



THE IMPRESSION OF LOGISTIC MANAGEMENT ON CUSTOMER SATISFACTION IN SMEs

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Abstract

Batam has its own regulations to regulate its area. It is part of the Free Trade Area making Batam a priority area for exports and imports. The purpose of this research is to find out whether there is an effect of Logistics Management on Customer Satisfaction in SMEs in the Free Trade Area during a decline in economic growth. In collecting data, the researchers used an instrument in the form of a questionnaire whose respondents were business actors in Small and Medium Enterprises (SMEs) in Batam. There are 428 samples then used as data analysis, applying Simple Linear Regression Analysis Technique using SPSS as a data processing tool. The results shown in the form of Logistics Management have a significant effect on SME Customer Satisfaction in Batam when there is a decline in economic growth.

Keywords: Logistics Management, Customer Satisfaction, Small and Medium Enterprises

INTRODUCTION

The concept of entrepreneurship has been attached to the Indonesian people, especially Batam. Batam, which is known as an industrial city, has a fairly strong capacity in the business world, both nationally and internationally. This is because Batam is one of the Special Economic Zones established by the central government in Law Number 44 of 2007 (bpbatam, 2020). This provision marks Batam as a Free Trade Area and Free Port, or commonly known as the Free Trade area. It is outside the jurisdiction of economic customs and does not calculate import duties or other procedures applicable to imports (Zaenuddin et al., 2017). FTZ is an area that provides freedom of trade for business actors by using the appropriate infrastructure in it (Seyoum, 2017).

Due to the designation of Batam as a Special Economic Zone, many companies, both domestic and foreign, have established their companies in Batam to facilitate the export and import process. Exporting is the most common practice because it is associated with minimal resources, lower risk, and structural flexibility that allows SMEs to develop more to engage in international trade (Njinyah, 2017). In the results of research Dhingra et al. (2009), the existence of certain economic areas can have a positive impact on the company's investment in utilizing the company's resources and capabilities. Not only beneficial for investment, the existence of certain areas also has a good impact on entrepreneurial abilities because these areas also receive differentiating support from government agencies so that production management becomes more efficient with cheaper capital (Dhingra et al., 2009).

Not only big companies, the development of SMEs in Batam is also increasing. In 2020, the Secretary of the Riau Islands Province KUMK, Eky, said there were 81,575 SME entrepreneurs in Batam (hmstimes, 2020). BPS Batam said there were 1,421,961 residents in the 2020 population census. If it is associated with the number of SMEs operating in Batam, 17.43% of the total population of Batam has micro and medium enterprises. With the number of SMEs and large companies growing every year, economic growth in Batam is also increasing. As the results of the research presented in the journal Sari and Saputra (2020), that SMEs have a positive and significant impact on economic growth in the city of Batam, it shows that the number of SMEs in the city of Batam can be a determinant. SMEs are jobs that can manifest goods or services so that the Gross Regional Domestic Product,

labor acceptance, and people's power to buy goods and services will increase (Sari & Saputro, 2020).

BPS Batam on its official website states that from 2012 to 2017, Batam's economic growth experienced a periodic decline and increased in 2018 and 2019 by 0.96%. However, in 2020, economic growth in Batam again decreased by -2.55%.

The decline could be triggered by various factors, such as the COVID-19 pandemic that began in 2019, or other factors such as high logistics costs in shipping goods out of the Batam area, especially to other regions in Indonesia (CNN Indonesia, 2020). In addition, according to the journal of Lubis and Yando (2020), it is stated that SMEs have a positive and significant impact on economic growth/GDP in the Riau Islands. As explained in the journal Sari and Saputro (2020), that the SME sector is a fairly large contributor to Gross Domestic Product (GDP) nationally, and economic growth is a procedure in which an increase in Gross Domestic Product (GDP) is created in the long term so that a country's economy is said to be advanced if there is an increase in output. If the SME sector advances in an area, it will result in increased labor absorption, and production paths and output that will be manifested will also increase, which will have an impact on increasing regional GRDP (Sari & Saputro, 2020).

Even though the number of SMEs in Batam is relatively large, according to Yealta (2015), if local investors have not been able to master technology in the production, marketing, distribution and sale of export quality goods, there will be setbacks or no added value in terms of trade liberalization reforms. .

Logistics management is also called supply chain management, which designs, deploys, and manages the forward and backward flow and retention of products, services, and related information between the point of origin and the point of consumption to meet consumer needs effectively and efficiently (Garside et al., 2017).). In short, logistics management focuses on preparations and schemes that realize the planned flow of goods and information throughout the industry, because Supply Chain Management prioritizes the flow of goods between companies from upstream to downstream (from companies to stores) and involves suppliers to customers (Hayati, 2014).

According to the journal of Purba and Saputra (2018) which discusses the Dominant Factors of the Decline in Batam City's Economic Growth from 2012 to 2017, it is stated

that there are several influential factors including; (1) the direct impact of the global economic downturn, (2) Batam's infrastructure is still considered lacking when compared to the free economic zones of Penang and Johor Bahru, (3) Batam is not the only free trade area in South China and the ASEAN region so that Batam is unable to compete in the fields of infrastructure, security, and business certainty, (4) two institutions regulate Batam, namely BP Batam and PEMKO Batam so that legal uncertainty arises, (5) Batam products are not easy to enter other regions in Indonesia, resulting in investors not getting the Indonesian market to goods they produce in Batam, (6) the minimum wage continues to rise.

From the factors described by Purba and Saputra (2018), it can be seen that the decline in economic growth in 2020 was due to several factors. The first factor is the direct impact of the weakening global economy, where in 2020 there will be a global pandemic effect. Another factor is that Batam products do not easily enter other regions in Indonesia, so investors do not get the Indonesian market for the goods they produce in Batam. High shipping costs apply if the distribution of products from Batam to regions within Indonesia, delivery of goods to other sectors is considered imports (tribunbatam, 2020). The amount of shipping costs is obtained from the accumulation of taxes and service fees.

Delivery of goods is a basic need for both individuals and companies, every aspect of wanting to send goods can be completed quickly and safely to ensure that the goods sent reach the recipient's hands (Dharmawan & Hendayani, 2019). Not only safe and fast but cost management can also be a prominent aspect of shipping goods. The determination of shipping costs is regulated in the Minister of Finance Regulation number PMK 199/PMK.10/2019. Although this regulation makes it difficult for Batam products to enter Indonesia, the fatwa was formed to increase sales of domestic producers and to manifest fairness in tax treatment between domestic executors and importers. The relationship between exporters and importers can be a solution for business actors, such as importers can provide knowledge in the form of market opportunities and market mix to importers so that exporters can carry out export activities with lower risk of obstacles (Alon et al., 2019).

In a previous scientific study by Larici and Abdul (2019), it was stated that there were deficiencies in the logistics management of PT. Bhinneka Bajas Cikarang Branch, these deficiencies can have a direct impact on customers, so various strategies must be

applied to improve the company's image and increase customer satisfaction. This study also states that customer satisfaction is a determining factor for the industry to attract consumer buying interest, and building relationships with customers can be an added value for the company. Thus, the influence of Logistics Management on Customer Satisfaction Levels is the main problem discussed in Larici and Abdul's research (2019).

According to the research of Larici and Abdul (2019), it is clear that logistics management affects the level of customer satisfaction. Although the effect given is only partial, there are still several other variables that affect the level of customer satisfaction. Logistics management becomes a sales constraint if the running process has problems. In the research of Alon et al., (2019) also explained that both SCM and marketing must also look at organizational and cultural aspects, especially if they are related to certain fields that connect or cross trade. SCM and marketing must also be able to find out how the optimal distribution strategy and service level to meet demand. In addition, both location, logistics, shipping, and return management, and others are also designed to balance market expectations and operating costs.

REVIEW OF LITERATURE

Hypothesis Development

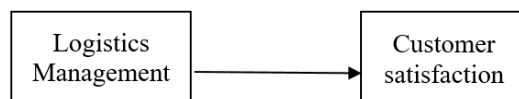
With the number of SMEs reaching 81 thousands, making the logistics process carried out in Batam, which is a small island, was even more difficult. Not only cost limitations but also delivery can reduce customer satisfaction. Shipments originating from Batam to other regions in Indonesia will be called imports, which causes businesses to have to pay import taxes every time they send goods. It has been regulated in government regulations to protect domestic products, but it is difficult for products from Batam to enter the Indonesian market. Moreover, SMEs are a massive supporter of Gross Domestic Product (GDP) and have an impact on increasing regional GRDP, therefore the growth of SMEs is expected to have a major impact on economic growth. However, in 2020 economic growth in Batam experienced a significant decline, the biggest factor was the direct impact of the global economy due to COVID-19, but on the other hand SMEs also played a role in this economic growth. The Yealta journal (2015) states, if the ability of local investors has not been able to master technology in the production, marketing,

distribution, and sale of export quality goods, there will be a setback or no added value in terms of the added value of trade liberalization reforms.

According to the research of Larici and Abdul (2019), it is clear that logistics management affects the level of customer satisfaction. Although the effect given is only partial, there are still several other variables that affect the level of customer satisfaction. Logistics management becomes a sales constraint if the running process has problems. Based on this explanation, the hypotheses in this study are:

H1: There is an effect of Logistics Management on Customer Satisfaction in SMEs in the Free Trade area

Figure 1
Empirical Model



The study is a replication of the study researched by Larici and Abdul (2019). However, in Larici and Abdul's research, the object used is PT. Bhinneka Bajasnas Cikarang Branch, while this study uses the object of SMEs in Batam.

RESEARCH METHOD

Aggregation in the study using a questionnaire survey was distributed gradually to the respondents. The sample in this study utilizes a purposive sampling technique in which only certain respondents can fill out the questionnaire. Respondents were small and medium enterprises (SMEs) in Batam with a total of 428 respondents. The variable x in this study is Logistics Management, and the variable y is Customer Satisfaction. The Logistics Management variable consists of four indicators, namely Competitive Advantage, Use of Time and Place, Delivery Speed, and Company Image. And the Customer Satisfaction variable consists of five indicators, namely Product Quality, Service Quality, Emotional, Price, and Cost. The indicators of the two variables proposed by Larici and Abdul (2019) will then become the basis for indicators in making a questionnaire that will be used as a data source in this study. The scale uses a Likert measurement with a score of 1 to 5, where a score of 1 for strongly disagree (STS) to a score of 5 for strongly agree (SS). The data

analysis technique in this study used simple linear regression, descriptive analysis using frequency tables, and hypothesis testing.

RESULTS AND DISCUSSION

Results

Data analysis was performed using the Statistical Package For Social Science (SPSS) version 26.0 software. Data analysis was carried out statistically analytic. Characteristics of respondents are classified based on gender, age, last education, type of business, business establishment, age of business, number of employees, gross income per month, and type of work. The following are the characteristics of the respondents.

Table 1
Characteristics of Respondents

Characteristics	Information	Quantity	%	Total
Gender	Male	202	47,20%	428 (100%)
	Female	226	52,80%	
Age	< 20 years	50	11,68%	428 (100%)
	20-29 years	148	34,58%	
	30-40 years	188	43,93%	
	> 40 years	42	9,81%	
Last Education	Elementary School	8	1,87%	428 (100%)
	Junior High School	21	4,91%	
	Senior High School	177	41,36%	
	Diploma (D1/D2/D3)	95	22,19%	
	Bachelor (S1/S2/S3)	127	29,67%	
Business Type	Culinary	84	19,63%	428 (100%)
	Fashion	141	32,94%	
	Technology	67	15,65%	
	Cosmetics	30	7,01%	
	Automotive	30	7,01%	
	Souvenir	38	8,88%	
Business Establishment	Agribusiness	9	2,10%	428 (100%)
	Others	29	6,78%	
	Self-founded	341	79,67%	
	Legacy	70	16,36%	
	Others	17	3,97%	

Business Age	< 1 years	36	8,41%	428 (100%)
	1-3 years	134	31,31%	
	4-6 years	154	35,98%	
	7-10 years	77	17,99%	
	> 10 years	27	6,31%	
Number of employees	< 10 people	291	67,99%	428 (100%)
	10-20 people	116	27,10%	
	21-30 people	8	1,87%	
	31-40 people	8	1,87%	
	41-50 people	1	0,23%	
	> 50 people	4	0,94%	
	< Rp 1.000.000	28	6,54%	
Rp1.000.000 - Rp5.000.000	74	17,29%		
Gross Income per Month	Rp 5.000.001 - Rp 10.000.000	116	27,11%	428 (100%)
	Rp 10.000.001 - Rp20.000.000	89	20,79%	
	Rp20.000.001 -Rp 50.000.000	98	22,89%	
	Rp 50.000.001 - Rp 100.000.000	16	3,74%	
	> Rp 50.000.000	7	1,64%	
	Main job	318	74,29%	
Side job	110	25,71%		

Based on these data, the majority of respondents in this study were women (52.80%), aged 30-40 years (43.93%), with the last education being high school (41.36%), having a fashion business type (32.94%), a self-owned business (79.67%), with a business age of 4-6 years (35.98%), having less than 10 employees (67.99%), having a gross monthly income of IDR 5,000. 001 to IDR 10,000,000 (27.11%), and his business is his main job (74.29%).

Frequency Table Analysis

Table 2
Frequency Table

Variable Code	Indicators	N	Score	Average	Information
LM1	Business growth rate	428	1691	3.95	G
LM2	Business advantages	428	1938	4.53	VG
LM3	Employee growth rate	428	1832	4.28	VG
LM4	Asset growth rate	428	1320	3.08	A

LM5	Product excellence	428	1792	4.19	G
LM6	Product condition	428	1637	3.83	G
LM7	Product service life	428	1537	3.59	G
LM8	Product price offered	428	1762	4.12	G
LM9	Term of payment	428	1563	3.65	G
LM10	Process of ordering goods	428	1526	3.56	G
LM11	Service excellence	428	1678	3.92	G
LM12	Information delivery speed	428	1552	3.63	G
LM13	Transaction processing speed	428	1387	3.24	A
LM14	Transaction convenience	428	1685	3.94	G
LM15	Product delivery speed	428	1358	3.17	A
LM16	Suitability of delivery quantity	428	1241	2.90	A
LM17	Customer trust	428	1594	3.72	G
LM18	Customer impression creation	428	1531	3.58	G
LM19	Customer pride creation	428	1201	2.81	A
LM20	Creating customer loyalty	428	1559	3.64	G
CS1	Effect on business	428	1452	3.39	A
CS2	Impact on business	428	1528	3.57	G
CS3	Business growth rate	428	1559	3.64	G
CS4	Product excellence	428	1515	3.54	G
CS5	Product price	428	1580	3.69	G
CS6	Product condition	428	1479	3.46	G
CS7	Payment service fee	428	1579	3.69	G
CS8	Delivery time	428	1363	3.18	A
CS9	Delivery process	428	1252	2.93	A
CS10	Payment procedure	428	1206	2.82	A
CS11	Product ordering process	428	1451	3.39	A
CS12	Service excellence	428	1545	3.61	G
CS13	Information delivery speed	428	1567	3.66	G
CS14	Transaction processing speed	428	1531	3.58	G
CS15	Transaction convenience	428	1608	3.76	G
CS16	Suitability of delivery quantity	428	1538	3.59	G
CS17	Customer trust	428	1642	3.84	G
CS18	Customer impression creation	428	1430	3.34	A
CS19	Customer pride creation	428	1319	3.08	A
CS20	Creating customer loyalty	428	1278	2.99	A

From the summary of the frequency table, the interpretation is Good (G) and Very Good (VG). The highest value was obtained from the business excellence indicator (LM2) with a total value of 4.26, while the lowest value was obtained from the payment procedure

indicator (CS10) with a total value of 2.82. It can be seen that the indicator that has the highest value on the Logistics Management (LM) variable is the LM2 indicator, and the one with the lowest average value is the LM19 indicator. In addition, several indicators received Bad (B) as many as five indicators, namely LM4, LM13, LM15, LM16, and LM19. In the Customer Satisfaction (CS) variable, it can be seen that the indicator that has the highest value is the CS17 indicator, and the one with the lowest average value is the CS10 indicator. In addition, several indicators received Bad (B) as many as eight indicators, namely CS1, CS8, CS9, CS10, CS11, CS18, CS19, and CS20.

Simple Linear Regression

Table 3
Results of Simple Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	52,650	2,304			22,854	,000
X	,220	,031	,325		7,083	,000

Based on the table, the resulting simple linear regression equation $Y = 52.650 + 0.220 X + e$. The constant value of 52.650 is accepted, for example the condition of the variable LM (X) is said to be constant, the variable CS (Y) obtained is 52.650.

Coefficient of Determination Test

The coefficient of determination (R^2) was carried out to determine whether there was a relationship shown by whether the change in the independent variable LM (X) would be followed by the dependent variable CS (Y) in the same ratio. The value used in this study is the value of R Square because it can increase or decrease if one of the independent variables is added to the model being tested.

Table 4
Results of the Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,325 ^a	,105	,103	7,765	1,876

Adjusted R Square value of 0.103 or 10.3% with the intention that the dependent variable CS (Y) is 10.3%, while the rest is explained by other factors not examined.

Hypothesis Test

The hypothesis test in this study utilizes the F test and the T test. The F test in this study is a test carried out to determine whether the LM variable (X) has a simultaneous (together) effect on the dependent variable CS (Y).

Table 5
F Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	3025,618	1	3025,618	50,174	,000 ^a
Residual	25688,632	426	60,302		
Total	28714,250	427			

The results of the F test in this study obtained a calculated F value of 50.174 with a significant number (P-value) of 0.000. With a significance level of 95% ($\alpha = 0.05$). The significance value (P-value) is $0.000 < 0.05$. Based on the parable, H0 is rejected or means that the LM variable (X) has a significant simultaneous effect on the CS variable (Y).

Table 6
T Test Results

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	52,650	2,304			22,854	,000
X	,220	,031	,325		7,083	,000

The T test in this study is to test whether or not there is a significant relationship between the independent variable LM (X) and the dependent variable CS (Y). The results of the T-test obtained on the variable LM (X) is a significance value (P Value) less than 0.05. Based on this comparison, H0 is rejected or it means that the LM variable (X) has a significant effect on the CS variable (Y).

Discussion

The study is to find out how the influence of Logistics Management on Customer Satisfaction in SMEs in the Free Trade area. In this study, the phenomenon taken is when there is a decline in economic growth in Batam in 2020 caused by various factors. The hypothesis in this study is "There is an effect of Logistics Management on Customer Satisfaction in SMEs in Free Trade Areas". Larici and Abdul's research (2019) states that Logistics Management has an effect on Customer Satisfaction at PT. Bhinneka Bajas

Cikarang. In Larici and Abdul's research (2019) there are two variables that are asked, and from these two variables there are indicators that are used to explain these variables. The first variable is Logistics Management with indicators of competitive advantage, use of time and place, speed of delivery, and company image. The second variable is customer satisfaction with indicators of product quality, price, cost, service quality, and emotional. These two variables and indicators from Larici and Abdul (2019) are used as variables in this study. The hypothesis was tested using Simple Linear Regression with the help of SPSS 26.0 software.

The results of this analysis are divided into the results of the analysis of the characteristics of the respondents and the results of research analysis. The results of the characteristics of the respondents can be summarized as follows.

The first, the demographic characteristics of respondents using descriptive statistics. The respondents are female with an age range of 30 to 40 years and have an average of high school education with a total of 177 respondents. They have businesses in the fashion sector and are entrepreneurs with an average business age of 4 to 6 years. They have less than 10 employees with a monthly gross income of Rp. 5,000,001 to Rp. 10,000,000. The business of most of the respondents is currently their main job. According to the authors' notes, women with these criteria run more businesses than men.

The second, the results of descriptive analysis using the Logistics Management variable frequency table get an average value of 3.67, for this the average result is in the good category (G). From the recapitulation of logistics management variables, there are still five indicators whose values are below the average, including LM4 (Asset Growth Rate), LM13 (Transaction Processing Speed), LM15 (Product Delivery Speed), LM16 (Conformity with The Number of Shipments), and LM19 (Customer Pride Creation). The indicators that score in the poor category indicate that the SMEs Logistics Management in Batam must be improved. The following are solutions that can be considered by business actors to improve Logistics Management.

LM4 (Asset Growth Rate)

Asset growth for business owners is very important, the way to increase can be by paying attention to the location of purchasing raw materials. If initially business actors buy raw materials in other regions in Indonesia, then the capital spent will be greater due to tax

constraints. If the capital issued is large, then the difference between the selling price and the capital will not produce a large profit. Thus, the solution is, business actors can buy raw materials outside Indonesia, because Batam is a Free Trade Area, shipping goods from outside to Batam or vice versa will not be subject to taxes and import duties. It makes the capital issued by business actors smaller and the wasted capital can be diverted to add other assets needed for business continuity.

LM13 (Transaction Processing Speed)

Technological developments should provide many advantages for business actors, especially in terms of transactions. However, many business actors still use traditional transaction methods, so the transaction process is not as efficient as using modern methods. For this reason, business actors can start studying online transactions such as Q-RIS which only uses barcodes (cashless). By changing the transaction process from traditional to modern, it can speed up the transaction process between sellers and customers.

LM15 (Product Delivery Speed)

In delivering products to customers, business actors can make certain schedules for goods to be sent so that the process of delivering goods can be more organized and coordinated. Business actors can also add employees who have the task of delivering goods to customers. Having employees who have certain tasks (sending goods) will make the process of sending goods faster, because employees do not have to take care of other work besides sending goods.

LM16 (Conformity with The Number of Shipments)

In the current era of digitalization, the bookkeeping process should be easier. Business actors can start switching from recording in books to recording using a computer. By using a computer, the recording will be neater, thereby reducing the risk of discrepancies between the goods sent to the customer and the goods in the seller's books.

LM19 (Customer Pride Creation)

To create a sense of pride in customers, business actors can advertise their products regularly. It will have a direct impact on the psychology of customers who see the product. The more business actors advertise their products, the more potential consumers will see the product and get to know the product. For example, an advertisement made by a toothpaste product in Indonesia, namely Pepsodent, because people often see Pepsodent

advertisements can change their mindset. Every potential customer wants to buy toothpaste, what comes to their mind is Pepsodent, and they will call all toothpaste Pepsodent. From this it can be seen that people who use Pepsodent toothpaste are proud of the products they buy, and over time, that pride becomes a habit in their lives.

The third, the reaction to descriptive analysis of the Customer Satisfaction variable gets an average value of 3.43, so the average result is in the good category (G). From the recapitulation of the Customer Satisfaction variable, eight indicators still have low averages, namely CS1 (Effect on business), CS8 (Delivery time), CS9 (Delivery process), CS10 (Payment procedure), CS11 (Product order process), CS18 (Customer impression creation), CS19 (Customer pride creation), and CS20 (Customer loyalty creation). Indicators that score in the less category indicate that the level of customer satisfaction in SMEs in Batam must be increased. The following are solutions that can be considered by business actors to increase the level of Customer Satisfaction.

CS1 (Influence on business)

In this case, the business actor can reconsider the location of his/her business. Determining the placement can have an impact on the business and affect the level of customer satisfaction. For example, people who buy clothes in the market will get a different level of satisfaction from people who buy clothes at the mall. Or another example of people who buy dumplings on the roadside will get a different level of satisfaction with people who buy dumplings at restaurants. The placement of this business location can be aligned with the type of business owned, for example the clothing business in the mall will provide a different exclusivity when compared to the clothing business in the market so that it will affect the level of customer satisfaction.

CS8 (Delivery time) and CS9 (Delivery process)

As described in one of the indicators of logistics management solutions. Businesses can schedule and recruit new employees to make the delivery process more organized and coordinated.

CS10 (Payment procedure) and CS11 (Product order process)

As described in one of the indicators of logistics management solutions. Business actors can start switching from traditional transactions to current transactions that use

barcodes (cashless), so that the transaction process for goods and money becomes faster and more efficient, thereby increasing the level of customer satisfaction.

CS18 (Customer impression creation), CS19 (Customer pride creation), and CS20 (Customer loyalty creation)

As described in one of the indicators of logistics management solutions. To increase the impression, pride, and loyalty of customers, business actors can start advertising their products regularly. Advertising products can be started by creating social media specifically for businesses, then start using advertising features on these social media so that products can spread more quickly to other user accounts.

The fourth, the hypothesis in this study is 'There is an Influence of Logistics Management on Customer Satisfaction in SMEs in Free Trade Areas'. To find out whether the hypothesis is accepted or not, this hypothesis is calculated by using the T test and F test. In the F test, the calculated F value is 50,174, the significant number (P-value) is 0.000, and the significance level is 95% ($\alpha = 0.05$). The significance value (P-value) is $0.000 < 0.05$. Based on this comparison, H_0 is rejected or means that the LM variable (X) has a significant simultaneous effect on the CS variable (Y). In the T-test, the results obtained for the LM variable (X) that the significance value (P Value) is less than 0.05. Based on this comparison, H_0 is rejected or means that the LM variable (X) has a significant effect on the CS variable (Y).

The fifth, this study conducted a simple linear regression test and obtained a constant value of 52.650. That is, if the Logistics Management variable (X) is equal to zero, then the level of Customer Satisfaction (Y) is 52.650. The regression coefficient of Logistics Management (X) is 0.220 with a positive value. Resulting that every increase in Logistics Management (X) by one unit, will include an increase in Customer Satisfaction Level (Y) of 0.220 units, or vice versa if there is a decrease in Logistics Management (X) of one unit and will include a decrease in Customer Satisfaction (Y) of 0.220 units.

The sixth, this study tested the coefficient of determination and got an Adjusted R Square value of 0.103 or 10.3%. This value indicates that the influence of the Logistics Management variable on the level of customer satisfaction is quite strong. With the value, it means that the Logistics Management variable (X) can explain or explain the level of

Customer Satisfaction (Y) of 10.3%, while the rest is explained by other factors not examined.

From the results of the research above, it can be explained that the hypothesis is accepted and there is a significant influence between Logistics Management on Customer Satisfaction Levels. The results of this study describe the view of logistics management affecting customer satisfaction in SMEs. This was also explained in previous research, namely Larici and Abdul (2019) which explained that there was an influence between Logistics Management on the Level of Customer Satisfaction at PT. Bhinneka Bajas Cab. Cikarang. In other words, the results of this study are in line with the results of previous studies.

CONCLUSION

The hypothesis in this study was accepted after testing the hypothesis using the F-test and T-test. Based on this comparison, H_0 is rejected or means that the Logistics Management variable (X) has a significant simultaneous effect on the Customer Satisfaction variable (Y). This result has a good meaning for logistics management in SMEs, it will increase the level of customer satisfaction. From these results it can be seen that both economic growth, logistics, and SMEs are related to each other. SMEs are able to increase GRDP which has a direct effect on economic growth. On the other hand, logistics and SMEs have an influence on each other. So it can be concluded that SMEs have an influence on economic growth which is directly related to government regulations.

Logistics carried out by business actors in Batam is related to distribution and this is regulated by taxes. Therefore, based on the results of the analysis in this study, especially in the descriptive analysis, it can be used as advice to SME business actors to improve logistics management so that they can increase the level of customer satisfaction. The improvement in logistics management can also be a driving force to increase economic growth. From these results, it was found that several indicators had low average scores and were categorized as Bad (B). From these results, several indicators get low scores which can be used as a reference in providing solutions to improve both logistics management and customer satisfaction levels.

The solution that can be given to business actors is to increase asset growth by changing the location of purchasing materials from within the country to abroad, changing

the transaction process to be more modern using barcodes, making a schedule for delivery of goods and hiring special employees in terms of distribution, changing records from books to applications or software, start to advertise products regularly, and pay attention to product sales locations.

The suggestions that can be given for further research can be in the form of examining how the influence of logistics management on SMEs, researching more specifically in the field of business how the influence of logistics management on customer satisfaction in SMEs, researching marketing strategies, examining how the direct impact of logistics management on SMEs, etc. However, the researchers suggest to conduct a more specific research with the business field of how the influence of logistics management on customer satisfaction in SMEs. Because in this study the data collection of respondents is not limited by the field of business, where all business fields that are included in the SME category are included in this study. By researching more specifically according to the line of business, it is possible to get different results according to the line of business.

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