

# **The Quality Effect of Digital-Based Signature Services on the Performance of the District Government**

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## **Abstract**

This study aims to measure the extent of the influence of digital-based signature service quality on the performance of the District Government of Palembang, Indonesia. The benefits of research provide solutions to the effectiveness of bureaucratic reform at the sub-district level. This research on the Effect of Digital-Based Signature Service Quality on Government Performance uses public service theory and organizational performance. This research method uses quantitative research methods. Research respondents were determined by population and sampling techniques following selected criteria relevant to the research problem. The research findings show that digital signatures are very significantly influential in overcoming slow problems and lengthy procedures in administrative services at the sub-district level. As a result, the socio-economic community feels facilitated in public services of its many types. The results of this study also go in line with efforts to reform public services undertaken by the Central Government so that aspects of organizational communication and public administration undergo fundamental changes.

## **Keywords**

Service Quality, District Performance, Digital Signature.

## **Introduction**

In the current millennial era, humanist service is the main task that is essential from the figure of the apparatus, as a servant of the state and servant of society. This task has been clearly outlined in the opening of the fourth 1945 Constitution, which includes 4 (four) aspects of the essential services of the apparatus to the community, namely protecting the entire Indonesian nation and all Indonesian bloodspots, promoting public welfare,

promoting the life of the nation and carrying out world order based on independence, lasting peace and social justice.

Revolution 4.0 makes the scope of services and public services include aspects of community satisfaction that is very broad tends to have a wider scope of services and is identical to the quality of service itself (Huang and Wong, 2014). Because public facilities and services are a way of allocating resources through performance mechanisms that work towards achieving better quality public services (Zhang et al., 2020). On the contrary, public services without a humanist apparatus performance process tend to open space for corrupt practices (Denford et al., 2019).

As part of the current service system, digitalization and paperless have been adopted in response to the comprehensive scope of public services (Gonzalez et al., 2019). Unfortunately, public services that touch almost every corner of people's lives are not supported by an open culture of bureaucratic reform and a humanist service process. Therefore it is not surprising that public services in Indonesia have characteristics that tend to be corrupt, especially those related to the procurement of public service products that are obligatory such as National Identity Cards (KTP), Family Cards (KK), Driving License, Passport, and other population administration.

The study has an urgency in the relationship between the problems studied, the findings produced, and the application of these findings to improve a mechanism for the realization of more public services Suitable for the community. The results of shows that are applicable can be made recommendations for the Government, especially in the district of AlangAlangLebar, Palembang, in optimizing administrative services based on digitalization (Blank, 2018). The design of this research is quantitative research. The advantage of this research also lies in the research design because the essence of quantitative analysis can measure statistical data in the form of public service relationships with organizational performance to realize appropriate solutions.

## **Literature Review**

### **1) Quality of Public Services**

It must be understood that public services are a form of public service activities carried out by Government Agencies at the Central and Regional Bureaucracy, the public must be able to provide public services that are more professional, effective, simple, transparent, open, timely, responsive and adaptive as well as able to develop human quality in the sense of increasing the capacity of individuals and society to actively determine their

future (Palma et al., 2020). Professional public services, which means that public services are characterized by the existence of accountability and responsibility from service providers (Lindkvist and Llewellyn, 2003), with the following characteristics (Widodo: 2002)

1. Effective, prioritizing the achievement of what are the goals and objectives;
2. Simple, implies that procedures/ for services are carried out easily, quickly, precisely, not convoluted, easily understood and easily implemented by people who request services;
3. Clarity and certainty (transparent), implies the existence of clarity and certainty regarding: (a) The procedure of service; (b) service requirements, both technical and administrative requirements; (c) work units and or officials who are authorized and responsible for providing services; (d) details of service tariffs and procedures for payment; (e) time schedule for completion of services.
4. Openness, meaning the procedures for requirements, work units in charge of service providers, completion time, details of tariffs and other matters relating to the service process must be openly informed so that it is easily known and understood by the public, both requested or unsolicited;
5. Efficiency means: (a) service requirements are only limited to matters that are directly related to the achievement of service objectives while still taking into account the integration of requirements with related service products; (b) Preventing the repetition of the fulfillment of requirements, in the case of the process of community service concerned, requires the completion of the requirements of the work units / other relevant government agencies.
6. Timeliness, this criterion implies the implementation of community services can be completed within a specified period of time;
7. Responsive, more directed at responsiveness and quick response to the problems, needs, and aspirations of the people being served;
8. Adaptive, quick to adjust to the demands, desires, and aspirations of the people served who are always experiencing growth and development.

To be able to assess the extent of the quality of public services Zeithaml (1990) stated in supporting this, there are 10 (ten) dimensions that must be considered in looking at the benchmarks of the quality of public services, namely as follows:

1. Tangible, consisting of physical facilities, equipment, personnel, and communications;
2. Reliable, consisting of the ability of the service unit to create the promised service appropriately;

3. Responsiveness, willingness to help consumers take responsibility for the quality of services provided;
4. Competence, demands it has, good knowledge and skills by the apparatus in providing services;
5. Courtesy, attitude or behavior friendly, friendly, responsive to the desires of consumers and willing to make contact or personal relationships;
6. Credibility, honest attitude in every effort to attract public trust;
7. Security, the services provided must be free from various dangers and risks;
8. Access, there is an easy to make contact and approach;
9. Communication, the willingness of service providers to listen to the voices, desires or aspirations of customers, as well as the willingness to always convey new information to the public;
10. Understanding the customer makes every effort to find out the customer's needs.

Based on the above explanation, indicators of the quality of public services such as:

1. Timeliness;
2. Ease of submission;
3. Service accuracy is error-free;
4. Service fees.

## **2). The Concept of Organizational Performance**

Many factors can play a role in creating organizational performance, including vision-mission, organizational structure, work procedures, intensive systems, discipline, cooperation, leadership. According to Palma et al. (2020) that increasing individual performance could be seen from their skills, practical skills, competencies, knowledge and information, freedom of experience, attitudes and behavior, virtues, creativity, morality, and others. Group performance can be seen from the aspects of cooperation, integrity, discipline, loyalty, and others " .

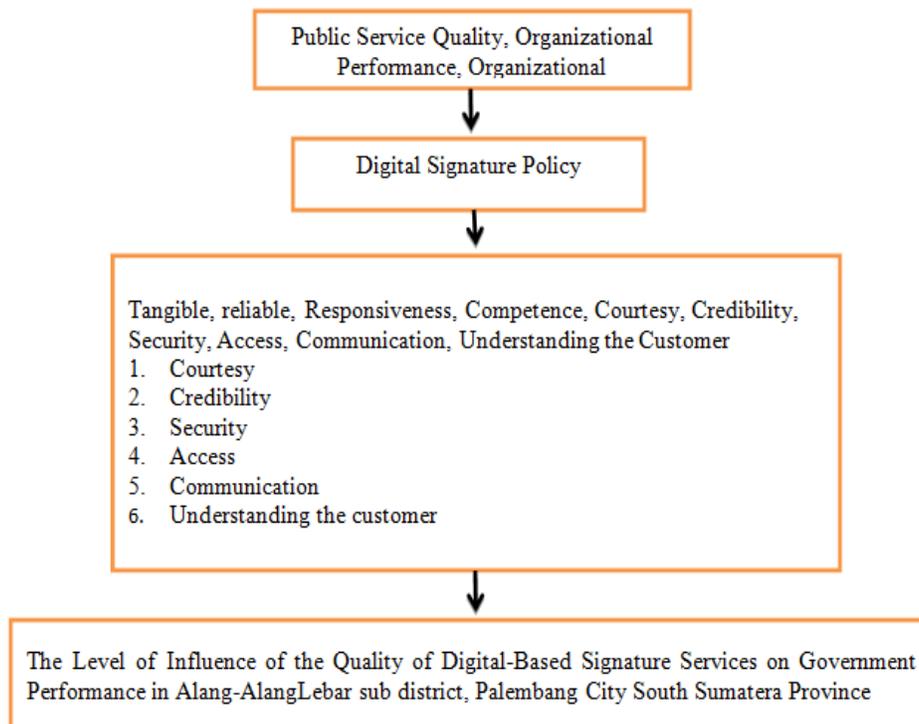
Meanwhile, (Matei et al., 2016; Palma et al., 2020) explained that a number of structural factors indicate a good administration and relationship to performance. Among the more prominent factors are the perception of roles, norms, social status, group size, demographic composition, group assignments, and cohesiveness. Furthermore, according to Goldschmidt et al. (2019), the implementation of the organizational task requires the support of organizational structures, such as a legal basis, work procedures, facilities, and others. The ability of the organizational structure is the administrative ability, namely the

strength of the organization to achieve or complete tasks supported by the organizational structure in addition to its environment. How far the organization's ability to carry out functions is very dependent on the availability of trained personnel, resources, and the level of authority (Nævestad et al., 2019).

Furthermore, Monteiro et al. (2020) hold that organizational structure is a form of the way in which tasks and responsibilities are allocated to individuals, where the individuals are grouped into offices, departments, and divisions. Organizational Structure should always adjust to the development needs of the public and the environment. It aims to create effective organizational performance and fast work processes. " Responding to the opinion above, it can be seen that in order to create an effective organizational performance in order to create a situation to accelerate the fast work process, an organizational structure is needed that can fulfill public services in the district government.

The study of this research from the perspective of social-political science is the study of organizational communication in the form of an analysis of the quality of public services and organizational performance of the District Government of Alang-AlangLebar, Palembang City. The following is a complete research road map.

**Chart 1 The framework of Public Service Quality**



(Source: Zeithaml, 1990)

## **Method**

Research Design The Effect of Digital-Based Signature Service Quality on Government Performance in Alang-AlangLebar Sub district, Palembang City, South Sumatra Province, is a quantitative descriptive design. Descriptive research is research that describes the object or subject of research and others based on the facts that appear and as they are systematically, factually and accurately about the facts and characteristics of the population of a particular area. Quantitative research itself based on various opinions of experts can be concluded an observation that involves a certain characteristic, in the form of calculations, numbers or quantities that view reality as a single, classified, concrete, can be observed and measured quantitatively.

Population from the research on the Effect of Digital-Based Signature Service Quality on Government Performance in Alang - AlangLebar Subdistrict, Palembang City, South Sumatra Province are people who promote public services in the Alang-AlangLebar District Office in Palembang City during March-June 2020 as many as 52 the visitor who submitted a public service. In this study, the population that had the opportunity was the person who filed for population administration at the Alang-AlangLebar Sub-District Office of Palembang City.

Data collection techniques used in this study were by distributing questionnaires, unstructured interviews, and observations. The three data collection techniques are the distribution of questionnaires in the study of the Effect of Digital-Based Signature Service Quality on Government Performance in Alang-AlangLebar sub district, Palembang, South Sumatra Province.

## **Results and Discussion**

The initial phenomenon of the research shows that there is an indication of the poor quality of public services that have been enjoyed by the people of Palembang City. Data on the quality of public services that have been provided are reflected in reports of the many complaints made by the public through newspapers and social media. The data is as follows:

**Table 1 Types and Community Negative Responses in Public Services**  
In the City of Palembang

Public Complain	Totals
1. Expensive costs	8
2. Long processing time	41
3. Too convoluted	12
4. There are always mistakes	9
5. The apparatus is not friendly	14
6. Dirty room	11

Source: Secondary data, 2020.

From the data in table 1, there are still complaints or dissatisfaction from the community about the results of services, and it is clear that complaints from the community will indicate the quality of services provided. The District Government of Alang - AlangLebar responds to this challenge by realizing a digital signature-based policy whose aim is to provide public services that are quickly accepted by the community through the signature of the Sub-District Head (Camat).

The respondents of this study are employees and the public who feel the services of the Government Office District of Alang – Alang Lebar Palembang City. The number of respondents in this study based on Gender consists of men and women, which can be seen in Table 9 below:

**Table 2 Classification of Respondents by Gender**

No	Gender	N (value)	Percent (%)
1.	Male	18	34,62
2.	Female	34	65,38
Total		52	<b>100</b>

Source: Secondary Data, 2020.

The data above shows that the number of respondents based on gender is that respondents are dominated by female respondents amounting to 34 people with a percentage of 65.38 percent and the number of male respondents totaling 18 people with a percentage of 34.62 percent, these results indicate that employees in this study the majority were female. The data that researchers present is information provided by respondents through providing questionnaires to be filled or answered.

Validity Test in this study was conducted on 52 respondents who are employees who work in the Government Office District of Alang - AlangLebar Palembang. The questions in the Questionnaire consist of 30 items, of which 14 questions for the independent variable are the service quality variable (X), which has 5 Dimensions, and 16 Questions

for the dependent variable are the employee performance variable (Y) which has four dimensions. The criteria used in this validity test are performed by comparing the value of "r" \_ ("calculate") with the value of "r" \_ "table". If "r" \_ (count) is greater than "r" \_ "table," then the question item is declared valid. the value of "r" \_ "table" can be seen in the helper table (attached). the value of "r" \_ "table" with N = 52 at the significance of 5% is 0.273. From the results of questionnaire processing through SPSS Version 20.0, the following results from the validity test of service quality variable (X) questions and Employee performance variable questions (Y).

**Table 3 Test Results of Service Quality Validity (X)**

Variable	Item	r <sub>Count</sub>	r <sub>table</sub>	Keterangan
Quality (X)	Item 1	0,343	0,273	Valid
	Item 2	0,326	0,273	Valid
	Item 3	0,457	0,273	Valid
	Item 4	0,374	0,273	Valid
	Item 5	0,366	0,273	Valid
	Item 6	0,377	0,273	Valid
	Item 7	0,416	0,273	Valid
	Item 8	0,352	0,273	Valid
	Item 9	0,432	0,273	Valid
	Item 10	0,602	0,273	Valid
	Item 11	0,558	0,273	Valid
	Item 12	0,437	0,273	Valid
	Item 13	0,493	0,273	Valid
	Item 14	0,487	0,273	Valid

**Source: Secondary Data, 2020.**

Based on Table 12, it can be seen that the independent variable, namely service quality has 14 questions. From the results of the validity test, it is known that all values of "r" \_ (count) have a value greater than "r" \_ "table" which is 0.312, this shows that the variable quality of service indicators owned is valid and reliable, the questionnaire used can further analysis is performed.

**Table 4 Employee Performance Validity Test Results (Y)**

Variable	Item	$r_{count}$	$r_{table}$	Result
Employee Performance (Y)	Item 1	0,489	0,273	Valid
	Item 2	0,396	0,273	Valid
	Item 3	0,377	0,273	Valid
	Item 4	0,348	0,273	Valid
	Item 5	0,360	0,273	Valid
	Item 6	0,399	0,273	Valid
	Item 7	0,450	0,273	Valid
	Item 8	0,557	0,273	Valid
	Item 9	0,305	0,273	Valid
	Item 10	0,372	0,273	Valid
	Item 11	0,435	0,273	Valid
	Item 12	0,347	0,273	Valid
	Item 13	0,412	0,273	Valid
	Item 14	0,407	0,273	Valid
	Item 15	0,359	0,273	Valid
	Item 16	0,468	0,273	Valid

**Source: Secondary Data, 2020.**

Based on the table above, it can be seen that the dependent variable is employee performance has 16 questions. From the results of the validity test, it is known that all values of  $r_{count}$  have a value greater than  $r_{table}$  which is 0.273, this shows that the employee performance indicators owned valid and reliable indicators that the questionnaire used can be further analyzed.

The above data also shows that employee performance variables from the dimensions of service quality, dimensions of employee work quantity, dimensions of task implementation, and overall dimensions of responsibility are 60.01 percent, which is included in the Good category. In the next discussion will be carried out interval scale measurements. The statistical test is performed on the independent variable (X), which is service quality on the dependent variable (Y), namely Employee Performance.

### 1) Service Quality Variable Interval

The questionnaire on the service quality variable consists of 14 question items. Based on data that has been processed using the SPSS 20.0 For Windows program, the highest score obtained is 65, and the lowest score is 39. The analysis shows an average of 52.90, a median of 53.00, mode 50, and a standard deviation of 5.661.

The number of interval classes can be calculated using the formula  $1 + 3.3 \text{ Log } N$  where  $N$  is the number of research subjects. it is known that  $N = 52$  so that the equation  $1 + 3.3 \text{ Log } 52 = 6.64$  is obtained rounded up to 7 class intervals. The range of data is calculated by using a formula with a maximum value of 65 - 39, the minimum value so as to obtain a range of data of 65 - 39 .. = 26 The length of the class is calculated by the formula for the range of data: the number of class intervals is obtained by the length of class 26:  $6.64 = 3.91$ . Respondents' answers to the service quality variables can be seen in the following table:

**Table 5 Number of Frequency Class Intervals Frequency of Service Quality**

No	Interval	Frequency (f)	Percentage (%)
1	63 – 66,9	2	3,8
2	59 – 62,9	6	11,5
3	55 – 58,9	14	26,9
4	51 – 54,9	10	19,2
5	47 – 50,9	13	25,0
6	43 – 46,9	5	9,6
7	39 – 42,9	2	3,8
Total		52	100

Source: Secondary Data, 2020.

Service quality variable data is then classified into the category of service quality variable tendency data. Calculation of trend distribution is used by using the ideal average formula ( $M_i$ ), and the ideal standard deviation formula ( $SD_i$ ), namely  $M_i = \frac{1}{2} (X_{\max} + X_{\min})$  and  $SD_i = \frac{1}{2} (X_{\max} - X_{\min})$  where  $X_{\max}$  is the maximum value and  $X_{\min}$  is the minimum value.

Based on these calculations, it is known that the ideal mean service quality variable is 52, and the ideal standard deviation is 4.33. The trend category table is divided into 3 interval classes in the calculation of high categories =  $X > M_i + SD_i$ , Medium =  $M_i - SD_i \leq X < M_i + SD_i$  and Low =  $X < M_i - SD_i$ . The results of the distribution of trends in service quality variables can be seen in Table 28, as follows:

**Table 6 Category Trends in Service Variable Data Quality**

No.	Interval	Frequency (f)	Percentage (%)	Result
1.	X 56,33	8	15,39	high
2.	47,67 – 56,33	37	71,15	midle
3.	X <47,67	7	13,46	low

Source: Secondary Data, 2020.

Based on the table above shows that the assessment of respondents on the variable service quality is moderate because the majority of respondents gave a medium assessment. The tendency category table shows that eight people (15.39%) each are in the high category; in the moderate category, 37 people (71.15%) and the low category are seven respondents (13.46%).

## 2) Employee Performance Variable Interval

The questionnaire on the Performance variable consists of 16 question items. Based on data that has been processed using the SPSS 20.0 For Windows program, the highest number of scores is obtained by 76, and the lowest number of scores is 54. The results of the analysis show an average of 65.83, a median of 66.00, mode 4, 00, and the standard deviation of 5,433.

The number of interval classes can be calculated using the formula  $1 + 3.3 \text{ Log } N$  where  $N$  is the number of research subjects. it is known that  $N = 52$  so that the equation  $1 + 3.3 \text{ Log } 52 = 6.64$  is obtained rounded up to 7 class intervals. The range of data is calculated by the formula maximum value of 76-54, the minimum value so as to obtain a data range of  $76-54 = 22$  The length of the class is calculated by the formula of the data range: the number of interval classes, the length of class  $22: 6.64 = 3.3$  is obtained. Respondents' answers to employee performance variables can be seen in the following table:

**Table 7 Number of Frequency Interval Classes Employee Performance Variables**

No.	Intervall	Frequency (f)	Percentage (%)
1.	74,4 – 77,7	2	3,8
2.	71 – 74,3	9	17,3
3.	67,6 – 70,9	7	13,5
4.	64,2 – 67,5	14	26,9
5.	60,8 – 64,1	9	17,3
6.	57,4 – 60,7	8	15,4
7.	54 - 57,3	3	5,8
Total		52	100

Source: Secondary Data, 2020.

Service quality variable data is then classified into the category of service quality variable tendency data. Calculation of trend distribution is used by using the ideal average formula ( $M_i$ ), and the ideal standard deviation formula ( $SD_i$ ), namely  $M_i = \frac{1}{2} (X_{max} + X_{min})$  and  $SD_i = \frac{1}{2} (X_{max} - X_{min})$  where  $X_{max}$  is the maximum value and  $X_{min}$  is the minimum value.

Based on these calculations it is known that the ideal mean of employee performance variables is 65 and the ideal standard deviation is 3.66 The tendency category table is divided into 3 interval classes in the calculation of categories High =  $X > M_i + SD_i$ , Medium =  $M_i - SD_i \leq X < M_i + SD_i$  and Low =  $X < M_i - SD_i$ . The results of the trend distribution of employee performance variables can be seen in Table 30, as follows:

**Table 8 Category trends in employee performance variable data**

No.	Intervall	Frequency (f)	Percentage (%)	Result
1.	$X > 68,66$	11	21,15	High
2.	$61,34 - 68,66$	30	57,70	middle
3.	$X < 61,34$	11	21,15	low

Source: Secondary Data, 2020.

Based on the table above, it can be explained that the assessment of respondents on the variable service quality is moderate because the majority of respondents gave a medium assessment. The trend category table shows that as many as 11 people (21.15%) were in the high category, in the moderate category were 30 people (57.70%), and the low category were 11 respondents (21.15%).

## **Conclusion**

After analyzing the results of the discussion studied related to the Effect of Digital-Based Signature Service Quality on Government Performance in Alang - AlangLebar District, Palembang City, South Sumatra Province, the researchers draw conclusions based on the explanation and explanation of the previous discussion, which is proven Effect of Digital-Based Signature Service Quality on Government Performance in Alang - AlangLebar Subdistrict, Palembang City, South Sumatra Province 0.576 (57.6%). The correlation coefficient between service quality (X) and employee performance (Y) in the District Government of Alang - AlangLebar Palembang, South Sumatra Province is 0.759 (75.9%). This means that employee performance can be said to be good, but needs to be maximized again. Improved employee performance can be done by further maximizing

the quality of service work of the District Government of Alang - AlangLebar, Palembang City, South Sumatra Province.

Based on research that has been done by the author, the authors suggest several things related to the Effect of Digital-Based Signature Service Quality on Government Performance in Alang - AlangLebar Subdistrict, Palembang, South Sumatra Province. First, more adequate facilities are needed both for work facilities in the employee's room, good facilities standards, and a clean work environment in supporting all employee performance. Second, do wider socialization to the public related to the existing digital signage service policy.

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