# Analysis of Learning and Growth, Business Processes, Costs and Service Innovation on Customer Loyalty with Customer Satisfaction as an Intervening Variable

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#### ABSTRACT

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#### Keywords

Learning and Growth; Business process; Cost and Service Innovation; Customer loyalty; Customer satisfaction; The aims of this study were to 1) analyze the effect of learning & growth, business processes, costs, service innovation on customer satisfaction at RSAB Harapan Kita partially or simultaneously; 2) analyze the effect of customer satisfaction on customer loyalty at RSAB Harapan Kita; and 3) knowing the effect of learning & growth, business processes, costs and service innovation on customer loyalty with customer satisfaction as an intervening variable at RSAB Harapan Kita. This study uses a quantitative approach with multiple linear regression analysis techniques. The population in this study was patients, which included outpatients at RSAB Harapan Kita in 2020. The sampling technique used was a non-probability sampling technique with an accidental sampling approach, so that 97 respondents were obtained. The data collection technique used a closed questionnaire with a measurement scale using a five-point Likert scale. The results of the study can be concluded that overall there is an effect of learning, business processes, costs and innovation (variable X) on loyalty (Y) through customer satisfaction (Z).

# **1. INTRODUCTION**

Innovation in the public sector is a must to make the availability of services easier, cheaper and affordable. The COVID-19 outbreak has disrupted people's daily lives[1], and every company, organization and industry is innovating to be ready to compete. Several innovations made in line with technological advances will greatly assist the health service process. They are not only limited to the queuing system, payment system, and pharmacy management system in hospital services but also the available medical devices. It is complete and impacts the patient's recovery so that life expectancy and the productivity level of humans will be increased. Innovations that are also carried out by health services are the emergence of technology-based health service innovations [2] through Online Medical applications such as HaloDoc, AloDokter, KlikDokter, Go-Dok, YesDok and others, making health services accessible quickly and easily. The difficulty of meeting face-to-face with doctors, as well as conducting direct examinations in hospitals, has led to several public complaints in terms of health services. This makes every hospital have to innovate in providing improved health services for the community.

The hospital is one organization that provides health services for the community by providing many products. It offers appropriate service fees for consumers, and the health services provided make the community more selective in choosing public health services that will be used. The phenomenon of the number of women in the province of Jakarta is 4,142,476, more than men, are 4,057,218, so when viewed from the population and working women, it can be a challenge and opportunity for hospitals, especially in Jakarta, which provides health services for women. and child. The need for special health services for women is becoming increasingly popular. This makes every health service business actor competing to establish a special hospital for mothers and children and carry out strategies to increase the number of health service users from the above phenomenon. Public demand for quality health services at affordable service costs is growing in line with the community's demands





for quality services are responded to by reforming the health sector. Therefore, the level of satisfaction of service recipients is a measure of the success of health service providers. Innovation is done so that customers can be satisfied. Satisfied customers will have an emotional bond with the product or service, thus allowing the company to retain its customers.

According to [3], [4] the factors that influence the demand for health services are based on physiological aspects; personal assessment of health status; economic variables such as tariffs, the presence or absence of an insurance system, and income; demographic and organizational variables and advertising, the effect of the number of doctors and health care facilities [5]. Learning & growth identifies the infrastructure companies must build to create growth and improve long-term performance [6]. Cost is the sacrifice of economic resources, measured in units of money, that has occurred or is likely to occur for a particular purpose. [7] defines costs as exchange rates, expenses, and sacrifices to obtain benefits. Financial measures are considered very important in providing a summary of the consequences of economic actions that have been taken [6]. A service fee is a system that regulates the amount and allocation of funds that must be provided to organize and or utilize various health efforts needed by individuals, families, groups and communities [8]. [9] explained that the cost indicator is a cost that matches the costs incurred with the services received. A business process is a business unit process in provides a value proposition that will attract and retain customers in the target market segment [6]. Business processes in the perspective of internal business processes are managers' processes in identifying various important processes that must be mastered by the company well from the acquisition of raw materials to finished products to consumers in order to be able to meet the goals of both shareholders and target customer segments [6]. Service innovation can be defined as a process containing new concepts and behavior production, development and implementation. Innovation is a description of all processes, namely the concept of a new idea, new invention or a new market development [10]. It is also a method, a change in response to the external environment or the first action due to environmental influences on organizational transformation [11]. [12] states that innovation is an idea, which is realized and accepted and as something new by a person or group to be adopted. Stephen Robbins (1994) explains that innovation is a new idea applied to initiate or update a product, process, and service. In conditions of increasingly fierce competition, the main thing that is prioritized by companies engaged in service is customer satisfaction to survive, which results in increased loyalty to dominate the market [13]. According to [10] satisfaction is a person's feeling of pleasure or disappointment that arises after comparing the performance (result) of the product thought to the expected performance (or result), by measuring customer satisfaction, the company can find out how much satisfaction is felt by customers [13]. [14] explained that the innovations carried out by the Pariaman Hospital were able to provide satisfaction to the people who provided health services.

Customer loyalty is increasingly becoming very important and seems to be a major concern for many businesses, especially when many companies face the costly challenges of high customer acquisition and customer turnover. Previous research has shown that business performance increases as the number of loyal customers increases. Recruiting new customers also cannot guarantee longterm success for a company, especially when the company cannot retain its customers. Therefore, retaining loyal customers is more profitable in the long run than acquiring new customers. In addition, loyal customers are willing to endorse the brand among their peers and ignore negative messages promoted by others. However, there is limited research on customer retention and brand loyalty [15]. According to Damanpour in Suwarno (2008), innovation can be in the form of new products or services, new production process technology, new structural and administrative systems or new plans for organizational members. Innovation is an idea, practice, or object that is perceived as new by an individual from one unit of adoption to another. One of the conditions a company must meet to succeed in competition is to try to achieve goals by maintaining and achieving customer value. Customer value is based on the perspective of the customer or organization concerned by considering the wishes and beliefs of customers from purchasing and using a product or service such as research performed [16]. [10] explains that customer value must be able to impact customer satisfaction, leading to customer loyalty. Innovation is done so that customers can be satisfied, and satisfied customers will have an emotional bond with the product or service, thus allowing the company to retain its customers [17].

Previous research on Learning and Growth, Business Processes, Costs and Service Innovation on Customer Loyalty and Customer Satisfaction in health services has not been found in previous studies and this is a novelty that the authors propose in this research. Other problems that arise are the non-optimal performance of services received by patients, inefficient services, not optimal information obtained by patients, and others. So referring to the explanation above, customer loyalty in health services is important, so building customer loyalty requires certain strategies even during the current pandemic conditions then customer satisfaction and good innovation will be able to increase customer loyalty, so the purpose of this study is to analyze the effect of learning & growth, business processes, costs, service innovation on customer satisfaction at RSAB Harapan Kita partially or simultaneously, as well as to analyze the effect of customer satisfaction on customer loyalty at RSAB Harapan Kita and to determine the effect of learning & growth, business processes, costs and Service Innovation towards customer loyalty with customer satisfaction as an intervening variable at RSAB Harapan Kita.

# 2. METHOD

This study uses a quantitative approach with multiple linear regression analysis techniques where data processing uses the help of the SPSS Version 22 program. The population in this study were patients which included outpatients at RSAB Harapan Kita in 2020. The sampling technique used was the non-probability sampling technique with an accidental sampling approach. Data is taken from March 2022 to July 2022. Sampling is done by taking cases or respondents who happen to exist or are available. The researchers calculate the number of samples using the Slovin formula and get the results of 97 respondents. The source of data in this study is primary data with questionnaires given to outpatients of RSAB Harapan Kita. The questionnaire used in this study is closed, that is, respondents can only answer according to the answer choices provided. The measurement scale in this study uses a five-point Likert scale. The data analysis technique used is instrument test, namely validity and reliability test, classical assumption test (normality test, multicollinearity test, heteroscedasticity test), multiple linear regression analysis test, multiple correlation coefficient test, t test, F test, and coefficient of determination test.

# **3. RESULTS AND DISCUSSION**

#### Results

This study tested the instrument's validity using the Pearson method. The criteria used are if the calculated r value is greater than r table, it can be concluded that the indicator is valid, while if the estimated r value is lower than r table, it can be concluded that the indicator is not valid. In the number of samples 97, then the value of r table is 0.200 ( $\alpha$ =5%).

			ndardized fficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.057	.392		.146	.884
	Learning and Growth (X1)	.293	.121	.276	2.414	.018
	Business process (X2)	.220	.094	.228	2.355	.021
	Cost (X3)	.214	.091	.195	2.353	.021
	Service Innovation (X4)	.220	.104	.209	2.127	.036

**Table 1.** Coefficient of Learning and Growth Path (X1), Business Process (X2), Cost (X3), andService Innovation (X4) on Customer Satisfaction (Z)

a. Dependent Variable: Customer Satisfaction (Z)

By paying attention to the table above, the following path equation is obtained:  $Z=0,057+0,276 X_1+0,228 X_2+0,195 X_3+0,209 X4$  233

The first hypothesis proposed in this study is that learning and growth affect customer satisfaction at RSAB Harapan Kita. The effect is shown in the regression value of 1 = 0.276. The sig value for the Learning and Growth variable (X1) is 0.018 and the t-count value for the Learning and Growth variable (X1) is 2.414. Because the sig value (0.018) is lower than 0.05 and the t arithmetic value (2.414) is greater than t table (1.986) then Ho is rejected or Ha is accepted, meaning that Learning and Growth (X1) has a significant partial effect on Customer Satisfaction (Z). Significant test results show that the study's first hypothesis is accepted, which means that learning and growth influence customer satisfaction.

The second hypothesis proposed in this study is that the Business Process affects RSAB Harapan Kita's customer satisfaction. The sig value for the Business Process variable (X2) is 0.021 and the t value for the Business Process variable (X2) is 2.355. Because the sig value (0.021) is lower than 0.05 and the t-count value (2.355) is greater than t table (1.986) then Ho is rejected or Ha is accepted, meaning that Business Process (X2) has a significant partial effect on Customer Satisfaction (Z). Significant test results show that the second hypothesis of the research is accepted, which means that there is an effect of Business processes on Customer Satisfaction.

The third hypothesis proposed in this study is that there is an effect of cost on customer satisfaction at RSAB Harapan Kita. The sig value for the Cost variable (X3) is 0.021 and the t value for the Cost variable (X3) is 2.353. Because the sig value (0.021) is lower than 0.05 and the t-count value (2.353) is greater than t table (1.986) then Ho is rejected or Ha is accepted, meaning that Cost (X3) has a partially significant effect on customer satisfaction (Z). Significant test results show that the third hypothesis of the study is accepted, which means that there is an effect of Cost on Customer Satisfaction.

The fourth hypothesis proposed in this study is that Service Innovation has an effect on customer satisfaction at RSAB Harapan Kita. The sig value for the Service Innovation variable (X4) is 0.036 and the t value for the Service Innovation variable (X4) is 2.127. Because the sig value (0.036) is lower than 0.05 and the t-count value (2.127) is greater than t table (1.986) then Ho is rejected or Ha is accepted, meaning that Service Innovation (X4) has a significant partial effect on customer satisfaction (Z). Significant test results show that the fourth hypothesis of research is accepted, which means that Service Innovation influences Customer Satisfaction.

From the equation above, it can also be interpreted that the path coefficient value of the Learning and Growth variable (X1) is greater than the path coefficient for the Business Process (X2), Cost (X3), and Service Innovation (X4) variable paths. This means that Learning and Growth (X1) is more decisive (greater effect) on Customer Satisfaction (Z) than Business Process (X2), Cost (X3), and Service Innovation (X4). There is a positive relationship direction between Learning and Growth (X1), Business Process (X2), Cost (X3), and Service Innovation (X4) on Customer Satisfaction (Z), with a path coefficient value of the Learning and Growth variable (X1) of 0.276; the path coefficient value of the Business Process variable (X2) is 0.228; Cost variable path coefficient value (X3) is 0.195; and the coefficient value of the Service Innovation path (X4) is 0.209. There is a unidirectional relationship, namely if Learning and Growth (X1) increases by 1 unit then Customer Satisfaction (Z) will increase by 0.276; if Business Process (X2) increases by 1 unit then Customer Satisfaction (Z) will increase by 0.228; if Cost (X3) increases by 1 unit then Customer Satisfaction (Z) will increase by 0.195; if Service Innovation (X4) increases by 1 unit then Customer Satisfaction (Z) will increase by 0.209.

<b>Table 2.</b> Multiple Correlation Coefficient Test Results Learning and Growth (X1), Business Process (X2),
Cost (X3), and Service Innovation (X4) on Customer Satisfaction (Z)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.740 <sup>a</sup>	.548	.529	.36788
a. Predictors: (Constant), Service Innovation (X4), cost (X3), Business				
process (	X2), Learning	g and Growth (2	X1)	

b. Dependent Variable: Customer satisfaction (Z)

Based on table 2 above, the R square value of 0.548 shows that the relationship X1, X2, X3, X4 with variable Z in the multiple linear regression equation models has a simultaneous relationship or 54.8%. It means that the variables Learning and Growth (X1), Process Business (X2), Cost (X3), and Service Innovation (X4) have an effect of 54.8% on Customer Satisfaction (Z). While the remaining 45.2% is the contribution of other variables.

Table 3. The Partial Effect of Learning and Growth (X1), Business Process (X2), Cost (X3), and
Outpatient Service Innovation (X4) on Customer Satisfaction (Z)

Variabel	Standardized Coefficients	Correlations	Partial Influence	% Partial
v ar laber	Beta	Zero-order	Value	- Influence
	(a)	(b)	(a x b)	Influence
Learning and Growth (X1)	.276	.671	.185	18,5
Business Process (X2)	.228	.598	.136	13,6
Cost (X3)	.195	.509	.099	9,9
Service Innovation (X4)	.209	.611	.128	12,8
		Total Influence	0,548	54,8

The partial effect is obtained by multiplying the standardized coefficient beta by zero-order. Based on the table above, it can be seen that the Learning and Growth variable (X1) has an effect of 18.5% on customer satisfaction. The Business Process variable (X2) affects 13.6% on customer satisfaction. The Cost variable (X3) has an effect of 9.9% on customer satisfaction and the Outpatient Service Innovation variable (X4) has an effect of 12.8% on customer satisfaction. Based on the table above, it can be explained that the variable that has the highest influence is Learning and Growth (X1) of 18.5% and the total effect of the four independent variables is 0.548 where 54.8% of customer satisfaction is influenced by Learning and Growth, Business Processes, Cost and Innovation of Outpatient Services, while the remaining 45.2% is influenced by other variables not examined in this study.

 Table 4. Path Coefficient Sub Coefficient Determination of Customer Satisfaction (Z) to Customer Loyalty (Y)

		Unstanda Coeffic		Standardized Coefficients		
			Std.			
Model		В	Error	Beta	t	Sig.
1	(Constant)	1.191	.278		4.289	.000
	Customer satisfaction (Z)	.723	.070	.729	10.375	.000

a. Dependent Variable: Loyalty Violation (Y)

The fifth hypothesis proposed in this hypothesis is that there is an effect of customer satisfaction on customer loyalty at RSAB Harapan. The effect is shown in the customer satisfaction regression value of 5 = 0.729 in the multiple linear regression equation model Customer Loyalty (Y) = 1.191 + 0.729 Customer Satisfaction (Z). Table 4 above shows that the sig value for the Customer Satisfaction variable (Z) is 0.000 and the t-count value for the Customer Satisfaction variable (Z) is 0.000 is lower than 0.05 and the t-count value (10.375) is greater than t table (1.985) then Ho is rejected or Ha is accepted, meaning that Customer Satisfaction (Z) has a partially significant effect on Customer Loyalty (Y). Significant test results show that the fifth hypothesis of the study is accepted, which means that there is an effect of customer satisfaction on customer loyalty.

From the equation above, it can be interpreted that there is a positive relationship between Customer Satisfaction (Z) and Customer Loyalty (Y), with a path coefficient value of the Customer Satisfaction variable (Z) of 6 = 0.729. It means there is a unidirectional relationship if Customer Satisfaction (Z) increases by 1 unit. Customer Loyalty (Y) will increase by 0.729. The magnitude of the influence of Customer Satisfaction (Z) on Customer Loyalty (Y) can be shown by the value of R square (coefficient of determination) based on the table below:

Table 5. Customer Satisfaction Correlation Coefficient Test Results (Z) to Customer Loyalty (Y)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.729ª	.526	.531	.36583
a. Predicto	ors: (Constat	nt), Customer	satisfaction (Z)	

b. Dependent Variable: Loyalty Violation (Y)

Based on table 5 above, the value of R square is 0.531 or 53.1% which means that the Customer Satisfaction variable (Z) influences 53.1% on Customer Loyalty (Y). While the remaining 46.9% is the contribution of other variables besides Customer Satisfaction (Z).

To test whether there is mediation by the Customer Satisfaction variable (Z), the Sobel test is carried out using an online calculator through the website https://quantpsy.org/sobel/sobel.htm.

	Input:		Test statistic:	Std. Error:	p-value:
a C	0.276	Sobel test:	2.22817275	0.0903	0.025869
<i>b</i> 0	).729	Aroian test:	2.21843506	0.09069637	0.02652518
s <sub>a</sub> (	).121	Goodman test:	2.2380398	0.08990189	0.02521846
s <sub>b</sub> (	0.070	Reset all		Calculate	

Fig. 1. Relationship between Learning and Growth (X1) on Customer Loyalty (Y) through Customer Satisfaction (Z)

The results of the Sobel test show that the t-statistic value obtained is 2.22817275 with a sig value of 0.025869. In the relationship between Learning and Growth (X1) to Customer Satisfaction (Z), the path coefficient value is 0.276 and the standard error value is 0.121. In the relationship between Customer Satisfaction (Z) and Customer Loyalty (Y), the path coefficient value is 0.729 and the standard error value is 0.070. Because the sig value is lower than 0.05 then Ho is rejected or Ha is accepted, then mediation occurs, meaning that Customer Satisfaction (Z) mediates the relationship between Learning and Growth (X1) on Customer Loyalty (Y).

	Input:		Test statistic:	Std. Error:	p-value:
a	0.227	Sobel test:	2.3524758	0.07034419	0.0186489
Ь	0.729	Aroian test:	2.34225107	0.07065126	0.01916782
sa	0.094	Goodman test:	2.36283562	0.07003576	0.01813571
sb	0.070	Reset all		Calculate	

Fig. 2. Relationship of Business Process (X2) to Customer Loyalty (Y) through Customer Satisfaction (Z)

The results of the Sobel test show that the statistical t value obtained is 2.3524758 with a sig value of 0.0186489. In the relationship between Business Processes (X2) and Customer Satisfaction (Z), the path coefficient value is 0.227 and the standard error value is 0.094. In the relationship between Customer Satisfaction (Z) and Customer Loyalty (Y), the path coefficient value is 0.729 and the standard error value is 0.070. Because the sig value is lower than 0.05, Ho is rejected or Ha is accepted, mediation occurs, meaning that Customer Satisfaction (Z) mediates the relationship between Business Processes (X2) and Customer Loyalty (Y).

	Input:		Test statistic:	Std. Error:	p-value:
a	0.195	Sobel test:	2.09888668	0.06772876	0.03582689
b	0.729	Aroian test:	2.08966475	0.06802766	0.03664793
sa	0.091	Goodman test:	2.1082318	0.06742854	0.03501094
$s_{\rm b}$	0.070	Reset all		Calculate	

Fig. 3. Relationship of Cost (X3) to Customer Loyalty (Y) through Customer Satisfaction (Z)

The results of the Sobel test show that the statistical t value obtained is 2.09888668 with a sig value of 0.03582689. In the relationship between Cost (X3) and Customer Satisfaction (Z), the path coefficient value is 0.195 and the standard error value is 0.091. In the relationship between Customer Satisfaction (Z) and Customer Loyalty (Y), the path coefficient value is 0.729 and the standard error value is 0.070. Because the sig value is less than 0.05 then Ho is rejected or Ha is accepted, then mediation occurs, meaning that Customer Satisfaction (Z) mediates the relationship between Cost (X3) and Customer Loyalty (Y).

Input:		Test statistic:	Std. Error:	p-value:
a 0.209	Sobel test:	1.97321354	0.07721465	0.04847124
b 0.729	Aroian test:	1.96450142	0.07755708	0.04947197
s <sub>a</sub> 0.104	Goodman test:	1.9820426	0.0768707	0.04747447
s <sub>b</sub> 0.070	Reset all		Calculate	

Fig. 4. Relationship of Service Innovation (X4) to Customer Loyalty (Y) through Customer Satisfaction (Z)

The results of the Sobel test show that the t-statistic value obtained is 1.97321354 with a sig value of 0.04847124. In the relationship between Service Innovation (X4) and Customer Satisfaction (Z), the path coefficient value is 0.209 and the standard error value is 0.104. In the relationship between Customer Satisfaction (Z) and Customer Loyalty (Y), the path coefficient value is 0.729 and the standard error value is 0.070. Because the sig value is lower than 0.05 then Ho is rejected or Ha is accepted, then mediation occurs, meaning that Customer Satisfaction (Z) mediates the relationship between Service Innovation (X4) and Customer Loyalty (Y).

The sixth hypothesis proposed in this hypothesis is the influence of learning & growth, business processes, costs and service innovation on customer loyalty at RSAB Harapan Kita with customer satisfaction as an intervening variable.

<b>Table 5.</b> Pathways of Direct and Indirect Effects of Learning and Growth (X1), Business Processes
(X2), Costs (X3), and Service Innovation (X4) on Customer Loyalty (Y) through Customer
Satisfaction (Z)

Correlation	Intervening	Direct	Indirect influence	Total
Learning and Growth (X1) Customer		0.276		
Satisfaction (Z)		(0,018)	-	
Business Process (X2) Customer		0.228		
Satisfaction (Z)		(0,021)	-	
Cost (X3) Customer Satisfaction (Z)		0.195 (0,021)	-	
Outpatient Service Innovation (X4) Customer Satisfaction (Z)		0.209 (0,036)	-	
Learning and Growth (X1) Customer Loyalty (Y)	Customer Satisfaction (Z)	-	0.276 (0.729)	0.201

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Correlation	Intervening	Direct	Indirect influence	Total	
Business Process (X2) Customer Loyalty (Y)	Customer Satisfaction (Z)	-	0.228 (0.729)	0.166	
Cost (X3) Customer Loyalty (Y)	Customer Satisfaction (Z)	-	0.195 (0.729)	0.142	
Outpatient Service Innovation (X4) Customer Loyalty (Y)	Customer Satisfaction (Z)	-	0.209 (0.729)	0.152	
Customer Satisfaction (Z) Customer		0.729			
Loyalty (Y)		(0.922)			
Error 1 is 0,699 obtained from e1 = $\sqrt{1 - r^2} = 1 - 0,5482 = 0,699$					
Error 2 is 0.718 obtained from $e^2 = \sqrt{1} - r^2 = 1 - 0.5312 = 0.718$					

Error 2 is 0,718 obtained from  $e^2 = \sqrt{1 - r^2} = 1 - 0,5312 = 0,718$ 

From table 6 it is found that based on the results of the partial mediation test that there is an effect of X1 on Y through Z; there is an effect of X2 on Y through Z; there is an effect of X3 on Y through Z; and there is an effect of X4 on Y through Z. It can be concluded that there is an effect of Learning and Growth (X1), Business Process (X2), Cost (X3), and Service Innovation (X4) on Customer Loyalty (Y) through Customer Satisfaction (Z).

#### **Discussions**

The Effect of Learning and Growth on Customer Satisfaction / has a significant effect on customer satisfaction in a positive direction, which means the higher the Learning and Growth received by RSAB Harapan Kita customers, the higher the customer satisfaction. This means that high learning and growth will increase customer satisfaction. Learning and Growth Perspective, the company considers 3 important aspects, namely humans as workforce, system or company management, and organizational work procedures that play a role in maintaining the company's sustainable growth for a longer time [18]. Learning and growth, identifying the infrastructure that must be built by a company in creating growth and improving long-term performance and with good performance it can provide satisfaction to customers [6], where the higher the Learning and Growth of RSAB Harapan Kita customers, the higher the RSAB Harapan Kita customer satisfaction. This is in line with previous research conducted by Ade Hilda and Zaini Aditya regarding the Effect of the Learning and Growth Perspective Balanced Scorecard Model on PTKIS Performance in Sukabumi, so it can be concluded that Learning and Growth affect the PTKIS performance in Sukabumi.

Business Processes significantly influence customer satisfaction in a positive direction, which means that the higher the Business Process received by RSAB Harapan Kita customers, the higher the customer satisfaction. According to [19] Business Process provides a value proposition that will attract and retain customers in the target market segment, where the quality of the service process and the time efficiency required are things that need to be considered in retaining customers. This means that between theory and research in the field is appropriate. Where when business processes increase, customer satisfaction also increases. In a previous study conducted by [20] with the title Fast and accurate quantitative business process analysis using feature complete queuing models. The new approach to parallel constructs performs significantly better than the current one in predicting residence time under different utilization rates. In future work it is necessary to develop methods in which the proposed model is aimed and used to optimize business processes.

Cost (X3) has a partially significant effect on Customer Satisfaction (Z), which means that the costs received by RSAB Harapan Kita customers on customer satisfaction must be in accordance with the services provided. According to [9] Costs are sacrifices of economic resources, measured in units of money, that have occurred or are likely to occur for certain purposes. This means that customer satisfaction increases between theory and research in the field, where the sacrifice of economic resources, measured in units of money, which has occurred or is likely to occur for certain purposes. In a previous study conducted by [21] with the title The Effect of Price Perception on Consumer Satisfaction of Travel Service Users (The Effect Of Price Perception On Customer Satisfaction With Travel Service Users) the results showed that the price was in accordance with what consumers wanted, the ticket price give it cheaper than its competitors, the positive coefficient value on the price perception variable means that the price given by JIA Travel Pammanu has a positive influence on consumer satisfaction. These results illustrate that the price given by JIA Travel Pammanu follows consumers' expectations as service users.

Service Innovation has a significant influence on customer satisfaction in a positive direction. It means that the higher Service Innovation has a considerable influence on customer satisfaction in a positive direction, which means that the higher the service innovation of a service received by RSAB Harapan Kita customers, the higher the customer satisfaction. In a previous study by [22] with the title Health Service Innovation Strategy at the Kendari City Regional General Hospital concluded that when innovating a web application-based referral information system regarding the availability of Inpatient Rooms or known as the Patient Referral Room Availability System (SEKAR) innovation program with This service information system is carried out on health services at the Kendari City Hospital, so all Puskesmas in Kendari City can take advantage of this information to provide maximum referral services to the people of Kendari City in particular and even Southeast Sulawesi people in general with the aim of minimizing public complaints about the uncertainty of room availability The results of this study are in accordance with the opinion [22] that Service Innovation is an idea, an idea, which is realized and accepted, as something new by a person or group to be adopted with dimensions namely the use of technology and the provision of new services that utilize technological advances so that customer satisfaction at RSAB Harapan Kita..

The magnitude of the influence of customer satisfaction on loyalty, which means the higher the satisfaction received by RSAB Harapan Kita customers, the higher the customer loyalty. Customer Satisfaction has a significant influence on customer loyalty in a positive direction. From the equation above, it can be interpreted that there is a positive relationship direction between Customer Satisfaction (Z) and Customer Loyalty (Y), with a path coefficient value of the Customer Satisfaction variable (Z) of 0.729. This means that there is a unidirectional relationship, namely if Customer Satisfaction (Z) increases by 1 unit then Customer Loyalty (Y) will increase by 0.729. This is in accordance with the theory proposed by [23] that loyalty is a customer's commitment to a brand, store, supplier based on a very positive attitude reflected in consistent repeat purchases. Customer satisfaction is a person's feelings of pleasure or disappointment that arise after comparing the product's performance (result) to the expected performance (or result). It can be concluded that when customer satisfaction increases, customer loyalty also increases, and vice versa. Based on the theory and research results that have been carried out, it can be concluded that customer satisfaction significantly influences customer loyalty. This is in line with previous research conducted by [25] with the title The effect of perceived value toward loyalty through patient satisfaction in Hasanuddin University Hospital, stated that The satisfaction variable has an influence five times greater than the perceived value and affects patient loyalty. So, it can be concluded that there is an influence between customer satisfaction and customer loyalty.

Learning and Growth (X1), Business Process (X2), Cost (X3), and Service Innovation (X4) have a significant influence on Customer Loyalty (Y) through Customer Satisfaction (Z). Based on the results of the partial mediation test that there is an effect of X1 on Y through Z; there is an effect of X2 on Y through Z; there is an effect of X3 on Y through Z; and there is an effect of X4 on Y through Z. And it can be concluded that there is an effect of X1, X2, X3, X4 on Y through Z. Customer satisfaction is very influential on customer loyalty, this research has been conducted in the field of marketing and services. Loyalty will appear when customer satisfaction has begun to be felt by the customer, a sense of customer satisfaction arises when the quality of service becomes good in other words, when the quality of service increases, customer satisfaction will increase as well, and loyalty also increases. Based on the theory and the results of research that has been done, it is

concluded that Service Innovation has a positive and significant influence on customer satisfaction. This is in accordance with the initial hypothesis that has been put forward. There is a need for improvement in terms of outpatient service innovation, what is done by RSAB Harapan in providing Child Growth and Development Clinic (KKTK) and Healthy Child Integrated Polyclinic (POTAS) are things that need to be improved and maintained, while teleconsultation services (consultation via telephone) it is necessary to continue to improve along with the advancement of technology and the increasing number of hospitals that use it for customer satisfaction and use it more and more through innovative teleconsultation services via telephone and social media. The more service innovations provided to customers, customer satisfaction will also increase, this is a concern in order to fulfill customer satisfaction.

The implications of this research concerning Learning and Growth, RSAB Harapan Kita can improve information systems that are more informative, accessible and user-friendly so that they can give satisfaction to customers, in improving business processes, RSAB Harapan Kita can make improvements in terms of waiting times service for customers so that they can be fast by the dynamics that are developing at this time, so that customer satisfaction will also increase and this will also increase loyalty for RSAB Harapan Kita, in terms of service costs it is necessary to pay attention to affordable service costs and can compete with regard to people's purchasing power In the innovation of teleconsultation services (consultation via telephone) it is necessary to increase the use of technology in line with the advancement of technology, many hospitals are already utilizing this technology. Teleconsulting innovation continues to be improved with more and more services that utilize digital technology provided to customers so that it will answer the needs and satisfaction of consumers will also be higher, and in terms of satisfaction so that customers can be loyal to RSAB Harapan Kita, it is necessary to improve all of these things which include: open information about service, cost, speed of service, affordable cost, convenience and easy payment so that customers will be satisfied. RSAB hopes that we can take advantage of all the dimensions contained in the Balancesorecard (BSC) method to analyze and measure the effect of satisfaction on loyalty in determining the best steps to be taken in the future.

# **4. CONCLUSION**

From the results and discussion, it can be concluded that learning and growth affect loyalty with customer satisfaction as an intervening variable. Learning and Growth positively influence customer satisfaction, where higher Learning and Growth will increase customer satisfaction. Business Process has an effect on loyalty, with customer satisfaction as an intervening variable. Business Process significantly influences customer satisfaction. Service costs affect loyalty with customer satisfaction as an intervening variable. Service costs significantly affect customer satisfaction in a positive direction, where appropriate service costs will increase customer satisfaction. Service innovation affects loyalty with customer satisfaction as an intervening variable. Service costs will increase customer satisfaction. Service Innovation has a significant influence on customer satisfaction in a positive direction where higher Service Innovation will increase customer satisfaction. Customer satisfaction has a mediating role in the influence of Learning and Growth, Business Processes, Service Costs, and Service Innovations on customer loyalty RSAB Harapan Kita.

# REFERENCES

- Adil, A., Syamsun, M., & Najib, M. (2016). Pengaruh Kualitas Pelayanan dan Biaya terhadap Kepuasan dan Loyalitas Pasien RSUD Kota Bogor. Jurnal Aplikasi Manajemen, 14(3), 432– 441.
- Ahoa, E., Kassahun, A., & Tekinerdogan, B. (2020). Business processes and information systems in the Ghana cocoa supply chain: A survey study. NJAS - Wageningen Journal of Life Sciences, 92(March 2019), 100323. https://doi.org/10.1016/j.njas.2020.100323
- Ananda, B. R., Putera, R. E., & Ariany, R. (2020). Inovasi Pelayanan Kesehatan Di Rumah Sakit Umum Daerah Kota Pariaman. *Publik (Jurnal Ilmu Administrasi)*, 8(2), 167. https://doi.org/10.31314/pjia.8.2.167-179.2019

Azwar, A. (1996). *Menjaga Mutu Pelayanan Kesehatan*. Pustaka Sinar Harapan.

- Carter, & Usry. (2006). *Cost Accounting* (13th ed.). By South-Western, A Division of Thomson Learning Inc. (terjemahan). Akuntansi Biaya, Edisi Tiga Belas, Salemba Empat, Jakarta.
- Dunlop, D., & Zubkoff, M. (1981). Inflation and Consumer Behavior in the HealthCare.In Economics and Health Care. (J. B. MCKinley, Ed.). MIT Press.
- Dwi Wahyuni, C. R. (2017). Kualitas Pelayanan Dan Pengaruhnya Terhadap Loyalitas Pelanggan Yang Di Mediasi Oleh Kepuasan Di Bank Muamalat Jombang. *Eksis: Jurnal Riset Ekonomi Dan Bisnis*, 12(1), 69–82. https://doi.org/10.26533/eksis.v12i1.84
- Fitriani, D. A., Pasinringi, S. A., Irwandy, I., & Amqam, H. (2020). The effect of perceived value toward loyalty through patient satisfaction in Hasanuddin University Hospital. *Enfermeria Clinica*, 30, 408–411. https://doi.org/10.1016/j.enfcli.2019.11.008
- Fuchs, A. H. (1998). Psychology and "The Babe." J. Hist. Behav. Sci., 34: 153-165.
- Hertz, E. (2019). Medical equipment management program standards-ANSI/AAMI EQ56 AND ANSI/AAMI EQ89. In *Clinical Engineering Handbook, Second Edition* (Second Edi). Elsevier Inc. https://doi.org/10.1016/B978-0-12-813467-2.00105-X
- Kaplan, R. S., & Norton, D. P. (2007). Using the balanced scorecard as a strategic management system. Harvard Bus. Rev. 150–161.
- Kotler, P., & Keller, K. L. (2017). Marketing Management (15th Edition) Philip Kotler. *Fortune*, 290.
- Kotler, P. T., Brady, M., Goodman, M., & Hansen, T. (2019). *Marketing Management*. Pearson Education.
- Lu, & Tseng. (2010). The Effectiveness of Inquiry-Based Learning by Scaffolding Students to Ask "5 Why" questions. Department of Natural Science Education, National Taipei University of Education.
- Manan, F., Nasir, M., & Saidin, S. (2020). Strategi Inovasi Pelayanan Kesehatan Pada Rumah Sakit Umum Daerah Kota Kendari. NeoRespublica: Jurnal Ilmu Pemerintahan, 1(2), 119. https://doi.org/10.52423/neores.v1i2.10427
- Peters, S., Kerner, Y., Dijkman, R., Adan, I., & Grefen, P. (2022). Fast and accurate quantitative business process analysis using feature complete queueing models. *Information Systems*, 104, 101892. https://doi.org/10.1016/j.is.2021.101892
- Rahmawati, D. D. (2020). Pengaruh Persepsi Harga Terhadap Kepuasan Konsumen Pengguna Jasa Travel. *Bongaya Journal for Research in Management (BJRM)*, 3(2), 21–27. https://doi.org/10.37888/bjrm.v3i2.239
- Rionanda, L. S., Farida, F., Putra, F. G., Damayanti, E., & Pradana, K. C. (2022). ICT-Based Lajur Bata Game Media Using Guided Discovery Method on Flat-sided Space Geometry Subject. *Journal Corner of Education, Linguistics, and Literature (JCELL)*, 1(4), 235–248. https://doi.org/10.54012/jcell.v1i4.47
- Rogers, E. M. (1983). Difussion of Innovations. London : Coller Macmillan Publisher.
- Soetjipto, H. N. (2018). Perspektif Pembelajaran Dan Pertumbuhan Dalam Implementasi Balance Scorecard Sebagai Instrumen Penilaian Kinerja. In *Paper Knowledge*. *Toward a Media History of Documents*.
- Tay, B., & Sundiman, D. (2021). Pengaruh Inovasi Hijau Terhadap Kinerja Berkelanjutan: Peran Moderasi Dari Kepedulian Lingkungan Manejerial (Studi Pada Umkm Di Batam). DeReMa (Development Research of Management): Jurnal Manajemen, 16(1), 96. https://doi.org/10.19166/derema.v16i1.2505
- Thaichon, P., Lobo, A., & Mitsis, A. (2014). Achieving customer loyalty through service excellence

in internet industry. *International Journal of Quality and Service Sciences*, 6(4), 274–289. https://doi.org/10.1108/IJQSS-03-2014-0024

Tjiptono, F. (2015). Strategi Pemasaran. Yogyakarta : Andi.

Tjiptono, F., & Chandra, G. (2016). Service, quality and satisfaction. Yogyakarta: Andi.

Widhiarso, A. (2021). Telemedicine dan Telepharmacy : Tantangan dan Perkembangan Di Masa Pandemi Covid-19. Jurnal Farmasi Dan Kesehatan Indonesia, 1(1), 46–54.