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Analysis of Factors Affecting Rates Visit Atpublic Fuel Stations (Gas Station) (Case Study on SPBU 14201123)

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Abstract. This research aims to determine the factors that influence the level of visits to SPBU 12201123 Jln. Gatot Subroto Medan. The object of this research was 100 visitors to SPBU 12201123 Jl. Gatot Subroto Medan. The research period is September to October 2023. The dependent variable in this study is the level of visits to gas stations 14201123 (Variable Y). The independent variables are the existence of an ATM (X1), the existence of a cafe (X2), the existence of a minimarket (X3) and the existence of a doormeer (X4). This research uses a multiple linear regression model which is calculated with the help of a programSPSS 25. Based on the results of multiple linear regression data processing, the results of the regression equation are Y = 2.952 – 0.233X1 – 0.194X2 + 0.218X3 + 0.414X4, which means that the existence of ATMs and Cafés does not have a significant effect on the level of visits to gas stations 12201123, while the existence of Minimarkets and Doorsmeer does. on the level of visits to gas stations 12201123. R test results2 shows that the 4 variables only have an influence of 4.3%, while the rest is generated by the influence of other variables outside this research.

Keywords: The existence of ATMs, the existence of cafes, the existence of minimarkets, the existence of Doorsmeer, gas stations.

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1. Introduction

The existence of Public Fuel Filling Stations (SPBU) is vital to support the transportation system in an area. Along with the increase in motorbike and car users, it is absolutely necessary to increase the number of gas stations to balance the need for motor vehicle fuel.

There are quite a lot of changes occurring in the gas station business currently, both internally and externally, especially changes in public demand, the quality of fuel filling services, both petrol, diesel and Pertamax. Therefore, gas station management must be open to accepting changes or exchange of points of view (paradigms), developing strategies, developing structures and increasing facilities.

SPBU 14201123 which is located on Jl. Gatot Subroto Medan, is one of the gas stations that does not have any facilities except filling fuel. Researchers feel it is necessary to conduct research on the factors that can influence the level of visits to SPBU 14201123, namely the addition of several facilities, including: the existence of ATMs, the existence of cafes, the existence of minimarkets and the existence of doorsomers.

By knowing the results of this analysis, whether the existence of these facilities is able to increase the level of visits to gas stations or not, it is hoped that office holders or decision makers at SPBU 14201123 Management can make better decisions.

2. Literature Review

The term "facilities" refers to everything, whether it be tangible items or monetary resources, that can make the process of putting a specific firm into operation easier and more efficient. The year 2008, Arianto Sam Facilities that are given for public use include things like roads, street lights, bus stations, walkways, and crossing bridges. Public facilities are also known as public amenities. The offered amenities are facilities that provide convenience for the community; therefore, it is imperative that they be maintained in an appropriate manner.

According to Kotler P. [3], "Facilities are anything that is physical equipment and is provided by the service seller to support consumer comfort." In the meantime, Facilities are defined as "anything that is physical equipment." Because of this, gas stations, which are businesses that supply fuel to the general public, need to give some thought to the possibility of providing amenities that would support the comfort of their customers.

According to Kasmir [4], an automated teller machine (ATM) is a device that enables users to carry out banking operations automatically 24 hours a day, seven days a week, including holidays. Aside from the fact that the primary purpose of an automated teller machine (ATM) is to facilitate cash withdrawals, there are a multitude of other functions that can simplify the process of carrying out banking transactions for customers. These capabilities include providing information about their balance, Bills for the telephone, credit cards, energy, water, and cellphones, as well as education fees, are examples of general payments. Ticket purchases, credit top-ups, open transfers, and PIN changes are all examples of purchases.

According to Maulidi [5], the definition of a cafe is a location where people may go to rest and talk while also being able to get food and drinks that they need. Cafes are a type of restaurant that prioritizes a laid-back ambiance, pleasant entertainment, and the comfort of their customers. As a result, cafes offer comfortable seating and a small amount of music.

According to business experts, minimarkets are a form of modern retail business that sells daily necessities. Minimarkets have big advantages because they have stable and high sales figures. Apart from that, minimarkets also have the advantage of being able to sell products at cheaper prices compared to other shops with other shops. Examples of minimarkets are: Indomaret, Alfamart, Alfamidi, and so on.

Car doorsmearing is a car washing process that is carried out using water, soap, and several cleaning tools such as sponges, brushes, and cloth rags.

This process aims to clean dirt, dust and other stains that stick to the surface of the car so that the car can look clean and shining. The term car doorsmeer apparently comes from Dutch which means to clean.

The term doorsmeer may sound less familiar, but it turns out that several areas such as Medan and North Sumatra still use this term.

3. Method

The object of this research was 100 visitors Gas Station 14201123 Jl. Gatot Subroto Medan.The research period is September to October 2023. Primary data, in this case in the form of first-hand accounts gathered from interviews with respondents using a predetermined set of questions, constitutes the basis of the analysis. (Questionnaire) and secondary data required in this research in the form of a literature study of officially published data, books, articles and journals that have relevance to the problems raised in this research, obtained through libraries and*download* internet.

The dependent variable in this research is the level of gas station visits14201123 (Y variable). The independent variables are the existence of an ATM (X1), the existence of a cafe (X2), the existence of a minimarket (X3) and the existence of a doormeer (X4)

This research uses a multiple linear regression model which is calculated with the help of a program *SPSS 25.* The analysis model for this research can be systematically written through the regression equation:

$Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 3X4 + e$

Where:

Y = Visit Rate
X1 = Presence of ATM
X2 = Keberadaan Café
X3 = Existence of minimarkets
X4 = Keberadaan Turnsmeer
α = Konstanta
β1-3 = Regression coefficient
ε = Interference Error

4. Result and Discussion

Table 1. Operational Definitions

Variable	Definition Variable	Indicator	Scale
The existence of an ATM (X_1)	Existence ATM as a facility, increase visits to gas stations 14201123	Fill in BBM can be done directly take money or transfer	• Score 5 for Very Agree (SS) • Score 4 for Agree (S) • Score 3 for Neutral (N) • Score 2 for No Agree (TS) • Score 1 for Very No Agree (STS) for Agree (S) • Score 3 for Neutral (N) • Score 2 for No Agree (TS) • Score 1 for Very No Agree

Variable	Definition Variable	Indicator	Scale
			(STS)
The existence of Café (X_2)	Existence Cafe as facility, increase visits to gas stations 14201123	Fill in BBM at a time Rest eat or drink	• Score 5 for Very Agree (SS) • Score 4 for Agree (S) • Score 3 for Neutral (N) • Score 2 for No Agree (TS) • Score 1 for Very No Agree (STS)
Mini existence market (X_3)	Existence Mini Market as facility, increase visits to gas stations 14201123	Fill in BBM at a time shopping needs	• Score 5 for Very Agree (SS) • Score 4 for Agree (S) • Score 3 for Neutral (N) • Score 2 for No Agree (TS) • Score 1 for Very No Agree (STS)

Variable	Definition Variable	Indicator	Scale
The existence of doorsmear (X_4)	Existence Lubricate as facility, increase visits to gas stations 14201123	Fill in BBM at a time sanctify car or bicycle motor.	• Score 5 for Very Agree (SS) • Score 4 for Agree (S) • Score 3 for Neutral (N) • Score 2 for No Agree (TS) • Score 1 for Very No Agree (STS)
Level Visits (Y)	How existence a number of facility affect levels visits to gas stations 14201123	Semkain Lots and good the existenc e of facilities at gas stations 14201123 the more beg level visits to gas stations the.	• Score 5 for Very Agree (SS) • Score 4 for Agree (S) • Score 3 for Neutral (N) • Score 2 for No Agree (TS) • Score 1 for Very No Agree (STS)

4.1. Respondent Description

a. Characteristics of Respondents Based on Gender

Table 2 Description of Respondents

Type Gender	Frequency	Percentage
Man	68	68%
Women	32	32%
Amount	100	100%

Based on the table above, it shows that of the 100 samples, the largest number of respondents were men, namely 68 respondents (68%), while female respondents were 32 respondents (32%). This shows that more visitors to gas station 14201123 are men.

b. Respondent Characteristics based on Vehicle Type

Table 3. Type of Respondent's Vehicle

Transportation type	Amount	Percentage
Car	43	43%
Motorcycle	57	57%
Amount	100	100%

Based on the table above, it shows that out of 100 samples, the type of vehicle with the most respondents was a motorbike, with 57 units or 57%. This shows that visitors to SPBU 14201123 are dominated by motorbike users.

4.2. Validity test

Tabel 4. Correlations

		X1	X2	X3	X4	Y	TOTAL
X1	Pearson Correlation	1	.608**	.185	.862**	-.042	.794**
	Sig. (2-tailed)		.000	.066	.000	.680	.000
	N	99	99	99	99	99	99
X2	Pearson Correlation	.608**	1	.400**	.576**	-.091	.802**
	Sig. (2-tailed)	.000		.000	.000	.373	.000
	N	99	99	99	99	99	99
X3	Pearson Correlation	.185	.400**	1	.000	.073	.541**
	Sig. (2-tailed)	.066	.000		1.000	.472	.000
	N	99	99	99	99	99	99
X4	Pearson Correlation	.862**	.576**	.000	1	.000	.731**
	Sig. (2-tailed)	.000	.000	1.000		1.000	.000
	N	99	99	99	100	99	99
Y	Pearson Correlation	-.042	-.091	.073	.000	1	.311**
	Sig. (2-tailed)	.680	.373	.472	1.000		.002
	N	99	99	99	99	99	99
TOTAL	Pearson Correlation	.794**	.802**	.541**	.731**	.311**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.002	
	N	99	99	99	99	99	99

**.Correlation is significant at the 0.01 level (2-tailed).

The values X1, The value of X4, 0.002, where 0.002 > 0.05, means that it is valid.

4.3. Reliability Test

Table 5. Reliability Test

Case Processing Summary

		N	%
Cases	Valid	99	99.0
	Excluded[a]	1	1.0
	Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.616	5

Based on the table above, the results can be seen*Cronbach's Alpha* variables X1, X2, X3, This means that the use of questionnaires or indicators of factor variables that influence the level of gas station visits is shown to be reliable.

4.4.Normality test

Table 6. Normality Test Table

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		99
Normal Parameters[a,b]	Mean	0E-7
	Std. Deviation	.83880563
Most Extreme Differences	Absolute	.250
	Positive	.104
	Negative	-.250
Kolmogorov-Smirnov Z		2.490
Asymp. Sig. (2-tailed)		.000

a. Test distribution is Normal.
b. Calculated from data.

Based on the One-Sample Kolmogorov-Smirnov Test table, it was found that the data was normally distributed.

4.5. Multicollinearity Test

Table 7. Multicollinearity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.952	.750		3.937	.000		
X1	-.233	.237	-.211	-.984	.328	.221	4.534
X2	-.194	.126	-.220	-1.543	.126	.502	1.992
X3	.218	.131	.200	1.663	.100	.702	1.424
X4	.414	.293	.309	1.412	.161	.213	4.690

The results table shows that all variables have a value tolerance greater than 0.10 and a VIF value less than 10, so it can be inferred that there is no multicollinearity between the

dependent variables in this study's regression model.

4.6. Uji t

Table 8. T test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.952	.750		3.937	.000
	X1	-.233	.237	-.211	-.984	.328
	X2	-.194	.126	-.220	-1.543	.126
	X3	.218	.131	.200	1.663	.100
	X4	.414	.293	.309	1.412	.161

a. Dependent Variable: Y

It can be observed from this table that the results of the partial hypothesis test that was performed using the t test obtained values based on the coefficient values that are contained in the table, which states that:

1. A t-count value of -0.984 was derived from the test results of the influence of the ATM presence variable (X1) on the level of visits (Y), whereas the t-table displayed a value of 1.660. In light of the calculations shown above, it can be concluded that the hypothesis Ha1 is rejected, while the hypothesis H01 is accepted. This is due to the fact that the t-count value is smaller than the t-table, specifically (-0.984 is less than 1.660), and the value achieved is greater than 0.1. The existence of automated teller machines does not have a major impact on the number of people that visit gas stations, as indicated by the data 14201123.
2. The results of the test that investigated the impact of the Cafe presence variable (X2) on the number of visits (Y) yielded a t-count value of -1.543, while the t-table value was 1.660. Given the calculation results presented above, it can be concluded that the hypothesis Ha2 is rejected, while the hypothesis H02 is accepted. This is due to the fact that the t-count value is smaller than the t-table, specifically (-1.534 < 1.660), and the value achieved is more than 0.1. However, the existence of ATMs does not have a substantial impact on the number of times that people go to petrol stations, as indicated by the previous sentence.
3. The results of the test that investigated the impact of the minimarket presence variable (X3) on the number of visits (Y) yielded a t-count value of 1.663, while the t-table value was 1.660. Based on the results of the calculations shown above, the hypothesis Ha1 is accepted, while the hypothesis H01 is rejected. This is due to the fact that the t-count value is higher than the t-table, specifically (1.663 has a value that is more than 1.660), and the number that was produced is sign. There is a substantial relationship between the presence of minimarkets and the number of visitors to gas station 14201123, as indicated by data.
4. A t-count value of 1.412 was derived from the test results of the influence of the ATM presence variable (X4) on the level of visits (Y), while the t-table value was 1.660. The hypothesis Ha1 is rejected and the hypothesis H01 is accepted as a consequence of the computation results presented above. This is due to the fact that the t-count value is smaller than the t-table, namely (1.412 < 1.660), and the value obtained is negative (0.161 > 0.1). Therefore, the availability of ATMs does not have a major impact on the number of times people go to petrol stations. The number 14201123

4.7. Uji F

Table 9. F test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.129	4	.782	1.066	.378[b]
	Residual	68.952	94	.734		
	Total	72.081	98			

a. Dependent Variable: Y
b. Predictors: (Constant), X4, X3, X2, X1

From calculations on the distribution of F-table values, the Ftable value was found to be 2.47. The results of the partial hypothesis test from the F test showed that F calculated on the basis of the coefficient values contained in the table stated that the value of F = 1.066 according to the sign level. 0.378 is greater than 0.05. Based on the results, it was found that Ha was rejected and Ho was accepted because the calculated F value < F table value was 1.006 < 2.47, so the conclusion was that the variables of the existence of an ATM, the existence of a cafe, the existence of a minimarket, and the existence of Doorsmeer together (simultaneously) had no significant effect. on the level of visits to gas stations 14201123.

4.8. Coefficient of Determination(Uji R^2)

Table. 10 R Test^2

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.208[a]	.043	.003	.856

a. Predictors: (Constant), X4, X3, X2, X1
b. Dependent Variable: Y

From this table, it is found that the correlation coefficient values are 0.208. This means that there is a weak link between increased visits to gas stations 14201123.

The coefficient of determination yields a value of 0.043, which is the percentage effect that the independent variable has on the variable that is being studied. This means that the level of visits to gas station 14201123 increased due to various factors, but not the presence of ATMs, Cafés, Minimarkets or Doorsmeer. Because these 4 variables only have an influence of 4.3%, while the rest is generated by the influence of other outside variables this research.

4.9. Results of Multiple Linear Regression Analysis

Table 11. Bergand Linear Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.952	.750		3.937	.000
	X1	-.233	.237	-.211	-.984	.328
	X2	-.194	.126	-.220	-1.543	.126
	X3	.218	.131	.200	1.663	.100
	X4	.414	.293	.309	1.412	.161

a. Dependent Variable: Y

Based on the results of the processed multiple linear regression data above, the results of the regression equation can be described as follows: Y = 2.952 – 0.233X1 – 0.194X2 + 0.218X3 +

0.414X4. Based on the results of the equation above, the meaning of the regression coefficient for each variable: the existence of an ATM, the existence of a cafe, the existence of a minimarket, the existence of a Doorsmeer, is as follows:

a. (a) is 2.952, the constant. Results demonstrate that the amount of visits to petrol station 14201123 is 2.952 units when the independent variables, namely the existence of ATMs, cafes, minimarkets, and Doorsmeer, are taken as constant (0).
b. With ATMs present (X1), the regression coefficient comes out to be ˛0.233. Evidence showing a one-unit increase to the ATM presence variable level will cause a 0.233-unit drop in the level of visits to petrol station 14201123.
c. The Café Existence variable (X2) has a regression coefficient of -0.194. It demonstrates that a 0.194-unit drop in visits to gas station 14201123 is affected by a 1-unit increase to the Cafe Existence variable.
d. X3, Minimarket Existence, has a regression coefficient of 0.218. Determines that a one-unit increase to the Cafe Existence variable will have a 0.218-unit impact on the rise to the level of visitors to gas station 14201123.

   X4, Doorsmeer Presence, has a regression coefficient of 0.414. Results demonstrate that a one-unit increase to the Doorsmeer presence variable will have an effect of 0.414-unit rise to the level of visitors to petrol station 14201123.

4. Conclusion

From the results of the analysis carried out, it can be concluded that the existence of ATMs, the existence of ATMs and the existence of Cafés do not affect the level of visits inSPBU 14201123. Meanwhile, the existence of Minimarkets and Doorsmeer influences the level of visits at SPBU 14201123.

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