# Analysis of Customer Loyalty Related to Purchasing Standard Microbial Products (B2b Case Study: Pt. Mrk)

Erfina Mei Rahmawati<sup>1</sup> Sri Hartono<sup>2</sup> <sup>1</sup>Master of Management, <sup>2</sup>Lecturer of Postgraduate, Universitas Mercu Buana Jakarta, Indonesia

Abstract:- This research was conducted to analyze the influence of Perceived Product Quality, Perceived Price Fairness, After-Sales Service Quality, Salesperson's Credibility on Customer Satisfaction and analyze how Customer Satisfaction mediates The influence of Perceived Product Quality, Perceived Price Fairness, After-Sales Service Quality, Salesperson's Credibility on Customer Loyalty. Population in this research is as many as 241 industries pharmacy ever do purchase product Microbiologics with level purchase at least once in 1 year. From the results calculation use Slovin's formula, sum samples studied \_ as many as 71 respondents with use simple random sampling technique was used in a way random without Pay attention to strata in the population the . The research method used is a quantitative method with SEM-PLS analysis. Analysis results show that After-Sales Service Quality has an influence positive significant towards Customer Satisfaction. Meanwhile, Perceived Product Quality, Perceived Price Fairness, and Salesperson's Credibility are not influential significant towards Customer Satisfaction. The analysis results also show that Perceived Price Fairness has an effect significant towards Customer Loyalty. Meanwhile, Perceived Product Quality, After-Sales Service Quality, and Salesperson's Credibility are not influential significant towards Customer Lovalty. And Customer Satisfaction does not mediate influence relationship between Perceived Product Quality, Perceived Price Fairness, After-Sales Service Quality, Salesperson's Credibility and Customer Loyalty. Companies must can organize a good After-Sales Service strategy and the right Price Fairness as superiority competitive company so that capable compete with competitors . This can strengthen long-term relationships with customers and increase company profitability.

**Keywords:-** Perceived Product Quality, Perceived Price Fairness, After-Sales Service Quality, Salesperson's Credibility, Customer Satisfaction, and Customer Loyalty.

# I. INTRODUCTION

Product pharmacy must own relevance with need therapeutic consumer as well as must fulfil standard quality, safety, and efficacy or good performance in ensure health consumers (WHO, 2007). Quality product pharmacy become matter important for the product to be produced in accordance with objective its use, satisfies listed requirements in document permission distribution (registration), and not give rise to dangerous risk for consumers (BPOM, 2006). Quality product bad pharmacy No only endanger for health , but also can give rise to big loss \_ for industry, government, and consumer in a way individual (WHO, 2015).

To guarantee quality product pharmacy, then need exists supervision quality (quality control) of products produced. Supervision quality to product pharmacy has been for a long time become attention of the World Health Organization (WHO). In 198 , WHO declared Good Manufacturing Process (GMP) as guidelines for industry pharmacy in carry out practice good manufacturing , management and control manufacturing, testing, as well quality product pharmacy in a way overall (WHO, 2007). In 1988, Indonesia started adopt so-called Good Manufacturing Process (GMP) practices as guidelines for Good Medicine Manufacturing Practices (CPOB).

Surveillance area quality is one of them carried out in the laboratory with test sample product pharmacy as representative from each production batch. Product pharmacy must tested in a way physical, chemical, and biological to assess whether the product has in accordance with condition valid quality and ready for distribution. Testing in a way biology or often called with testing microbiology become very important thing remember exists possibility contamination microbes that can pollute product. Contamination microbes can happen during the sourced production process from material raw materials used, transportation material standard tool production, environment production, and personnel involved during the production process. In every testing microbiology, analyst need microbes standard used to identify There is or the absence ( absence and presence ) of contamination microbes in product.

PT. Multiredjeki Kita (PT. MRK) is company importer and distributor for products microbes standard from Mycobiologics from the United States . This product is marketed by PT. MRK to all over industry pharmacy in Indonesia for later used in the monitoring process quality production of vitamins and medicines. Apart from Microbiologics, currently there are a number of product microbes standards in Indonesia, namely Remel (Competitor A), Liofilchem (Competitor B), Bioball (Competitor C), and Sigma-Aldrich (Competitor D). In the microbial market standards, Microbiologics occupy position as product with premium price. By percentage, Microbiologics own prices are 20-30% more expensive in comparison with product Competitors C and D; as well as Microbiologics own price is 50% more expensive in comparison with product Competitors A and B apart from side quality and price products offered,Microbiologics through PT. MRK also delivers good service to customer.

Table 1: Product Price Comparison Miroba Standard

Level Harga	Produk Mikoba Standar
Tingkat 1	Microbiologics
Tingkat 2	Pesaing C, Pesaing D
Tingkat 3	Pesaing A, Pesaing B

To analyze and understand response customer to quality PT products and services \. MRK, quality management do it regularly evaluation to satisfaction customer . In 2022 PT. MRK has conducting a satisfaction index survey customers (customer satisfaction index) for 100 industries pharmacy. Rating result show that percentage satisfaction index customer against PT. MRK in 2022 will be 86.87%. This figure is increasing from period previously in 2019, namely amounting to 76.65%. The assessment parameters tested consists from a number of aspect important, that is quality product, quality service full selling, and ability power seller in serve customer.

Table 2: Customer Satisfaction Index (CSI) 2019 & 2022

Periode	Responden Target	Feedback	CSI (%)
2019	150	81	76,65
2022	100	100	86,87

In 2019, Microbiologics own market share of 83% in Indonesia and becoming market leader for product microbes standard, then followed by competitor A and competitor B (Figure 1). PT. MRK as the sole distributor distributes product Microbiologics throughout Indonesia, has role important in success and bignameofMicrobiologics in Indonesia.

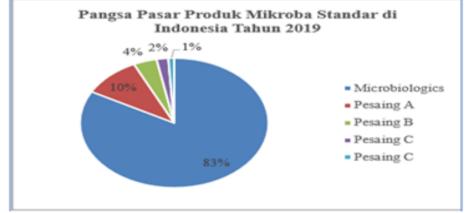


Fig. 1: Product market share microbes standards in Indonesia in 2019

COVID-19 pandemic makes need consumption will product pharmacy increase so that create opportunity in push activity production pharmaceuticals in Indonesia (Ministry of Industry, 2021). Enhancement activity production This pharmacy also encourages competitors to compete in increase superiority competitive it has and delivers opportunity to competitors to expand share the market so that cause happen decline Microbiologics market share (Figure 2).

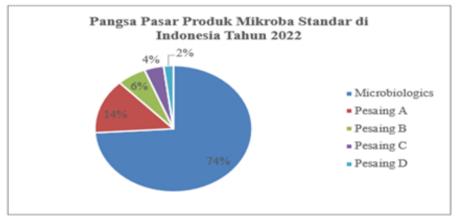


Fig. 2: Product market share microbes standards in Indonesia in 2022

To face this competition , every company provider microbes standard required to do adaptation in a way fast , strengthen superiority competitive , as well set mix strategy effective marketing . \_ Increasing market competition causes company must can increase loyalty customers not to the more replaced by competitors . Russo et al. (2017) stated that customer will remain loyal to supplier if satisfaction they to supplier increases and when satisfaction increases , then the chances are very small of getting it replaced by competitors . Tegambwage&Kasoga (2022), also mentions that Loyal customers don't will move to other products / services very easily . \_ Hence , loyalty \_ customers (customer loyalty) become variable important that will tested in this research .

In context B2B companies , value transaction generally higher \_ with amount fewer customers \_ so that company need offer product / service personally via \_ power seller . For the sake of making it happen connection period mutual length \_ profitable between companies and customers , then company must can establish and manage connection personally via \_ power credible seller \_ so that understand customers' business processes . Therefore , it was developed One variable new that becomes novelty in this research , namely credibility power salesperson (salesperson's credibility). Based on results research and studies existing library \_ done , then set three dimensions of the salesperson's credibility, namely experience interaction , expertise and ethics .

Based on background behind that has been described, this research was conducted to test further about influence perception quality product (perceived product quality); perception fairness price (perceived price fairness); quality service full selling (after-sales service quality); as well as credibility power seller (salesperson's credibility) towards loyalty customers (customer loyalty), with dimensions attitude loyalty (attitudinal loyalty) and behavior loyalty (behavioral loyalty) which is mediated by satisfaction customers (customer satisfaction).

# II. LITERATURE REVIEW

# A. Business-to-business (B2B)

Business model to the business market (business-tobusiness) is much more challenging rather than a business model to the consumer market (business-to-consumer) and demands Skills special from marketer . A accompanying customers \_ with not quite enough answer to company them and have knowledge special about product there will be more own demands If compared to with consumer usual (Zimmerman & Blythe, 2013). According to Kotler & Keller (2018), business markets actually similar with the consumer market Where both of them involves the people who take it role as buyers and makers decision purchase to fulfill his needs . However, business markets differ in many ways from consumer markets shown in the table below.

In addition, according to Grewal et al. (2015) in several respects B2B purchasing behavior is substantially different from consumer purchasing behavior. First, in B2B purchasing impulse purchases are usually rare, clearly stated, have objective criteria, such as meeting needs and production schedules at minimum costs will usually drive the choice process. Second, because more than one person is involved in the purchasing decision process, purchasing managers rarely make purchasing decisions independent of the influence of other stakeholders, either inside or outside the purchasing organization (for example: consultants, supplier companies, other companies in the industry). Third, the B2B purchasing process usually takes quite a long time and involves extensive bargaining and negotiation processes. Fourth, because B2B buyers focus on meeting their entire needs rather than purchasing a specific product, offers can be very complex and include training, technical support, financing, shipping terms, and so on, so that neither buyers nor sellers can easily determine which offer is best for buyers.

# B. Perceived Product Quality

Product is offers made by the company to fulfill need customer. Customer trying to buy benefit and be willing exchange it with things valuable (including money and time) as reward to obtain product to be needs (Zimmerman & Blythe, 2013). B2B marketers must can understand importance every product / service as perceived by its customers and what the product is certain can differentiate offer from competitor. Is the product said own good quality, deliver benefit for customers, and offers solution for problems faced by customers, completely depending on how matter the felt or perceived (perceived) by customers.

According to Hutt & Speh (2010), perception quality (perceived quality) is attitude customer to quality perceived product / brand as well as perception they about value and satisfaction. Parasuraman et al. (1988) in Moretta-Tartaglione et al. (2019) stated that perceived quality can understood as comparison between performance company and hope customer; when confirmed negative so dissatisfaction created, however when positive so satisfaction customer generated, so will increase loyalty customer. Draft perceived quality is closely related with perceived value (perceived value), which is defined as evaluation whole consumer on benefits obtained from something product / service as rewards from cost incurred.

# C. Perceived Price Fairness

Price is the only one activity B2B marketers who produce income for company . Ability manage price with true also means understand cost operational company in a way comprehensive as well as understand customers (Zimmerman & Blythe, 2013). From concept cognitive consumer , price is something that must be given or sacrificed to gain something products / services (Susanti, 2019). Sharma (2022), Susanti (2019), and Ruiz-Martínez et al. (2019) stated that besides quality product, price is also a core components offered to customer.

Perceived price fairness is evaluation engaging customers \_ emotion related with There is or or not difference price between One seller with seller other in a way reasonable, and what is the difference this price can be accepted or justified (Parry et al., 2021). Frederick Offiong Bassey (2014) in in Fatmi & Malviya (2023) also defines perception justice price as perception customer to transaction fair sales, can accepted, and logged in sense.

Campbell (1999) in Zhong &Hee Cheol Moon (2020) shows that price fairness significant influence image brand ; as the consequences, if impropriety price (perceived price unfairness) is felt by customers so can cause behavior negative, such as negative, shifting word -of-mouth brand . Setiawan et al. (2016) in Setiawan et al. (2020) mentioned that perceived price fairness is shared into two dimensions ie comparable options and knowledge \_ customers (customer knowledge). In determining price fairness, customers will consider other aspects such as similarity price offered \_ to other customers or price offered by the company similar (comparable options). In addition, customers will too compare price offered and expectations \_ they as well as benefits obtained (customer knowledge).

#### D. After-Sales Service Quality

Gaiardelli et al. (2007) in Shokouhyar et al. (2020) mentioned that the term after-sales service in general used to describe services provided \_ after delivery goods / commodities specific purpose \_ support use products by customers throughout cycle his life . According to Shokouhyar et al. (2020), definition general from aftersales service, namely a customer - oriented process to fulfill need customers and looking after satisfaction customer . In addition, the concept of after-sales service represents a cross- process functions performed by different roles . \_ \_ According to Murali et al. (2016), after-sales service is activities that occur after purchase products by customers and devoted to support customer in use and disposal goods . After-sales service available create sustainable relationship with customers and contribute in a way significant to satisfaction customer.

Patelli et al. (2004) in Murali et al. (2016) explains that after-sales service is related with series activities performed after did it sale product with aim to guarantee availability sustainable goods ; \_ solve problems faced by customers \_ end in use goods ; support customer in designing, managing and controlling related activities and processes with use product ; support customers at end of life product ; as well as increase the level of satisfaction customers and contribute to the creation of competitive advantage. Adusei & Tweneboah-Koduah (2019) stated that utilize after-sales service with Good can increase profitability company because of after-sales service significant can increase satisfaction customer through quality effective service \_ in industry automotive . Othman et al. (2021) mentioned that after-sales-service is very good opportunity in obtain retention customers and to prove that customer is priority main company . After-sales service is one of them activity B2B marketing for companies can focus more on maintaining satisfaction existing customers \_ than acquire customer new, because cost acquisition customer new relatively Enough high ( Shokouhyar et al., 2020).

#### E. Salesperson's Credibility

Personal selling becomes technique sale main in the B2B market. This happened Because mark B2B transactions are generally higher and in quantity fewer customers so that company need offer product / service personally via \_ power sellers (Hutt & Speh, 2010); (Zimmerman & Blythe, 2013). Personal selling consists of from verbal communication between power seller ( or team sales ) and one or more candidates buyer with objective make or influence sales (Cravens & Piercy, 2009). Personal selling is strength pusher most important request in mix promotion B2B marketer. Through power seller, marketer connect offer products and services company in accordance with need B2B customers (Hutt & Speh, 2010). Personal selling is mix interpersonal promotion. In personal selling, energy seller create and communicate mark customer through interaction personal with customers (Kotler & Armstrong, 2017). Personal selling is interaction stare advance with One or more candidates buyers for purposes do presentation, answer questions, and get order (Kotler & Keller, 2018). Personal selling offers twowav communication with The customers are different with mix promotion other like promotion the usual sales, advertising, and publications communication only happen One direction.

B2B transactions that occur can be very different between One customer with customer other . In one side, there is one transaction involved relatively A little taking decisions and communication only limited between buyers and sellers. But on the other side of decision purchase Possible need involve connection period long between company, in touch with many levels, and frequencies high communication between member second company (Zimmerman & Blythe, 2013). According to Liu & Leach (2001) energy seller can increase level satisfaction customer with manage image they in a way effective on the eyes customer . By specifically, considered can trusted and owned level high skill so that can help power seller build connection business period long. Therefore, energy seller must considered as a credible consultant.

According to Theoharakis et al. (2009) in Zimmerman & Blythe (2013) states that in intertwine B2B relationships, interactions between company with customer can happen Good formally or informally. Interaction generally formal done in scope work between One or more representatives from companies and customers. Whereas interactions that occur informally , like possible individuals can interact outside scope work ( for example : at seminars, training, or on site meeting other). Informal interactions like this are considered very important and only will happen in case Where employee feel satisfied with superior them and loyal to company they. Connection social this is not Possible develop when employee No willing to do matter the or No affected get to the point certain.

#### F. Customer Satisfaction

Creating a loyal B2B customer base is not only about maintain amount customer from time to time, but also about look after connection with customer business to encourage purchases and levels advocacy them in the future. Connection with customer need managed with good to achieve connection sustainable with customers at all point contact and access customer with personalized treatment from most valuable customers to be sure retention customers and effectiveness marketing.

Companies need measure satisfaction customers (customer satisfaction) to help company in determine what the product / service is they fulfil hope customer or no, or whether customers own better experience than hope them (Alzoubi et al., 2020). According to Kotler & Armstrong (2017) satisfaction is block building key to developing and managing connection customer. Kotler & Armstrong (2017) also confirms this that customer satisfaction depends on performance perceived product \_ relatively to hope buyer . If performance product Far from hope , then customer will feel No satisfied . If performance meets expectations, customers will feel satisfied. However, if performance exceeds expectations, then the customer will be very satisfied or happy.

In a simpler sense , customer satisfaction can be interpreted extent of performance perceived product \_ suitable with hope buyer. Zimmerman & Blythe (2013) mention that customer measure satisfaction based on hope they compared to with perception they about performance actual service . \_ Anderson et al . (1994) in Sharma (2022) states that satisfaction is perception customer to performance supplier based on evaluation all experience previously with supplier . Fornell (1992) in Kwiatek et al. (2020) defines satisfaction as evaluation overall positive \_ to performance company . According to Bernardo et al. (2022), satisfaction is sensation or feelings produced by aspects \_ cognitive and emotional from products / services , as well accumulation evaluation from various components and features .

#### G. Customer Loyalty

When market conditions become very competitive, many company realize importance maintain customer current and some among them has start various activities to improve loyalty customers (customer loyalty). Kotler & Keller (2018) stated that create Loyal customers are the essence every business . Haghkhah& Asgari (2020) also mentioned that loyalty customer own impact significant positive \_ to profitability B2B companies . Loyalty customers (customer loyalty) is considered as very important concept so that give positive impact \_ for company like superiority competitiveness, higher profitability, and behavior cooperative (Aaker, 1991). The results of research conducted by John T. Bowen & Shiang -Lih Chen (2001) also show exists correlation positive between loyal customers and profitability. Loyal customers will give more purchase in a way repeat and have very little chance of switching for gain offer best . Russo et al. (2017) found that customer will remain loyal to supplier if satisfaction they to supplier increases and when satisfaction increases, then the chances are very small of getting it replaced by competitors. Tegambwage&Kasoga (2022) also mentions that Loval customers don't will move to other products / services very easily . Apart from that, research conducted by Ing & Sim (2020) and Samudro et al. (2020) in B2B context, shows that Loyal customers are willing to pay with premium price.

Oliver (1999) in Kotler & Keller (2018) defines loyalty as commitments held determined to buy return or support return product or preferred services in the future although exists influence situational and effortful potential marketing \_ cause customer can switch . Dick & Basu (1994) define loyalty as connection between attitude relatively to entities and behavior patronage . Algesheimer et al. (2005) define that loyalty customer is willingness customers to buy product from supplier certain in a way repeatedly and maintain commitment period long to the . Sharma (2022) supplier mentions that conceptualization loyalty in a way general is preference to continue buy product / service from the same supplier. According to John T. Bowen & Shiang -Lih Chen (2001) loyal customers are those who have good attitude to company, committed to purchasing return products / services, and recommend product the to other people. Rubio (2019) also defines loyal customers something brand is repeat customers purchase return brand the Because customers and brands bound in a way emotional and committed to brand the.

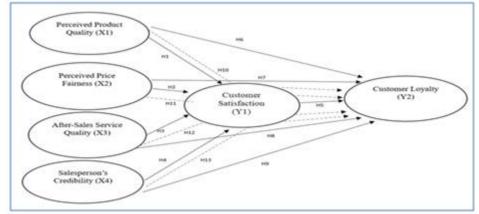


Fig. 3: Framework Thinking

#### III. RESEARCH METHODOLOGY

This research uses method quantitative with Partial Least Square Structural Equation Model (PLS SEM) approach. Statistical tools used for testing hypotheses \_This research is a Partial Least Square (Smart-PLS) program. Data will analyzed with two models. Measurement Model (Outer Model) is a connecting measurement model indicator with variable latent . Structural Model (Inner Model) is a structural model that connects between latent variable.

The variables used in this research is *Perceived Product Quality* (X1), *Perceived Price Fairness* (X2), *After Sales Service Quality* (X3), *Salesperson's Credibility* (X4), *Customer satisfaction* (Y1), and *Customer Loyalty* (Y2). The data collection technique in this research is non - probability sampling using purposive sampling. Amount existing population in This study consisted of 241 members and the margin of error level was used of 10% (0.10). From calculations use Slovin's formula is obtained magnitude sample will researched as many as  $70.67 \approx 71$  respondents.

## IV. RESULTS

#### A. Evaluation of the Measurement Model (Outer Model)

This model defines How every indicator relate with variable its latency, or can said that the outer model can specify connection between latent variable with the indicators. The outer model is carried out by looking at the values of convergent validity, discriminant validity and construct reliability.

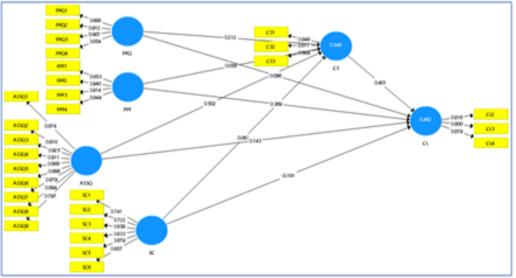


Fig. 4: Path DiagramOuter Loading

# Test result Convergent Validity

Testing *Convergent Validity* is the loading factor value on the latent variable with the indicators. This measurement is carried out to test validity of each variable. Data is said to be valid if obtain loading value > 0.7. Based on the path diagram, the measurement model in Figure 4 states that all over indicators for each variable own The outer loading / factor loading value is more than 0.7, which means all over valid indicator. With thus, the research model has fulfil condition validity convergent which means that all over valid indicator in measure the construct.

Validity test converge also can done with look at AVE (*Average Variance Extracted*). It is declared that the construct meets convergent validity if the construct's AVE value is more than 0.5.

Variabel	Nilai AVE (Average Variance Extracted)
Perceived Product Quality (X1)	0.775
Perceived Price Fairness (X2)	0.790
After-Sales Service Quality (X <sub>3</sub> )	0.780
Salesperson's Credibility (X <sup>4</sup> )	0.663
Customer Satisfaction (Y1)	0.710
Customer Loyalty (Y2)	0.693

Table 3: AVE Results

The table shows that all variables have an AVE value of more than 0.5. so it can be concluded that all variables have met discriminant validity (Ghozali& Latan (2019:37).

#### > Test result Discriminant Validity

Validity test discriminant one of them did through the Heterotrait-Monotrait Ratio (HTMT) test . Recommended HTMT value should be smaller of 0.85 (Clark & Watson 1995; Kline 2011) while others propose smaller value \_ of 0.90 (Gold et al. 2001; Teo et al. 2008).

	After- Sales Service Quality	Customer Loyalty	Customer Satisfaction	Perceived Price Fairness	Perceived Product Quality	Salesperson's Credibility
After-Sales Service Quality						
Customer Loyalty	0.534					
Customer Satisfaction	0.807	0.704				
Perceived Price Fairness	0.347	0.621	0.398			
Perceived Product Quality	0.726	0.589	0.723	0.559		
Salesperson's Credibility	0.819	0.441	0.698	0.475	0.662	

Table 3: HTMT Test Results

Based on the resulting HTMT test results show that all between construct own HTMT value is less from 0.90. Thus, it can be stated that all constructs are valid in terms of discriminant validity.

The discriminant validity test can also be carried out using the Fornell and Larcker method by comparing the square root of average variance extracted (AVE) value for each construct with the correlation between the construct and other constructs in the model. Validity test results distriminant based on the Fornell Lackers test obtained as follows:

	After-Sales Service Quality	Customer Loyalty	Customer Satisfactio n	Perceived Price Fairness	Perceived Product Quality	Salesperso n's Credibility
After-Sales Service	0.883					
Quality						
Customer Loyalty	0.479	0.832				
Customer Satisfactio n	0.712	0.588	0.843			
Perceived Price Fairness	0.334	0.534	0.361	0.889		
Perceived Product Quality	0.675	0.525	0.617	0.521	0.880	
Salesperso n's Credibility	0.767	0.387	0.598	0.434	0.596	0.814

Table 4: Fornell and Larcker Test Results

The result obtained every construct own greater value \_ rather than correlation between construct One with other constructs \_ in models. With so, then can stated that all construct has been valid validity discriminant.

#### B. Structural Model Evaluation (Inner Model)

Inner model testing can be done seen through mark coefficient R-Square determination  $(R^2)$ , and Q-Square

predictive relevance (Q  $^2$  ). While, level significance coefficient track used for testing hypothesis ie predict connection between latent variable.

R-Square Value Test Results (<sup>R2</sup>)

Coefficient determination R Square ( $R^2$  shows how much big variable exogenous explain variable its endogenous.

Table 6: R Square Value (R <sup>-</sup> )						
Konstruk	R Square	RSquare Adjusted	Kategori			
Customer Satisfaction (Y1)	0,546	0,518	Moderat			
Customer Loyalty (Y2)	0,482	0,442	Moderat			

Table 6: R Square Value (R  $^2$ )

Based on The R-Square value in Table 6 shows that The R-Square value of the Repurchase Intention (Y2) variable is 0.482. This value means that variability The Repurchase Intention construct can be explained by variability the construct of Customer Satisfaction, Price, Product, Promotion, Brand Image was 48.2%. This value

indicates category "medium" relationship, meanwhile the rest 51.8 % is explained by other variables outside those studied. Meanwhile, the R-Square value of the Customer Satisfaction variable (Y1) is of 0.546. The R-Square value shows influence simultaneous Price, Product, Promotion, Brand Image towards Customer Satisfaction of 54.6% indicates category "Medium" relationship, meanwhile the

rest 45.4 % is explained by other variables outside those studied .

#### ➤ Test result Predictive Relevance (Q<sup>2</sup>)

The Q  $^2$  value of the model is more than 0, indicating that the model has good predictive relevance, whereas Q<sup>2</sup> value is less from 0 indicates the model is lacking has predictive relevance.

Variabel	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
After-Sales Service Quality	639.000	639.000	
Customer Loyalty	213.000	152.779	0.283
Customer Satisfaction	213.000	139.321	0.346
Perceived Price Fairness	284.000	284.000	
Perceived Product Quality	284.000	284.000	
Salesperson's Credibility	426.000	426.000	

Table 8: Predictive Relevance Value ( $Q^2$ )

Based on Test Results Communality Cross Validation of Constructs in table 8 above can seen that all variable own greater value \_ from 0. With thereby so can interpreted that all variable own very strong value, where number highest that is with Q2 value = 0.304 meaning that the Intention to Use variable has mark strong and relevant predictions.

#### > Testing Hypothesis

Testing hypothesis PLS-SEM analysis in this study used significance 5% or with tolerance error  $\alpha = 0.05$ . As for taking decision in PLS-SEM analysis for hypotheses with a 5% significance test is If |t-statistic| value > 1.96 or mark significance (p-value) < 0.05 and the path coefficient value is positive.

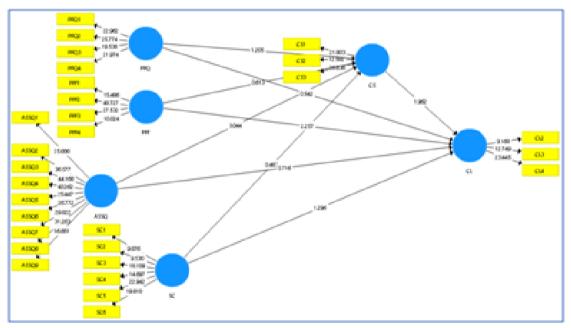


Fig. 5: Path Diagram Path Coefficient & T-Statistics Structural Model (Inner Model)

Tuble 7. Results of Direct and mandet Hypothesis Testing					
	Original Sampel (O)	Standard Deviation (STDEV)	T Statistic (  O/STDEV  )	P Values	
Perceived Product Quality $(X_1) \rightarrow Customer Satisfaction (Y_1)$	0.212	0.176	1.205	0.229	
Perceived Price Fairness $(X_2) \rightarrow Customer Satisfaction (Y_1)$	0.056	0.091	0.613	0.540	
After-Sales Service Quality (X <sub>3</sub> ) $\rightarrow$ Customer Satisfaction (Y <sub>1</sub> )	0.502	0.165	3.044	0.002	
Salesperson's Credibility $(X_4) \rightarrow Customer Satisfaction (Y_1)$	0.063	0.129	0.483	0.629	
Customer Satisfaction $(Y_1) \rightarrow Customer Loyalty (Y_2)$	0.401	0.205	1.962	0.050	
$\begin{array}{l} \textit{Perceived Product Quality} \ (X_1) \rightarrow \\ \textit{Customer Loyalty} \ (Y_2) \end{array}$	0.096	0.178	0.542	0.588	
Perceived Price Fairness $(X_2) \rightarrow Customer Loyalty (Y_2)$	0.369	0.163	2.257	0.024	
After-Sales Service Quality $(X_3) \rightarrow Customer Loyalty (Y_2)$	0.143	0.200	0.716	0.474	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	-0.181	0.139	1.296	0.196	

	Table 9: Results	of Direct and I	Indirect H	ypothesis	Testing
--	------------------	-----------------	------------	-----------	---------

		Standard		1
	Original Sample (O)	Deviation (STDEV)	T Statistic (  O/STDEV  )	P Values
Perceived Product Quality $(X_1) \rightarrow Customer$ Satisfaction $(Y_1) \rightarrow$ Customer Loyalty $(Y_2)$	0.085	0.077	1.099	0.272
Perceived Product Fairness $(X_2) \rightarrow Customer$ Satisfaction $(Y_1) \rightarrow$ Customer Loyalty $(Y_2)$	0.023	0.039	0.572	0.568
After-Sales Service Quality $(X_3) \rightarrow Customer$ Satisfaction $(Y_1) \rightarrow$ Customer Loyalty $(Y_2)$	0.201	0.108	1.859	0.064
Salesperson's Credibility $(X_4) \rightarrow Customer$ $Satisfaction$ $(Y_1) \rightarrow$ Customer Loyalty $(Y_2)$	0.025	0.062	0.408	0.684

# V. DISCUSSION

#### A. H1: Influence of Perceived Product Quality on Customer Satisfaction

H1 in this study was rejected. The results of this study are not in line with research conducted by Sharma (2022), Phang & Sim (2020) and Wiraaya et al. (2023) which states that perceived product quality has a direct positive and significant effect on customer satisfaction. However, the results of this study are in line with research conducted by Manurung et al. (2022), Tirtayasa (2022) and Fiqqih (2023) which state that Perceived Product Quality has a positive and insignificant effect on Customer Satisfaction. Quality product microbes good standard possible customer can utilise the product he purchased in accordance with need testing microbiology and answer problems that occur in the laboratory. However, results research also shows that Still there is part small consumers who haven't feel satisfied to quality and value product from PT MRK. This is caused by the limited information received by customers regarding product features and benefits.

# B. H2: Influence of Perceived Price Fairness on Customer Satisfaction

H2 in this study was rejected . and concluded that Perceived Price Fairness has an effect positive and not significant towards Customer Satisfaction. The results of this study are not in line with research conducted by Susanti (2019), Alzoubi et al. (2020), Bernardo et al. (2022), and Setiawan et al. (2020) which states that Perceived Price Fairness has an effect positive and significant directly to Customer Satisfaction. However, results this research is in line with research conducted by Sugianto &Ardhanari (2021) stated that Perceived Product Fairness has an influence positive and not significant towards Customer Satisfaction.

Analysis results show that the more tall perception customer to fairness price hinted suitability price with offers accepted by customers, as well suitability prices offered by the company and competitors so satisfaction customers will too increase. However, Perceived Price Fairness does not give A significant influence to satisfaction felt by customers of PT. MRK. This can caused by existence a number of other capable competitors offer more competitive prices compared to with the price offered by PT. MRK.

#### C. H3: The influence of After-Sales Service Quality on Customer Satisfaction

H3 in this study was accepted and concluded that After-Sales Service Quality has an influence positive and significant towards Customer Satisfaction. It means in business product microbes standard , After-Sales Service Quality is variables that are significant influence Customer Satisfaction. The results of this study are consistent with research conducted by Tweneboah - Koduah, I. (2019) and Shokouhyar et al. (2020) which states that After-Sales Service Quality has an influence positive and significant directly to Customer Satisfaction. Quality service full good selling \_ will reflect good picture \_ to company, other than that if quality service full good selling truly applied so can made one way to look after sustainabilitZ and growth company. Activities carried out in service full sell become the main strategy company to get superiority competitive compared to with competitors other. Suitability between service full sell given with need customers, especially Again services provided can exceed expectation customer will influence given value customer to company.

### D. H4: Influence of Salesperson's Credibility on Customer Satisfaction

H4 in this study was rejected and concluded that Salesperson's Credibility does not influential towards Customer Satisfaction. The results of this study are consistent with research conducted by Roman (2003) shows that behavior ethics possessed by a salesperson (salesperson's ethical behavior ). No significant influence satisfaction customer to company.

Salesperson can increase level satisfaction customer with manage image they in a way effective on the eyes customer. By specifically, considered can trusted and owned level high skill so that can help power seller build connection business period long. Therefore, energy seller must considered as a credible consultant.

### E. H5: Influence of Customer Satisfaction on Customer Loyalty

H5 in this study was rejected and concluded that Customer Satisfaction has an effect positive and not significant towards Customer Loyalty. It means in business product microbes standard, Customer Satisfaction is variables that influence Customer Loyalty however in a way No significant. results this research is in line with research conducted by Erdiansyah&Imaningsih (2021) stated that customer satisfaction is not influential significant on customer loyalty. That is, improvement satisfaction customer No will give Lots influence to loyalty customer. This can caused by low level satisfaction obtained customer so that This is not enough to make customer loyal against PT. MRK.

#### F. H6: Influence of Perceived Product Quality on Customer Loyalty

H6 in this study was rejected and concluded that Perceived Product Quality has an influence positive and not significant towards Customer Loyalty. It means in business product microbes standard, Perceived Product Quality is variables that influence Customer Lovalty however in a way No significant., results this research is in line with study conducted by Fiqqih (2023), Tirtayasa (2022), Somalua et al. (2022), and Wantara&Tambrin (2019) who mention that perceived product quality is not influential in a way significant on customer loyalty. Analysis results show that the more tall perception customer to all over component quality from product microbes standard so loyalty customers will too increased, however enhancement loyalty this customer does not significant. This can caused by existence a number of other capable competitors offer quality comparable products with PT. MRK. Apart from that, perception to quality neither is the product become very important thing for customer.

### G. H7: Influence Perceived Price Fairness to Customer Loyalty

H7 in this study was accepted and concluded that Perceived Price Fairness has an effect positive and significant towards Customer Loyalty. The results of this study are consistent with research conducted by Hutama&Ekawati (2020), and Fiqqih (2023) which states that perceived price fairness has an effect positive and significant on customer loyalty. It means in business product microbes the Perceived Price Fairness standard is variables that are significant affects Customer Loyalty. Analysis results show that the more tall evaluation customer to fairness the price suggests suitability price with offers accepted by customers, as well suitability prices offered by the company and competitors so loyalty customers will too increase in a way significant.

H. H8: Effect of After-Sales Service Quality on Customer Loyalty

H8 in this study was rejected. The results of this study are consistent with research conducted by Ashari (2023), Wirajaya et al. (2023), and Iskandar et al. (2023) which states that service quality is not influential in a way significant towards customer loyalty.

It means in business product microbes standard, After-Sales Service Quality is variables that influence Customer Loyalty however in a way No significant. This shows that if evaluation customer to quality services provided to customer after do purchase product microbes standard the more high, then No will significant increase loyalty customer. This can happen Because quality service full sales provided by PT. MRK not yet reach level desired advantages or fulfil hope customer so that not enough give significant impact to loyalty customer.

I. H9: The Influence of Salesperson's Credibility on Customer Loyalty

H9 in this study was rejected. The results of this study are consistent with research conducted by Jamal & Anastasiadou (2009) stated that expertise matters negative towards customer loyalty.

It means in business product microbes standard, Salesperson's Credibility is not is variables that influence Customer Loyalty. This shows that if credibility possessed by the workforce seller Good interaction, expertise and ethics of the seller the more increases, then No will increase loyalty customer.

J. H10: The influence of Perceived Product Quality on Customer Loyalty is mediated by Customer Satisfaction

H10 in this study was rejected. The results of this study are consistent with research conducted by Fiqqih (2023) stated that customer satisfaction is not mediate the influence of product quality on customer loyalty. It means in business product microbes standard, Perceived Product Quality is not influencing Customer Loyalty through Customer Satisfaction. This shows that the more tall perception customer to all over component quality from product microbes standard, then will create satisfaction for the customer in the end impact on improvement loyalty customers, however in a way No significant.

K. H11: The influence of Perceived Price Fairness on Customer Loyalty is mediated by Customer Satisfaction

H11 in this study was rejected. The results of this study are not in line with research conducted by Susanti (2019), Octaviani et al. (2021), and Yaqub et al. (2019) stated that customer satisfaction mediates The relationship between perceived price fairness and customer loyalty significant. It means in business product microbes standard, Perceived Price Fairness No significant influencing Customer Loyalty through Customer Satisfaction. Where can you? interpreted that in a way empirical evaluation customer to reasonableness and suitability price No can increase satisfaction customer in a way significant impact to enhancement loyalty customer. So that can said that high assessment to reasonableness and suitability price product microbes standard can cause customer not loyal to PT. MRK.

L. H12: The influence of After-Sales Service Quality on Customer Loyalty is mediated by Customer Satisfaction H12 in this study was rejected. The results of this study are consistent with research conducted by Fiqqih (2023) and Atmaja & Yasa (2020) which states that customer satisfaction is not mediate the influence of service quality on customer loyalty. It means in business product microbes standard, After-Sales Service Quality No significant influencing Customer Loyalty through Customer Satisfaction. This shows that the more tall evaluation customer to quality services provided to customer after do purchase product microbes standard, then No will in a way significant increase satisfaction for the customer in the end impact on improvement loyalty customer.

M. H13: Influence of Salesperson's Credibility on Customer Loyalty is mediated by Customer Satisfaction

H1 3 in this study was rejected. The results of this study are not in line with research conducted by Mansouri et al. (2022) and Kethan & Basha (2022) who mention that customer satisfaction is successful mediate The relationship between ethical sales behavior and customer loyalty. It means in business product microbes standards. Salesperson's Credibility No significant influencing Customer Loyalty through Customer Satisfaction. This shows that the more tall credibility possessed by the workforce seller Good interaction, expertise and ethics, then No will in a way significant increase satisfaction for the customer in the end impact on improvement loyalty customer.

Liu & Leach (2012) found that when something source considered credible, then information provided will be more persuasive and more likely leads to intention buying and choice brand . When solving problems and development customized solutions by power seller become integral aspect of offer, perception customer to credibility power seller become the more important. Because if power credible seller can trustworthy, then customers and personnel seller can depend on One each other to comply promise and share information needed to design the right solution. Apart from that, energy credible seller seen as a expert or consultant who became source information valuable and also a partner business.

#### VI. CONCLUSION

### A. Conclusion

Conclusions of This research is :

- After-Sales Service Quality becomes the only one influential variables in a way significant towards Customer Satisfaction
- Perceived Price Fairness becomes the only one influential variables in a way significant towards Customer Loyalty
- Customer Satisfaction does not mediate connection between Perceived Product Quality, Perceived Product Fairness, After-Sales Service Quality and Salesperson's Credibility on Customer Loyalty.

#### B. Suggestion

#### > For Companies

In increasing Customer Satisfaction, the company need maintain the After-Sales Service Quality provided to customer with strengthen aspects of tangibles, reliability, responsiveness, assurance, and empathy. Because inside B2B context, company No only role as seller just but also as capable consultant give accompaniment to customer during the work process The same taking place. If company have a service strategy full good sell, then \_ This can \_ useful as superiority competitive capable company compete with competitors so that can increase profitability company. Apart from that, companies also need it increasing Perceived Product Quality, Perceived Product Fairness, and Salesperson's Credibility for the sake of increasing increasing satisfaction customer.

In the Brand Image indicator variable product Krisbow can used for all circles Still low on the Brand Image variable so need repaired so that with exists products for all circles, then Companies can too reach all existing market share as well as Products provided Krisbow can influence interest buy back, then the advice given researcher is to continue increase quality products to increase Lots customer. In increasing Customer Lovalty, the company need maintain the Perceived Price Fairness offered to customer with strengthen aspects of comparable options and price knowledge. Because currently customerstend consider connection between fairness price paid with hope to products that have been bought it. Customers are also inclined compare prices offered by the company and competitors so the pricing strategy also becomes superiority other competitive ones can reliable . That means, more and more enter sense price product microbes standards offered, then loyalty customer to company will the more increase. Apart from that, companies also need it improve Perceived Product Quality, After-Sales Service Quality, and Salesperson's Credibility for the sake of increasing increasing loyalty customer.

# ➢ For Researchers Furthermore

This research is still ongoing own one of the limitations in reference study previous. On relationships between every variables taken for research previous Still limited. Hopefully this research can become reference for researchers furthermore in study with the same variable. In this research there are other factors can influencing Customer Loyalty for further research like image brand, promotion, level trust, commitment customers, and so on so that study furthermore can much more varied Where results study can made reference in a way academic in provide and improve as well as develop Customer Loyalty theory.

#### REFERENCES

- [1]. Aaker, D. A. (1991). Managing Brand Equity. The Free Press.
- [2]. Adusei, C., & Tweneboah-Koduah, I. (2019). After-Sales Service and Customer Satisfaction in the Automobile Industry in an Emerging Economy. OALib, 06(01), 1–21. https://doi.org/10.4236/oalib.1105167
- [3]. Algesheimer, R., Dholakia, U. M., & Herrmann, A. (2005). The social influence of brand communities: Evidence from European car clubs. Journal of Marketing, 69(3), 19–34. https://doi.org/10.1509/jmkg.69.3.19.66363
- [4]. Almomani, H. C. (2019). Relationship Quality as a Predictor of B2B Customer Loyalty in the Pharmaceutical Sector: Evidence from Jordan. Journal of Relationship Marketing, 18(2), 108–123. https://doi.org/10.1080/15332667.2018.1534062
- [5]. Alzoubi, H., Alshurideh, M., Kurdi, B. Al, & Inairat, M. (2020). Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context. Uncertain Supply Chain Management, 8(3), 579–588. https://doi.org/10.5267/j.uscm.2020.2.005
- [6]. Atmaja, GKK & Yasa NNK (2020). The Role of Customer Satisfaction in Mediating the Influence of Price Fairness and Service Quality on the Loyalty of Customers in Low-Cost Carriers Indonesia. International Research Journal of Management, IT & Social Sciences Available online at https://sloap.org/journals/index.php/irjmis/ Vol. 7 No. 5, September 2020, pages: 149-159 ISSN: 2395-7492 https://doi.org/10.21744/irjmis.v7n5.984
- [7]. Bernardo, I., Purwanto, A., & Masman, RR (2022). The Effect of Perceived Risk, Brand Image and Perceived Price Fairness on Customer Satisfaction. Journal Management, 26(1), 35–50.
- [8]. BPOM. (2006). Guidelines On Good Manufacturing (CPOB).
- [9]. Cravens, D. W., & Piercy, N. F. (2009). Strategic Marketing Ninth Edition.
- [10]. Davison, R.C.R., & Smith, P.M. (2018). Quantitative data analysis. In Research Methods in Physical Activity and Health. https://doi.org/10.4324/9781315158501-17
- [11]. Dick, A.S., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. Journal of the Academy of Marketing Science, 22(2), 99–113. https://doi.org/10.1177/0092070394222001
- [12]. Erdiansyah D. &Imaningsih ES (2021). Analysis of Effects of Product Quality, Promotion and Received Value Towards Customer Loyalty through Customer Satisfaction Grab Food. Journal of Business and Management Studies (JBMS) ISSN: 2709-0876 DOI: 10.32996/ jbms
- [13]. Fiqqih , MN (2023). The Effect of Perceived Price Fairness, Product Quality, and Service Quality on Customer Loyalty with Customer Satisfaction Mediation on Shopee Consumers. WR Murhadi et al.

(Eds.): INSYMA 2022, AEBMR 223, pp. 265–271, 2023. https://doi.org/10.2991/978-94-6463-008-4\_35

- [14]. Grewal, R., Lilien, G.L., Bharadwaj, S., Jindal, P., Kayande, U., Lusch, R.F., Mantrala, M., Palmatier, R.W., Rindfleisch, A., Scheer, L.K., Spekman, R. ,& Sridhar, S. (2015). Business-to-Business Buying: Challenges and Opportunities. Customer Needs and Solutions, 2(3), 193–208. https://doi.org/10.1007/s40547-015-0040-5
- [15]. Haghkhah, A., & Asgari, A. A. (2020). Effects of Customer Value and Service Quality on Customer Loyalty: Mediation Role of Trust and Commitment in Business-To-Business Context. Management Research and Practice, 12(1), 27–47.
- [16]. Hair, J.F., Ringle, C.M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139–152. https://doi.org/10.2753/MTP1069-6679190202
- [17]. Hair Jr., J.F., Matthews, L.M., Matthews, R.L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. International Journal of Multivariate Data Analysis, 1(2), 107. https://doi.org/10.1504/ijmda.2017.10008574
- [18]. Hänninen, N., &Karjaluoto, H. (2017). The effect of marketing communication on business relationship loyalty. Marketing Intelligence and Planning, 35(4), 458–472. https://doi.org/10.1108/MIP-01-2016-0006
- [19]. Hayati IK, Sumardjono , & Mulyadi Y. (2020). Analysis of consumer loyalty based on the aspect of brand image and after sales service. The Management Journal of BINANIAGA Vol. 05, No. 01, June 2020. p-ISSN: 2527 – 4317, e-ISSN: 2580 – 149x
- [20]. Huang, P.L., Lee, BCY, & Chen, C.C. (2019). The influence of service quality on customer satisfaction and loyalty in B2B technology service industry. Total Quality Management and Business Excellence, 30(13–14), 1449–1465. https://doi.org/10.1080/14783363.2017.1372184
- [21]. Human, G., Ferreira, C.C., Robertson, J., & Witherspoon, M. (2020). Customer experience, satisfaction and loyalty in business-to-business markets: Does the chain hold across customer segments? Acta Commercii , 20(1), 1–13. https://doi.org/10.4102/ac.v20i1.899
- [22]. Hussein F. &Hartelina . (2021). After Sales Service For Smartphone Iphone To Customer Loyalty. ATM, Vol 5, No. 1, January 2021 e-ISSN: 2622-6804 p-ISSN: 2622-6812
- [23]. Hutama KY &Ekawati NW (2020). The Influence of Price Fairness and Corporate Image on Customer Loyalty towards Trust. American Journal of Humanities and Social Sciences Research (AJHSSR) e-ISSN:2378-703X Volume-4, Issue-8, pp-209-214
- [24]. Hutt, M.D., & Speh, T.W. (2010). Business Marketing Management: B2B. Cengage Learning.
- [25]. Jamal, A. and Anastasiadou, K. (2009), "Investigating the effects of service quality dimensions and expertise on loyalty", European Journal of Marketing, Vol. 43 No. 3/4, pp. 398-420
- [26]. Jannah R., Mappatompo A., &Haanurat I. (2019). The Influence of Product Quality and Promotion on

Customer Satisfaction and Its Impact on Customer Loyalty PT. Indonesian Prosperous Masterpiece . Proceedings of The 3rd International Conference on Accounting, Business & Economics (UII-ICABE 2019)

- [27]. John T. Bowen, & Shiang -Lih Chen. (2001). The Relationship Between Customer Loyalty and Customer Satisfaction. International Journal of Contemporary Hospitality Management, 5(13), 213– 217.
- [28]. Kato, Takumi. (2021). Factors of loyalty across corporate brand images, products, dealers, sales staff, and after-sales services in the automotive industry. P Croocmepduiate Cr oSmcipenucteer 0 S0c i( e2n0c1e9 1) 9020 0(2–002010) 1411–1421 10.1016/j.procs.2021.08.144
- [29]. Keller, K. L. (2000). Strategic Brand Management: Building, Measuring, and Managing Brand Equity. In Journal of Consumer Marketing (Vol. 17, Issue 3). https://doi.org/10.1108/jcm.2000.17.3.263.3
- [30]. Indonesian Ministry of Health. (2020). Indonesian Pharmacopoeia IV edition . In Ministry of Health of the Republic of Indonesia.
- [31]. Ministry of Industry. (2021). Book Industrial Development Analysis-II Edition 2022. In Books Industrial Development Analysis.
- [32]. Kethan M. & Basha M. (2022). Relationship of Ethical Sales Behavior with Customer Loyalty, Trust and Commitment: A Study with Special Reference to Retail Stores in Mysore City. East Asian Journal of Multidisciplinary Research (EAJMR) Vol. 1, No. 7, 2022 : 1365-1376
- [33]. Khoironi , TA, Syah, H., & Dongoran, P. (2018). Product quality, brand image and pricing to improve satisfaction impact on customer loyalty. International Review of Management and Marketing, 8(3), 51–58.
- [34]. Kittur, P., & Chatterjee, S. (2021). Goods and services related brand image and B2B customer loyalty: effects of construal level. Journal of Business and Industrial Marketing, 36(1), 17–30. https://doi.org/10.1108/JBIM-06-2019-0284
- [35]. Kothari, C.R. (2004). Research Methodology Methods and Techniques.
- [36]. Kotler, P., & Armstrong, G. (2017). Principles of Marketing (14th, Ed.). Pearson. https://doi.org/10.2307/2548367
- [37]. Kotler, P., & Keller, K. L. (2018). Marketing Management. In Essentials of Management for Healthcare Professionals. https://doi.org/10.4324/9781315099200-17
- [38]. Kwiatek, P., Morgan, Z., & Thanasi- Boçe, M. (2020). The role of relationship quality and loyalty programs in building customer loyalty. Journal of Business and Industrial Marketing, 35(11), 1645– 1657. https://doi.org/10.1108/JBIM-02-2019-0093
- [39]. Lee, M., Kang, M., & Kang, J. (2019). Cultural influences on B2B service quality-satisfaction-loyalty. Service Industries Journal, 39(3–4), 229–249. https://doi.org/10.1080/02642069.2018.1495710
- [40]. Liu AH & Leach MP (2012). Developing Loyal Customers with a Value-adding Sales Force:

Examining Customer Satisfaction and the Perceived Credibility of Consultative Salespeople. The Journal of Personal Selling and Sales Management, Vol. 21, no. 2, Special Issue on Strategic Issues in Selling and Sales Management (Spring 2001), pp. 147-15

- [41]. Malhotra, N. K., & Birks, D. F. (2007). Marketing Research and Applied Approach. In Open Journal of Business and Management: Vol. Vol. 4 (Issue Prentice Hall.).
- [42]. Mansouri, H., Sadeghi Boroujerdi, S., & Md Husin, M. (2022). The influence of sellers' ethical behavior on customer's loyalty, satisfaction and trust. Spanish Journal of Marketing - ESIC, 26(2), 267–283. https://doi.org/10.1108/SJME-09-2021-0176
- [43]. Manurung L., Ningsi EH, & Widodo S. (2022). The Effect of Product Quality and Service Quality on Customer Satisfaction at AlfamidiRingroad Store 3. Economic Journal, Volume 11, No 01 June 2022. ISSN: 2301-6280 (print) ISSN: 2721-9879 (online)
- [44]. Marwa R. &Astini R. (2023). Influence of Service Quality, Price Perception and Quality of the Customer Experience Customer Loyalty with Customer Satisfaction as an Intervening Variable. Saudi J Bus Manag Stud, 8(8): 202-214. Microbiologics. (2022). About us Microbiologics . (2022). https://www.microbiologics.com/aboutus
- [45]. Moretta-Tartaglione, A., Cavacece, Y., Granata, G.R., & Granata, G. (2019). A Systematic Mapping Study on Customer Loyalty and Brand Management. MDPI.
- [46]. Murali, S., Pugazhendhi, S., & Muralidharan, C. (2016). Modeling and Investigating the relationship of after sales service quality with customer satisfaction, retention and loyalty - A case study of home appliances business. Journal of Retailing and Consumer Services, 30, 67–83. https://doi.org/10.1016/j.jretconser.2016.01.001
- [47]. Newell, S. J., Belonax, J. J., McCardle, M. W., & Plank, R. E. (2011). The effect of personal relationships and consultative task behaviors on buyer perceptions of salesperson trust, expertise, and loyalty. Journal of Marketing Theory and Practice, 19(3), 307– 316. https://doi.org/10.2753/MTP1069-6679190304
- [48]. Newell, S. J., Wu, B., Leingpibul, D., & Jiang, Y. (2016). The importance of corporate and salesperson expertise and trust in building loyal business-tobusiness relationships in China. Journal of Personal Selling and Sales Management, 36(2), 160–173. https://doi.org/10.1080/08853134.2016.1190656
- [49]. Octaviani OC, Rizan M., &Rivai AK (2021). The Effect of e-Service Quality and Perceived Price Fairness on Customer Loyalty which Customer Satisfaction as Intervening Study on Online Shopping Site in Indonesia. JDMB Vol. 04 No. 1 2021.
- [50]. Othman, B., He, W., Huang, Z., Xi, J., & Ramsey, T. (2021). The effects on service value and customer retention by integrating after sale service into the traditional marketing mix model of clothing store brands in China. Environmental Technology and Innovation, 23, 101784. https://doi.org/10.1016/j.eti.2021.101784

- [51]. Pang, Ing & Sim, YS (2020). Rational or emotional? An examination of customer loyalty in B2B packaged food retail settings. Asian Journal of Business Research, 10(1), 1–28. https://doi.org/10.14707/ajbr.200073
- [52]. Parry, M.E., Sarma, S., & Yang, X. (2021). The Relationships among Dimensions of Perceived Risk and the Switching Intentions of Pioneer Adopters in Japan. Journal of International Consumer Marketing, 33(1), 38–57. https://doi.org/10.1080/08961530.2020.1765445
- [53]. Ramaswami, S. N., & Arunachalam, S. (2016). Divided attitudinal loyalty and customer value: role of dealers in an indirect channel. Journal of the Academy of Marketing Science, 44(6), 770–790. https://doi.org/10.1007/s11747-015-0471-4
- [54]. Rauyruen, P., & Miller, K. E. (2007). Relationship quality as a predictor of B2B customer loyalty. Journal of Business Research, 60(1), 21–31. https://doi.org/10.1016/j.jbusres.2005.11.006
- [55]. Réklaitis, K., &Pilelienė, L. (2019). Principle Differences between B2B and B2C Marketing Communication Processes. Management of Organizations: Systematic Research, 81(1), 73–86. https://doi.org/10.1515/mosr-2019-0005
- [56]. Roman, Sergio. (2012). The Impact of Ethical Sales Behavior on Customer Satisfaction, Trust and Loyalty to the Company: An Empirical Study in the Financial Services Industry. Journal of Marketing Management, 19:9-10, 915-939, DOI: 10.1080/0267257X.2003.9728245
- [57]. Rubio, N. (2019). Customer Loyalty and Brand Management. In Customer Loyalty and Brand Management. https://doi.org/10.3390/books978-3-03921-336-8
- [58]. Ruiz-Martínez, A., Frasquet, M., & Gil-Saura, I. (2019). How to measure B2B relationship value to increase satisfaction and loyalty. Journal of Business and Industrial Marketing, 34(8), 1866–1878. https://doi.org/10.1108/JBIM-10-2018-0289
- [59]. Russo, I., Confente, I., Gligor, D. M., & Cobelli, N. (2017). The combined effect of product returns experience and switching costs on B2B customer repurchase intent. Journal of Business and Industrial Marketing, 32(5), 664–676. https://doi.org/10.1108/JBIM-06-2016-0129
- [60]. Samudro, A., Sumarwan, U., Simanjuntak, M., & Yusuf, EZ (2020). Assessing the effects of perceived quality and perceived value on customer satisfaction. Management Science Letters, 10(5), 1077–1084. https://doi.org/10.5267/j.msl.2019.11.001
- [61]. Setiawan, EB, Wati, S., Wardana, A., & Ikhsan, RB (2020). Building trust through customer satisfaction in the airline industry in Indonesia: Service quality and price fairness contribution. Management Science Letters, 10(5), 1095–1102. https://doi.org/10.5267/j.msl.2019.10.033
- [62]. Sharma, N. (2022). How core, technical and social components of business relationship value drive customer satisfaction and loyalty in high tech B2B markets. Journal of Business and Industrial

Marketing, 37(5), 975–994. https://doi.org/10.1108/JBIM-12-2020-0554

- [63]. Shokouhyar, S., Shokoohyar, S., & Safari, S. (2020). Research on the influence of after-sales service quality factors on customer satisfaction. Journal of Retailing and Consumer Services, 56(April), 102139. https://doi.org/10.1016/j.jretconser.2020.102139
- [64]. Somalua R., Assim, Nurmingsih, & Siregar R. (2022). The Effect of Product Quality and Product Innovation on Customer Loyalty in Fizzul Putra Mandiri Convention Jombang Regency. JOURNAL OF MANAGEMENT, ACCOUNTING, GENERAL FINANCE AND INTERNATIONAL ECONOMIC ISSUES (MARGINAL) Volume 1 ISSUE 2 (2022)
- [65]. Sugianto E. &Ardhanari M. (2021). The Effect of Country Image, Price Fairness, and Ethical Practice to Customer Satisfaction Through Customer Perceived Value of TTS Leci Syrup in Surabaya. Journal Scientific E-ISSN Management : 2549-9491.
- [66]. Sugiyono . (2013). Research methods Quantitative , Qualitative , and R&D.
- [67]. Susanti, CE (2019). The Effect of Service Quality and Perceived Price Fairness on Consumer Loyalty through Consumer Satisfaction on Budget Hotels in East Java. Indian Journal of Science and Technology, 12(6), 1–7. https://doi.org/10.17485/ijst/2019/v12i6/141954
- [68]. Tafsir M., Shaari R., Muchtar H., &Firmansya . (2018). The Effects of Product Quality and Interpersonal Communication on Customer Loyalty. IJoASER, Volume 1, Issue 1, March 2018 DOI: 10.33648/ ijoaser.v 1i1.1
- [69]. Tegambwage, A.G., &Kasoga, P.S. (2022).
  Antecedents of customer loyalty in Islamic banking: evidence from Tanzania. Journal of Islamic Accounting and Business Research, 13(4), 701–713. https://doi.org/10.1108/JIABR-10-2021-0288
- [70]. Tirtayasa, Satria. (2022). Effect Of Product Quality And Service On Customer Loyalty With Customer Satisfaction As An Intervening Variable (Study On Coffee Shop In Medan). International Journal of Science, Technology & Management ISSN: 2722 -4015
- [71]. Vize, R., Coughlan, J., Keneedy , A., & Ellis-Chadwick, F. (2016). Measuring B2B Relationship Quality in an Online Context: Exploring the Roles of Service Quality, Power, and Loyalty. Developments in Marketing Science: Proceedings of the Academy of Marketing Science, 255–267. https://doi.org/10.1007/978-3-319-26647-3\_51
- [72]. Walliman , N. (2021). Research theory. In Research Methods. https://doi.org/10.4324/9781003141693-4
- [73]. Wantara P. & Tambrin M. (2019). The Effect of Price and Product Quality Towards Customer Satisfaction and Customer Loyalty on Madura Batik. International Tourism and Hospitality Journal 2(1): 1-9 (2019) Print ISSN: 2616-518X Online ISSN: 2616-4701

- [74]. WHO. (2007). Quality assurance of pharmaceuticals: A compendium of guidelines and related materials Volume 2, 2nd updated edition. In WHO Library Cataloging-in-Publication Data (Vol. 136). https://doi.org/10.1016/j.sajb.2020.04.002
- [75]. WHO. (2015). Medicines: Good manufacturing practices. https://www.who.int/news-room/questionsand-answers/item/medicines-good-manufacturingprocesses
- [76]. Wijaya, T. (2022). Salesperson ethics behavior as an antecedent of Islamic banking customer loyalty. 13(7), 1535–1550. https://doi.org/10.1108/JIMA-04-2020-0100
- [77]. Wirajaya S., Sitorus HM, Wibisono YY, Kurniawan D., & Nathania L. (2023). The effect of product quality, service quality, corporate image, and perceived value on customer loyalty of B2B truck companies with customer satisfaction as intervening variables. International Journal of Economics, Business and Accounting Research (IJEBAR) Peer Reviewed International Journal Vol-7, Issue-4, 2023 (IJEBAR) E-ISSN: 2614-1280 P-ISSN 2622-4771
- [78]. Yaqub, Shahid R.M., Halim F., & Shehzad A. (2019). Effect of service quality, price fairness, justice with service recovery and relational bonds on customer loyalty: Mediating role of customer satisfaction, Pakistan Journal of Commerce and Social Sciences (PJCSS), ISSN 2309-8619, Johar Education Society, Pakistan (JESPK), Lahore, Vol. 13, Iss. 1, pp. 62-94
- [79]. Zhong, Y., &Hee Cheol Moon. (2020). What Drives Customer Satisfaction, Loyalty, and Happiness in Fast-Food Restaurants in China? Perceived Price, Service Quality, Food Quality, Physical Environment Quality, and the Moderating Role of Gender. Mdpi, 9(4), 1–16.
- [80]. Zimmerman, A., & Blythe, J. (2013). Business to Business Marketing Management. In Business to Business Marketing Management. https://doi.org/10.4324/9780203067581