in service, the more customer loyalty will increase.
6. The sixth hypothesis states that Customer Relationship Management (CRM) has a positive and significant effect on customer loyalty through customer satisfaction is acceptable. This means that there is an influence from the implementation of CRM on customer loyalty through customer satisfaction felt by customers of PT. Sayap Mas Utama. The better the implementation of CRM from PT. Sayap Mas Utama and customer satisfaction from PT. Sayap Mas Utama, the more the loyalty of PT. Sayap Mas Utama customers will increase.
7. The seventh hypothesis states that Service Innovation has a positive and significant effect on customer loyalty through customer satisfaction can be accepted. This means that there is an influence from the implementation of Service Innovation on customer loyalty through customer satisfaction felt by customers of PT. Sayap Mas Utama. The more we innovate in service, the satisfaction will be seen by customers of PT. Sayap Mas Utama and customer loyalty will go hand in hand with customer satisfaction.

## Implication

This study demonstrates that constant communication with clients via digital channels is also highly valued. Customer relationship management (CRM) was successfully implemented on digital platforms, assisting PT—Sayap Mas Utama in retaining customers and raising their lifetime value. In order to stay competitive in a market that is becoming increasingly digital, PT Sayap Mas Utama can use the study's findings as input to increase the creation of an integrated and data-driven digital marketing strategy. Investing in cutting-edge marketing technologies and providing staff with data analysis training is essential.

## Research Limitation

This study has several limitations that can be used as a reference for further research to produce better research, namely:

1. This research was conducted by distributing questionnaires to PT users. Sayap Mas Utama products and services.
2. This study only uses 120 respondents who have been users and customers of PT. Sayap Mas Utama products.
3. This study uses nonprobability sampling techniques.

## REFERENCES

- Abdul Gofur. (2019). 1. Pengaruh Kualitas Pelayanan Dan Harga Terhadap. *Jurnal Riset Manajemen Dan Bisnis (JRMB) Fakultas Ekonomi UNIAT*, 4(1), 37–44.
- Cristea, I. G., & Mocuta, D. (2018). Customer relationship management. *Proceedings of the 31st International Business Information Management Association Conference, IBIMA 2018: Innovation Management and Education Excellence through Vision 2020*, 10(3), 2557–2565. [https://doi.org/10.1007/978-3-658-19532-8\\_20](https://doi.org/10.1007/978-3-658-19532-8_20)
- Familiar, K., & Ida, M. (2015). Pengaruh Kualitas Produk Dan Kualitas Pelayanan Terhadap Loyalitas Pelanggan Melalui Kepuasan Pelanggan. *Management Analysis Journal*, 4(loyalitas pelanggan, kualitas pelayanan, kualitas produk), 2252–6552.
- Fauzi, Anatasha Onna Carissa Achmad, S. K. (2014). PENERAPAN CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SEBAGAI UPAYA UNTUK MENINGKATKAN LOYALITAS PELANGGAN (Studi Kasus pada Bandung Sport Distro Malang). *Jurnal Administrasi Bisnis (JAB)*, 15(1), 1–11. <http://repository.ub.ac.id/id/eprint/115746>
- Gultom, D. K., Arif, M., & Muhammad Fahmi. (2020). Determinasi Kepuasan Pelanggan Terhadap Loyalitas Pelanggan Melalui Kepercayaan. *Determinasi Kepuasan Pelanggan Terhadap Loyalitas Pelanggan Melalui Kepercayaan*, 3(2), 273–282. <http://jurnal.umsu.ac.id/index.php/MANEGGIO>
- Kusumawati, E. (2021). Implementasi Customer Relationship Management ..... Erna Kusumawati 2. *Jurnal ALTASIA E-ISSN: 2655-965X, ISSN: 2655-965X*, 3(1), 1–8.
- Mardalis, A. (2005). Meraih Loyalitas Pelanggan. *Jurnal Manajemen Dan Bisnis BENEFIT*, 9(2), 111 – 119. <https://doi.org/10.1007/s13398-014-0173-7.2>
- Oktariana, Y., Fauzi, A., & Kumadji, S. (2012). Faktor-Faktor Customer Relationship Management (Manajemen Hubungan Pelanggan) Dalam Mewujudkan Kepuasan Anggota Dan Dampaknya Terhadap Loyalitas Anggota (Survey Pada Anggota Koperasi Nusantara Cabang Malang di Kantor Pos Besar Malang). *Jurnal*, 6(2), 149–162. <https://profit.ub.ac.id/index.php/profit/article/download/250/556>
- Prasetya, V. A., Widayanto, W., & Waloejo, H. D. (2022). Pengaruh Kualitas Pelayanan dan Inovasi Layanan terhadap Kepuasan Pelanggan PT PLN (Persero) Kota Semarang. *Jurnal Ilmu Administrasi Bisnis*, 11(4), 694–700. <https://doi.org/10.14710/jiab.2022.35998>

- Qomariah, N., Sarwito, S., Sanosra, A., & Thamrin, M. (2023). Peran Kualitas Layanan, Inovasi dan Kepercayaan dalam Meningkatkan Kepuasan Pengunjung Lapas Kelas IIB. *BUDGETING: Journal of Business, Management and Accounting*, 4(2), 204–217. <https://doi.org/10.31539/budgeting.v4i2.5538>
- Rafiah, K. K. (2019). Analisis Pengaruh Kepuasan Pelanggan dan Kepercayaan Pelanggan terhadap Loyalitas Pelanggan dalam Berbelanja melalui E-commerce di Indonesia. *Al Tijarah*, 5(1), 46. <https://doi.org/10.21111/tijarah.v5i1.3621>
- Sambodo Rio Sasongko. (2021). Faktor-Faktor Kepuasan Pelanggan Dan Loyalitas Pelanggan (Literature Review Manajemen Pemasaran). *Jurnal Ilmu Manajemen Terapan*, 3(1), 104–114. <https://doi.org/10.31933/jimt.v3i1.707>
- Saribanon, E., Manajemen, S. T., Trisakti, T., Sitanggang, R., Manajemen, S. T., & Trisakti, T. (2016). Kepuasan Pengguna Jasa Transportasi the Satisfaction of Transportation ' S. 03(03), 317–326.
- Satryawati, E. (2018). Pengaruh Kepercayaan Dan Kepuasan Terhadap Loyalitas Pelanggan E- Commerce. *Jurnal Teknologi Informatika Dan Komputer*, 4(1), 36–52. <https://doi.org/10.37012/jtik.v4i1.284>
- Yulianto, G., & Hasan, A. (2019). Pengaruh Orientasi Pasar, Konsumen, Merek, Dan Inovasi Layanan Terhadap Kinerja Umkm Di Yogyakarta. *Media Wisata*, 17(1), 11–24. <https://doi.org/10.36276/mws/v17i1>