

People Customer Satisfaction Indeks Analysis On The Administration of Driving License Service Using The Integrity of Importance Performance Analysis and Kano Model at SATLANTAS POLRESTA Sidoarjo

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Abstract: The government as a service provider is obliged to demand the public for good and quality public services. Therefore, the government provides driving license management services through the Police Service Unit, one of which is the service at SATLANTAS Sidoarjo. So it is hoped that the police will be able to help the community to improve the quality of life, so that the community will feel satisfied, distrustful and will support what is designed in the next development plan. This study aims to analyze the satisfaction of people who manage SIM in SATLANTAS Sidoarjo using the Customer Satisfaction Index (CSI), Importance Performance Analysis (IPA), and Kano methods. Based on filling out the questionnaire 125 respondents obtained a CSI value of 84.93%, which means that respondents are very satisfied with the driving license service at SATLANTAS Sidoarjo. Next, perform IPA and Kano analysis on the dimensions of physical appearance, responsiveness, assurance, and empathy with 22 total attributes on 125 respondents. The results of the IPA analysis show that 11 attributes are in quadrant I, 6 attributes are in quadrant II, 3 attributes are in quadrant III and 2 attributes are in quadrant IV. Meanwhile, in Kano's analysis, 4 attributes are in the must-be category, and other attributes are in the one-dimensional category. Furthermore, the IPA-Kano integration is carried out to obtain strategic priorities that must be carried out, namely improving performance on several attributes including attributes of convenience, service procedures, fulfillment of service requirements, the ability of officers to provide information in polite and easy language and the speed of employees in responding to consumer needs/complaints.

Keywords: SATLANTAS Sidoarjo, Surat Izin Mengemudi (SIM) or Driving License, Customer Satisfaction Index (CSI), Importance Performance Analysis (IPA), Kano, Integration of IPA-Kano

1. INTRODUCTION

Public services are a very important instrument to realize good governance. Good and excellent services will be felt if the agency providing these services can serve politely and professionally with quality service standards, good procedures. Indonesia's public services are currently ranked 129 out of 188 countries in the world where the public services with the most complaints are licensing, police, defense, and courts [1].

The Indonesian National Police (Polri) is very closely related to public services. One of the most prominent benchmarks of police performance is the service in making driving licenses. SIM is a means of controlling and controlling the use of motorized vehicles on the highway, as well as the identity of motorized vehicle drivers who have been declared capable of driving a motorized vehicle[2]. Therefore, the government provides SIM management services through the Police Service Unit, namely the traffic police, one of which is SATLANTAS Sidoarjo.

However, in reality, there are still many shortcomings that characterize the public service process provided by the police. Particularly in this research is SIM administration services in

the police. This makes public services by government officials in Indonesia feel that they still do not meet the quality expected by the community. This makes the provision of quality public services increasingly important and necessary to implement. Improving the quality of service will make people more satisfied in taking care of SIMs so they are not reluctant to take care of them independently.

In this study, we will discuss and measure the level of satisfaction of people who apply for a driving license with services at the SATLANTAS Sidoarjo. There are advantages to the CSI method, namely efficiency in measuring universal satisfaction. The IPA method can display product/service attributes that need to be improved or reduced in the form of quadrants. The Kano method can divide service priority levels into functional categories and dysfunctional categories. The Customer Satisfaction Index, Importance Performance Analysis and Kano methods used in this study are expected to provide a thorough analysis of customer satisfaction levels and identify service attributes that are priority improvements and features which is less than optimal and provide suggestions for improving the quality of service at the SATLANTAS Sidoarjo.

2. RESEARCH METHOD

a. Method and Data Source

The method used in this research is Customer Satisfaction Index, Importance Performance Analysis, and Kano method, while the source of data is primary data obtained by conducting direct surveys of respondents who have been apply for a driving license at SATLANTAS Sidoarjo

b. Research Variable

The variables used in this research are patient satisfaction variables of BPJS Siwalankerto Health Center Surabaya.

Table 1. Satisfaction Variables

Attributes	Dimension
A1 Comfortable and clean waiting room	Tangible
A2 Availability of a large and safe parking space	
A3 There is an adequate information center	
A4 Neat appearance of officers	
A5 Cleanliness and comfort of the toilet	
A6 SATPAS Room / Environment is Clean and Neat	
B1 Ease of service procedures	Reliability
B2 The ability of officers to provide information to the public in a language that is polite and easy to understand	
B3 Officers are not discriminatory in serving the community	
B4 Compliance with service requirements	
C1 Respond to every community who wants to carry out services	
C2 Transparent and accountable in serving the community	Responsiveness
C3 Responsibilities of officers in service	
C4 Determination of the implementation of the service time schedule	
C5 The speed of employees in responding to consumer needs/complaints	Assurance
D1 Officers have ethics in providing services	
D2 Officers are able to handle complaints in the SIM making process	
D3 Clarity and certainty of officers in providing services	
D4 Officers have good knowledge of the SIM service mechanism	

E1	Officers are able to direct service users who do not understand the flow of SIM making	Empathy
E2	Justice gets services in the process of making a SIM regardless of social status	
E3	Officers understand the needs of service users	

c. Step of the Research

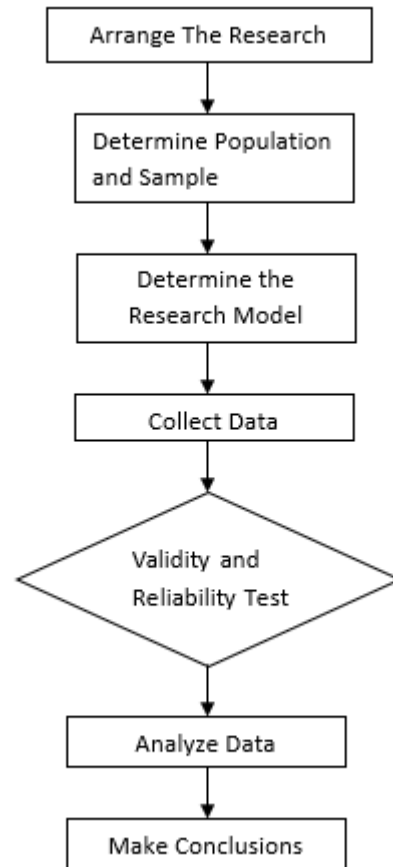


Figure 1. Step of the Research

3. RESULT AND DISCUSSION

a Validity Test

Validity test was done to acquire the validity of statement attributes of the questionnaire. It can be valid if the data can represent the research variable data that will be measured. Validity is a test that measures the validity or validity of a questionnaire [3]. The hypothesis used in the validity test can be seen as follows Hipotesis yang digunakan dalam uji validitas adalah :

$H_0 : \rho = 0$ (Invalid question items)

$H_1 : \rho \neq 0$ (Valid question item)

The results of the validity test in table 2

Table 2. Validity Test

Attributes	P-Value	Conclusion	
Tangible	A1	0,000	Valid
	A2	0,000	Valid
	A3	0,000	Valid
	A4	0,000	Valid
	A5	0,000	Valid
	A6	0,000	Valid
	A7	0,000	Valid
Reliability	B1	0,000	Valid
	B2	0,000	Valid
	B3	0,000	Valid
	B4	0,000	Valid
	B5	0,000	Valid
Responsiveness	C1	0,000	Valid
	C2	0,000	Valid
	C3	0,000	Valid
Assurance	D1	0,000	Valid
	D2	0,000	Valid
	D3	0,000	Valid
	D4	0,000	Valid
Empathy	E1	0,000	Valid
	E2	0,000	Valid
	E3	0,000	Valid

Based on the table above, all of the question variables have p-value smaller than $\alpha = 0.05$, which means REJECT H_0 . So it can be concluded that all the questions for the five-dimensional variables on the questionnaire are valid. They can measure what is desired and can reveal data from the variables appropriately.

b Reliability Test

The reliability test is used to determine the consistency of the measuring instrument, whether the measuring device used is reliable and remains consistent if the measurement is repeated [4]. High and low reliability is indicated by a number called the reliability coefficient. The SPSS program provides facilities for measuring reliability with the Cronbach Alpha (α) statistical test.

The results of the reliability test on all component variables are presented in the following table:

Variables	Cronbach's Alpha	Conclusion
Tangible (X_1)	0,698	High Reliability
Reliability (X_2)	0,621	High Reliability
Responsiveness (X_3)	0,684	High Reliability
Assurance (X_4)	0,691	High Reliability
Empathy (X_5)	0,617	High Reliability

Based on the table above, it can be concluded that the dimensions of tangible, reliability, responsiveness, assurance and empathy dimensions have high reliability with Cronbach's Alpha values obtained between 0.6 to 0.8. This means that someone's answer to a question is consistent and stable over time

c Customer Satisfaction Index

The customer satisfaction index or Customer Satisfaction Index (CSI) is an index that determines the overall level of customer satisfaction with an approach that takes into account the importance and performance of the measured attributes [5].

1. Mean Importance Score (MIS)

$$MIS_j = \frac{\sum_{i=1}^n Y_{ij}}{n}; j = 1, 2, \dots; i = 1, 2, \dots, 125$$

$$MIS_1 = \frac{\sum_{i=1}^{125} Y_{1i}}{125}; j = 1, 2, \dots; i = 1, 2, \dots, 125$$

$$= \frac{4,3 + \dots + 4,7}{125} = 4,643$$

2. Weight Factors (WF)

$$WF_j = \frac{MIS_j}{\sum_{r=1}^p MIS_r} \times 100\%; p = 1, 2, \dots, 22$$

$$WF_1 = \frac{MIS_1}{\sum_{i=1}^{22} MIS_i} \times 100\%$$

$$= \frac{4,643}{4,643 + \dots + 4,555} \times 100\%$$

$$= \frac{4,643}{101,515} \times 100\% = 4,5739$$

3. Mean Satisfaction Score (MSS)

$$MSS_j = \frac{1}{n} \sum_{i=1}^n X_{ij}; j = 1, 2, \dots, p$$

$$MSS_1 = \frac{\sum_{i=1}^{125} X_{1i}}{125}$$

$$= \frac{3,2 + \dots + 4,5}{125} = 4,254$$

4. Weight Score (WS)

$$WS_j = WF_j \times MSS_j$$

$$WS_1 = 4,574 \times 4,254$$

$$= 19,4556$$

Table 4. Customer Satisfaction Index (CSI)

Attributes	Mean Importance Score (MIS _j)	Weight Factors (WF _j)	Mean Satisfaction Score (MSS _j)	Weight Score (WS _j)
A1	4,6432	4,5739	4,254	19,4555
A2	4,4696	4,4029	4,170	18,3583
A3	4,6224	4,5534	4,429	20,1661
A4	4,7064	4,6362	4,446	20,6142
A5	4,2888	4,2248	4,024	17,0005
A6	4,644	4,5747	4,370	19,9895
B1	4,636	4,5668	4,370	19,9588
B2	4,6424	4,5731	4,032	18,4388
⋮	⋮	⋮	⋮	⋮
E1	4,6856	4,6157	4,114	18,9907
E2	4,6192	4,5503	4,333	19,7153
E3	4,5552	4,4872	4,066	18,2468
Total				424,642

$$CSI = \frac{424,514}{5} = 84,93\%$$

Based on the results of the CSI value obtained a value 84.93%. This value is in the "81-100" interval, which means that people who apply for a driving license are very satisfied with the services at the SATLANTAS Sidoarjo

d Importance Performance Analysis

Importance-Performance Analysis (IPA) was first introduced by Martilla and James in 1977 in their article entitled "Importance Performance Analysis" in the Journal of Marketing [6]. Importance Performance Analysis (IPA) is used to compare consumer ratings between importance and performance.

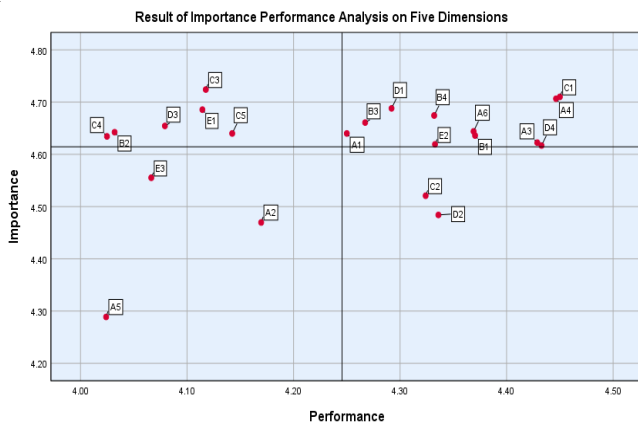


Figure 2 Importance Performance Analysis (IPA) on Five Dimensions

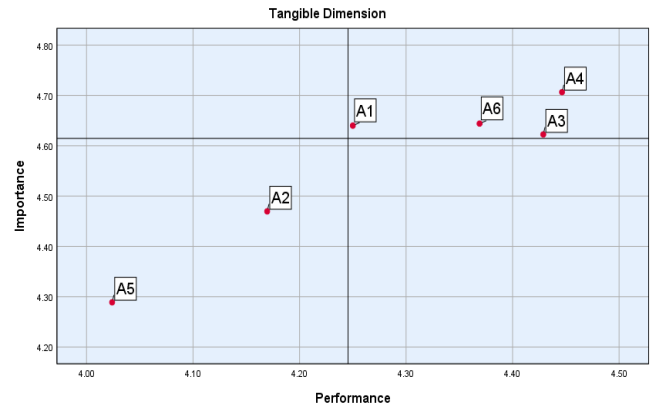


Figure 3 Importance Performance Analysis (IPA) on Tangible Dimensions

Based on Figure 3, the variables included in quadrant I which are superior services that need to be maintained are Comfortable and clean waiting room A1, There is an adequate information center A3, Neat appearance of officers A4, and SATPAS room/environment is clean and neat A6. In quadrant III which is a service that is not paid attention to by the SATLANTAS Sidoarjo and service quality is low in Availability of a large and safe parking space A2 and Cleanliness and comfort of the toilet A5.

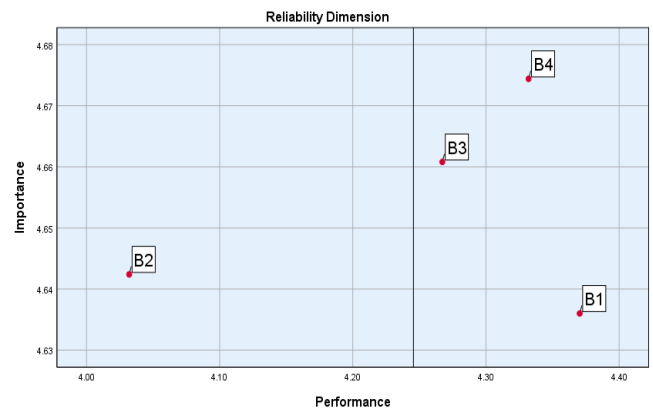


Figure 4 Importance Performance Analysis (IPA) on Reliability Dimensions

Based on Figure 4 the variables included in quadrant I which are superior services so that they need to be maintained are Ease of service procedures B1, Officers are not discriminatory in serving the community B3 and Compliance with service requirements B4. In quadrant II, high priority and need improvement in The ability of officers to provide information to the public in a language that is polite and easy to understand B2.

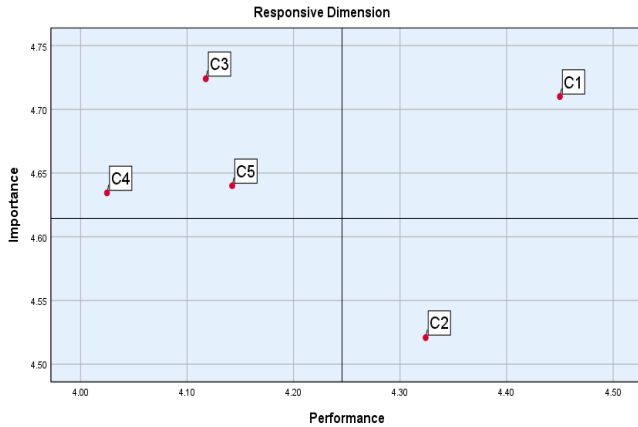


Figure 5 Importance Performance Analysis (IPA) on Responsiveness Dimensions

Based on Figure 5, the variable that is included in quadrant I which is a superior service so it needs to be maintained, namely Respond to every community who wants to carry out services C1. In quadrant II, the high priority and needs improvement namely Responsibilities of officers in service C3, Determination of the implementation of the service time schedule C4, and The speed of employees in responding to consumer needs/complaints C5. In quadrant IV there are elements of service that are considered less important but in fact, satisfactory service is Transparent and accountable in serving the community C2.

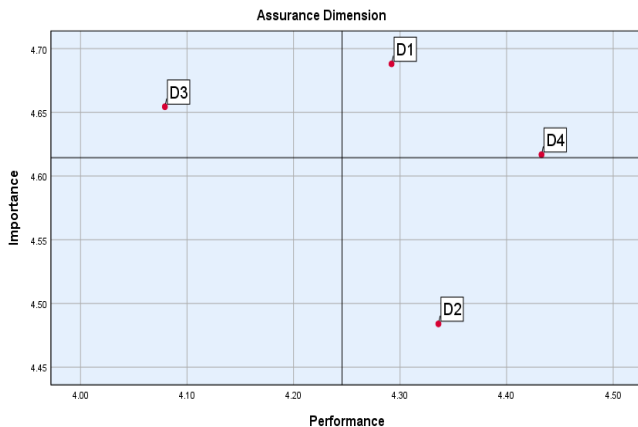


Figure 6 Importance Performance Analysis (IPA) on Assurance Dimensions

Based on Figure 6, the variables included in quadrant I which are superior services that need to be maintained, namely Officers have ethics in providing services D1 and Officers have good knowledge of the SIM service mechanism D4. In quadrant II, a high priority and needs improvement, namely Clarity and certainty of officers in providing services D3. In quadrant IV there are elements of service that are considered less important but in fact, satisfactory service namely Officers are able to handle complaints in the SIM making process D2.

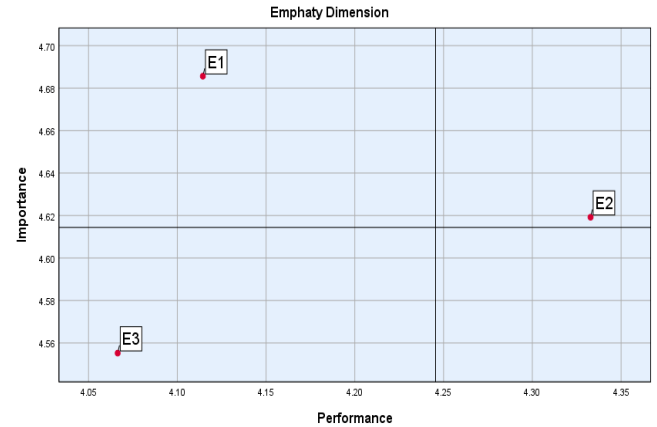


Figure 7 Importance Performance Analysis (IPA) on Empathy Dimensions

Based on Figure 7, the variables included in quadrant I which are superior services that need to be maintained are E2. In quadrant II, the high priority and needs improvement is E1. In the low priority quadrant III, the service element is not paid attention to by respondent and the quality of service from the SATLANTAS is also low in E3

e KANO

The Kano method is a method that aims to categorize attributes of a product or service based on the ability of the product/service to provide satisfaction to customers or service users. With the help of the R Studio Software, the following results were obtained:

Table 5. Kano

Code	O	A	M	I	R	Q	O+A+M	I+R+Q	Kano
A1	65	21	28	11	0	0	114	11	O
A2	55	19	37	14	0	0	111	14	O
A3	62	16	33	14	0	0	111	14	O
A4	66	14	31	12	1	1	111	14	O
A5	58	19	29	19	0	0	106	19	O
A6	56	29	22	18	0	0	107	18	O
B1	18	3	77	25	2	0	98	27	M
B2	42	13	50	13	0	7	105	20	M
B3	63	29	23	8	1	1	115	10	O
B4	35	22	40	28	0	0	97	28	M
C1	67	31	18	9	0	0	116	9	O
C2	47	30	24	21	1	2	101	24	O
C3	60	26	19	20	0	0	105	20	O
C4	48	12	48	17	0	0	108	17	O
C5	38	15	55	17	0	0	108	17	M
D1	69	21	30	5	0	0	120	5	O
D2	56	37	17	14	1	0	110	15	O
D3	57	42	16	10	1	0	115	10	O
D4	47	26	36	16	0	0	109	16	O
E1	48	16	47	14	0	0	111	14	O
E2	63	42	8	12	0	0	113	12	O
E3	54	31	27	10	1	2	112	13	O

From the results of calculations using the Kano method, it is found that attributes B1,B2, B4 and C5 are included in the Must Be (M) category, which is a basic need if this variable can be met, then service users do not increase their satisfaction. On the other hand, because consumers consider this category to be appropriate, then the fulfillment of this category will not increase service user satisfaction. However, if this variable is not sufficient to meet basic needs, service users will be dissatisfied.

The other variables from the table above are in the One Dimensional (O) category, which indicates that the increase in service user satisfaction increases proportionally when this variable is increased. On the other hand, satisfaction will decrease if the service on this variable decreases.

f Integration Importance Performance Analysis (IPA) with Kano

IPA-Kano integration is used to complete the shortcomings of each method. The integration of the IPA-Kano method can formulate strategic priorities for the development of each service indicator. In addition, the IPA-Kano method can provide the right strategic decisions as well as firm and avoid wrong decisions [7].

Table 6. Integration IPA-Kano

Var.	Kano	IPA	Strategy Priority
A1	One Dimensional	I	Sustainment of 3rd Performance
A2	One Dimensional	III	Enhancement of 4th Performance
A3	One Dimensional	I	Sustainment of 3rd Performance
A4	One Dimensional	I	Sustainment of 3rd Performance
A5	One Dimensional	III	Enhancement of 4th Performance
A6	One Dimensional	I	Sustainment of 3rd Performance
B1	Must-be	I	Sustainment of 1st Performance
B2	Must-be	II	Enhancement of 1st Performance
B3	One Dimensional	I	Sustainment of 3rd Performance
B4	Must-be	I	Sustainment of 1st Performance
C1	One Dimensional	I	Sustainment of 3rd Performance
C2	One Dimensional	IV	Sustainment of 4th Performance
C3	One Dimensional	II	Enhancement of 3rd Performance
C4	One Dimensional	II	Enhancement of 3rd Performance
C5	Must-be	II	Enhancement of 1st Performance

D1	One Dimensional	I	Sustainment of 3rd Performance
D2	One Dimensional	IV	Sustainment of 4th Performance
D3	One Dimensional	II	Enhancement of 3rd Performance
D4	One Dimensional	I	Sustainment of 3rd Performance
E1	One Dimensional	II	Enhancement of 3rd Performance
E2	One Dimensional	I	Sustainment of 3rd Performance
E3	One Dimensional	III	Enhancement of 4th Performance

Based on the results of the IPA-Kano Integration in the table above, the order of priority strategies that must be carried out by the SATLANTAS Sidoarjo is as follows:

1. Improve performance on attributes B1, B2, B4, and C5
2. a. Maintain performance on attributes A1, A3, A4, A6, B3, C1, D1, D4, and E2
 b. Improve performance on attributes C3, D4, D3 and E1.
3. a. Improve performance on attributes A2, A5, and E3.
 b. Maintain performance on attributes C2 and D2.

3. CONCLUSION

a. Conclusion

Based on research on driving license administration service at SATLANTAS Sidoarjo, it is concluded as follows:

1. The level of satisfaction of respondent who apply driving license based on the calculation results of the CSI value of 84.93%, which means that respondent in SATLANTAS Sidoarjo are very satisfied.
2. Based on the Importance Performance Analysis (IPA) it can be concluded that the priority strategies that must be carried out by the SATLANTAS Sidoarjo are:
 - a. Maintain performance on attributes A2, A3, A6, A7, B2, B5, C3, D1, D4, E2 and E3
 - b. Improve performance on attributes A1, A4, B1, B4, C1, and D3
3. Based on the analysis using Kano method, it can be concluded that :
 - a. Attributes B1,B2, B4 and C5 are included in the Must Be (M) category, which are basic needs if this variable can be met, then service users do not increase their satisfaction. On the other hand, because consumers consider this category to be appropriate, the fulfillment of this category will not increase service user satisfaction. However, if this variable is not sufficient to meet basic needs, service users will be dissatisfied.

- b. Other variables are included in the One Dimensional (O) category which shows that service user satisfaction increases proportionally if this variable is increased. On the other hand, satisfaction will decrease if the service on this variable decreases.
4. Based on the results of the integration between Importance Performance Analysis (IPA) and Kano, the main strategic priorities that must be carried out by the SATLANTAS Sidoarjo are :
 - a. Improve performance on attributes B1, B2, B4, C5, C3, D4, D3, E1, A2, A5, and E3
 - b. Maintain performance on attributes A1, A3, A4, A6, B3, C1, D1, D4, E2, C2, and D2.

b. Suggestion

Based on the results of the discussion and the conclusions obtained, some suggestions can be put forward as follows:

1. From the results of this research, it is suggested to the SATLANTAS Sidoarjo maintain and improve services that need improvement. It is hoped that from the results of this evaluation, the performance of the SATLANTAS Sidoarjo in the future can be even better and can serve the community with maximum performance.
2. For further research, it is hoped that new researchers can conduct more specific research, pay attention to language structure, and clarity of questions so that respondents' answers are more stable

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