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The Impact of Digital Transformation in Land Services, Accountability, Organizational Culture, and Community Participation on Improving Service Quality at the Agrarian and Spatial Planning Office of the National Land Agency in Batam City

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ABSTRACT

This research aims to analyze the Influence of Digital Transformation of Land Services, Accountability, Organizational Culture and Community Participation on Improving Service Quality at the Agrarian and Spatial Planning Office of the National Land Agency of Batam City. This study uses a quantitative method with an explanatory research type, with a population of 169 and a research sample of 83 people determined by the Slovin formula (1960). The sampling technique used is simple random sampling where sampling is done randomly. Meanwhile, the data analysis method used in this study is simple linear regression analysis and multiple linear regression analysis. From the results of this study, it is evident that there is a positive and significant influence of partial variables on Service Quality Improvement, each Digital Transformation of Land Services. The magnitude of the influence of Anti-Corruption Behavior on the Professional Integrity of ASN is determined by the dimensions of Participation and Main Aspects. So that in the future, improving the quality of services should pay attention to the importance of the factors of Digital Transformation of Land Services, Accountability, Organizational Culture and Community Participation in the implementation and efforts to improve the quality of services so that it can run even better for the community, especially in an effort to improve the quality of services at the Agrarian and Spatial Planning Office of the National Land Agency in Batam City

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INTRODUCTION

The Batam City Land Office is a vertical agency of the Ministry of Agrarian and Spatial Planning/National Land Agency (ATR/BPN) in districts/cities that are under and responsible to the Minister of Agrarian and Spatial Planning/Head of the National Land Agency through the Head of the Regional Office of the National Land Agency. In the Regulation of the Minister of Agrarian and Spatial Planning (ATR/BPN) Number 17 of 2020 concerning the Organization and Work Procedures of the Regional Office of the National Land Agency and the Land Office, that the Land Office carries out functions including the preparation of plans, programs, budgets and reporting, the implementation of surveys and mapping, the implementation of land rights determination and registration, the implementation of structuring and empowerment, the implementation of land acquisition and land development, implementation of land dispute control and handling, implementation of electronic-based land service modernization, implementation of bureaucratic reform and complaint handling, implementation of administrative support to all organizational units of the Land Office (Davies, 2018; Vial, 2019; Barry & Libert, 2016; Saleh, 2012).

We often hear that public services today are still very concerning, so almost all government agencies always receive negative criticism. This is because the services provided are not in accordance with the expectations of the community. In general, public services that often cause problems are individual services, this is because the nature and characteristics of the community are different so that in service with each other can be different. One of the public services that often receives criticism from the public is the Land Agency (Rohman et al., 2016; Saleh, 2012; Siti Maryam, 2017; Omoregie, 2014). Until now, the community still thinks that land services are still difficult, it is due to the lack of socialization from the Land to the community, so that the community is still difficult, especially in the application for the making of certificates and the Roya for the elimination of Dependent Rights. Systematic land registration is "a land registration activity for the first time that is carried out simultaneously that includes all land registration objects that have not been registered in the area/part of a village/sub-district." Furthermore, sporadic is "Land registration activities for the first time regarding one or several objects. Land registration in an area or part of a village or sub-district individually or en masse" while the meaning of Roya in general is the crossing out of the Dependent Rights attached to the land book that is the object of the Dependent Rights, because the registration of the Dependent Rights is burdensome on the land. Roya's application was submitted to the authorized agency, namely the Agrarian and Spatial Planning Office of the National Land Agency (ATR/BPN).

Due to the lack of socialization to the community, the community still does not know what files must be prepared in the application for making certificates and Roya at the Agrarian and Spatial Planning Office of the National Land Agency (ATR/BPN), besides that the community still thinks that the costs incurred are too expensive. So that the public feels uncomfortable with costs that are considered expensive and too difficult, so that people trust a Notary more even though the costs incurred are actually more expensive than coming directly to the Agrarian and Spatial Planning Office of the National Land Agency. Until now, public awareness of the making of certificates is still minimal, even though the making of certificates is very important for the community, because certificates are valid evidence of the ownership of land rights they own. In fact, year by year the number of people is increasing, and indirectly the amount of land owned by humans is very limited, while the number of people who desire land is always increasing. In addition to the increasing number of people who need land for housing, there is also the progress and development of the economy, socio-culture and technology so that the availability of a lot of land is also required (Ferrari et al., 2013). Therefore, the imbalance between the land supply and the need for the land has led to many problems that the community has about their land ownership rights. So that the making of certificates is very important for the community to maintain their land rights so that in the future problems will not arise.

Until now, there are still many weaknesses in the services of the Agrarian and Spatial Planning Office of the National Land Agency (ATR/BPN) even in some regions, such as the lack of the number of employees who serve the community in applications, it is marked by many problems such as not being optimally served by applicants when applying for certification and or other services.

Today, we are reminded again of the importance of digital transformation in land services, in order to realize advanced and modern land and spatial planning institutions. In this regard,

e-government is a must. In this context, in addition to boosting the completion of land registration through PTSL, the Ministry of ATR/BPN also initiated a digital transformation policy in land services. One of them is the Electronic Certificate policy through the Minister of ATR/KBPN Number 1 of 2021 concerning Electronic Certificates, which is currently replaced by the Minister of ATR/KBPN Number 3 of 2023 concerning the Issuance of Electronic Documents in Land Registration Activities (Afni et al., 2021; Hermawan, 2016). Electronic documents in the regulation mean any electronic information that is created, transmitted, transmitted, received, or stored in analog, digital, electromagnetic, optical or similar form, which can be seen, displayed, and/or heard through a computer or electronic system, including but not limited to writing, sound, images, maps, designs, photographs or the like, letters, signs, numbers, access codes, etc. a symbol or perforation that has a meaning or meaning or can be understood by a person who is able to understand it. Digital Transformation challenges faced in digital transformation in land services, especially in the issuance of electronic documents in land registration activities include: (a) the availability of complete and detailed regulations; (b) the availability of reliable electronic documents and systems; (c) the readiness of human resources, both their capacity and integrity; and (d) guarantee the security of documents and their electronic systems. Complete and detailed regulations are not only oriented to obtain the legitimacy of producing electronic documents, but also provide protection to the parties who produce them as well as the holders of their land rights.

The implementation of the land sector can be seen as the implementation of government administration related to public organizations that require good governance (Narayana, 2017; Tumigolung et al., 2019; Lovelock & Gummesson, 2017; Omoregie, 2014). In organizational culture, it will form the identity of the members of the organization that is necessary in fostering pride and effectiveness in work. Effectiveness that is solidly formed in related agencies will not only improve organizational performance but will also form a good image of the related agencies. A strong culture is characterized by widely held and agreed values. The more members of the organization accept the core values and the greater the commitment to those values, the stronger the culture. With the performance of BPN services, there is a lot of attention from the public because the performance of services to the community is considered not good. This is a future challenge that needs to be faced and useful for analyzing the strengths and weaknesses of BPN itself. BPN needs to adjust to the changes that occur so that the desired goals can be achieved optimally. In other words, BPN needs to adjust its strategy and prepare its organizational infrastructure well. One of the main infrastructures that BPN needs to pay attention to is organizational culture, because with a good organizational culture, policies, strategies, and agency plans can be carried out properly.

In addition, performance accountability is one of the keys to the realization of good governance in the management of public organizations, if the public sector accounting cycle ends with a public accountability process, this process determines the assessment of the success of a public organization in achieving its goals. Performance accountability has become one of the items listed in the legal basis or rules of the organization, therefore, the organization is legally obliged to fulfill its organizational accountability with the performance it obtains. Organizational performance can be achieved by making the results of organizational processes

effective and efficient. Namely planning, budgeting, budget realization, control and services, financial reporting, auditing, and public accountability.

Community participation is the involvement of the community in an activity carried out by the government in the process of social interaction associated with various interests and agendas that take place in people's lives and decision-making processes. On the other hand, community participation is the right and obligation of citizens to make their contribution to the achievement of group goals, giving them the opportunity to participate in development through their initiative and creativity.

Several studies have examined aspects influencing public service quality. For instance, **Budi Supriyatno (2020)** emphasized that digital transformation enhances service efficiency, accessibility, and user satisfaction through technology integration. Similarly, **Mahmudi (2019)** identified accountability—encompassing legal, procedural, program, and policy dimensions—as a critical determinant of public trust and institutional performance. In the realm of organizational culture, **Edy Sutrisno (2018)** and **Emron, Yohny & Komariah (2018)** argued that a strong, value-driven culture fosters employee commitment, teamwork, and service excellence. Furthermore, **Hajar S. Tanjung (2018)** and **Mulyadi (2019)** highlighted that community participation ensures services are responsive to local needs and promotes collaborative governance.

Despite these contributions, limited research has integrated digital transformation, accountability, organizational culture, and community participation into a comprehensive framework for assessing land service quality. Most prior studies focus on general public administration or sector-specific analyses (e.g., health, education), with insufficient attention to the unique challenges of land agencies in Indonesia. Moreover, empirical evidence at the regency/city level—especially in rapidly developing regions like Batam—remains scarce.

This study addresses this gap by investigating the simultaneous influence of digital transformation, accountability, organizational culture, and community participation on service quality at the Agrarian and Spatial Planning Office/National Land Agency (ATR/BPN) in Batam City. Batam, as a strategic economic zone, faces high demand for land services, making it an ideal context for examining modern governance challenges. The research provides a localized, evidence-based perspective that can inform policy and practice in similar settings across Indonesia.

In the Public Service Law, there is an understanding that public services are activities or a series of activities in order to meet service needs in accordance with the laws and regulations for every citizen and resident for goods, services, and/or administrative services provided by public service providers. The organizer is any state organizing institution, corporation, independent institution formed under the law for public service activities, and other legal entities formed solely for public service activities within the state organizing institution, corporations, independent institutions formed under the law for public service activities, and other legal entities formed solely for public service activities later.

Based on the background mentioned above, the author felt interested in conducting research: "The Influence of Digital Transformation of Land Services, Accountability, Organizational Culture and Community Participation on Improving the Quality of Service at the Agrarian and Spatial Planning Office of the National Land Agency of Batam City".

The objective of this study is to analyze the influence of digital transformation in land services, accountability, organizational culture, and community participation on improving service quality at the Agrarian and Spatial Planning Office/National Land Agency in Batam City. Specifically, this research seeks to empirically examine the extent to which each of these factors contributes to the enhancement of public service delivery, both individually and collectively. The findings are expected to provide an evidence-based foundation for policy formulation, governance improvement in land administration, and the development of more inclusive and accountable digital transformation strategies at the regional level, particularly in the context of accelerating development and enhancing regional competitiveness such as in Batam City.

RESEARCH METHOD

Research Design

The research on the Influence of Digital Transformation of Land Services, Accountability, Organizational Culture and Community Participation on Improving Service Quality at the Agrarian and Spatial Planning Office of the National Land Agency of Batam City is included in the quantitative research that is explanatory in nature.

Descriptive research requires a research plan, where a descriptive study tries to find a comprehensive and thorough description of a situation or empirical reality, so research planning is very necessary so that the description really covers all aspects or parts of the problem to be researched. The formulation of the right problem will show what kind of information is actually needed. Descriptive data is used as a direct basis for making decisions in analysis and other formulation purposes.

Data Collection Techniques and Tools

Data Collection Techniques

In conducting this research, the author requires data that can support the study, which includes theoretical data derived from expert literature and empirical data obtained from related institutions regarding the influence of digital transformation in land services, accountability, organizational culture, and community participation on improving service quality at the Agrarian and Spatial Planning Office/National Land Agency in Batam City. To obtain comprehensive data on the research object, two main data collection techniques were employed: library research and field research. Library research was conducted to support theoretical and conceptual understanding of the research variables through literature review and documentation study, including analysis of textbooks, academic references, and institutional documents such as reports and statistical data from the Agrarian and Spatial Planning Office of Batam City. Field research was carried out through observation, questionnaires, and interviews. Observation allowed the researcher to directly witness and record behaviors and events in real settings, thereby obtaining firsthand contextual knowledge. Questionnaires were administered using closed-ended questions based on a Likert scale, enabling respondents to select predetermined answers systematically. Structured interviews were conducted through guided oral question-and-answer sessions to gather relevant information in an organized manner, ensuring data consistency and ease of subsequent processing.

Data Analysis Techniques

The data analysis was conducted systematically, beginning with validity and reliability tests, normality tests, and regression analysis. Descriptive statistics were first employed to summarize the characteristics of the independent variables (X1, X2, X3, X4) and the dependent variable (Y), including measures such as mean, median, maximum, minimum, standard

deviation, skewness, and kurtosis, along with graphical representations such as histograms. Prior to distributing the questionnaire, validity and reliability tests were carried out to ensure the measurement instrument's accuracy and consistency. Validity was assessed by comparing the calculated correlation coefficient with the table value, where an item is considered valid if the result is positive and exceeds the critical value. Reliability was evaluated using Cronbach's Alpha, with a value greater than the table threshold indicating a reliable instrument. Classical assumption testing included a normality test using the One-Sample Kolmogorov-Smirnov Z Test, where data is considered normally distributed if the p-value exceeds 0.05. Multicollinearity was examined using the Variance Inflation Factor (VIF), with a VIF value below 10 indicating the absence of multicollinearity. Determinant analysis was performed using the Coefficient of Determination (R^2) to explain the proportion of variability in the dependent variable accounted for by the independent variables. Linear regression analysis was applied to model the relationships, employing both simple linear regression equations for each independent variable and a multiple linear regression equation to assess their combined effect. Hypothesis testing involved t-tests to evaluate the significance of individual predictors and F-tests to examine the overall model significance, with decisions based on comparing calculated values against critical values from statistical tables.

RESULTS AND DISCUSSION

Hypothesis Testing

Based on the results of hypothesis testing using *the SPSS 25 for Windows* program, the results of the calculation of the five hypotheses test are obtained as follows:

First Hypothesis

H0 : b1 = 0 : there is no effect of Digital Transformation of Land Services (X1) on Improving Service Quality (Y).

H1 : b1 ≠ 0 : there is an effect of Digital Transformation of Land Services (X1) on Improving Service Quality (Y)

If t calculates > t_{table}, then H_0 is rejected and H_1 is accepted

1. T test

Based on calculations using *SPSS 25 for Windows, it* was obtained that the value of $t_{calculated}$ was 9.069 and the value of $t_{of\ table}$ df (81) was 1.990 or $t_{calculated}$ (9.069) > t_{table} (1.990) meaning that there was an influence between the variable of Digital Transformation of Land Services (X1) partially on the variable of Service Quality Improvement (Y). Thus the hypothesis is acceptable and proven.

2. Coefficient Determination Analysis

Based on calculations using *SPSS 25 for Windows*, a determination coefficient value of 0.504 or 50.4% was obtained. The value of this determination coefficient means that 50.4% of Service Quality Improvement (Y) is due to the Digital Transformation of Land Services (X1), while the rest (49.6%) is due to other variables.

3. Simple Linear Regression Equation

Based on calculations using *SPSS 25 for Windows, the* values of the simple linear regression equation are obtained as follows:

- $\hat{Y} = a + b1X1$
- $\hat{Y} = 1.743 + 0.521X1$

The value of the simple linear regression equation above, has the understanding that every 1 increase in the value of the Land Services Digital Transformation variable (X1) can increase the Improvement of Service Quality (Y) by 2.264 with the estimated variables of Accountability (X2), Organizational Culture (X3) and Community Participation (X4) constant.

Second Hypothesis

H0 : b2 = 0 : there is no effect of Accountability (X2) on Service Quality Improvement (Y)

H1: b2 ≠ 0 : there is an effect of Accountability (X2) on Improving Service Quality (Y)

If t calculates > t_{table}, then H_0 is rejected and H_1 is accepted

1. T test

Based on calculations using *SPSS 25 for Windows, it* was obtained that the$_{t\text{-value of}}$ the calculation was 13.631 and the t-value$_{of\ the\ df}$ table (81) was 1.990 or $t_{of\ the\ table}$ (13.631) > $t_{of\ the\ table}$ (1.990) meaning what is the influence between the Accountability variable (X2) partially on the variable of Service Quality Improvement (Y). Thus the hypothesis is acceptable and proven.

2. Coefficient Determination Analysis

Based on calculations using *SPSS 25 for Windows*, the determination coefficient value of 0.696 or 69.6% was obtained. The value of this determination coefficient means that 69.6% of Service Quality Improvement (Y) is due to Accountability (X2), while the rest (30.4%) is due to other variables.

3. Simple Linear Regression Equation

Based on calculations using *SPSS 25 for Windows*, the following simple linear regression equation is obtained:

- $\hat{Y} = a + b2X2$
- $\hat{Y} = 0.796 + 0.704X2$

The value of the simple linear regression equation above, has the understanding that every increase of 1 value of the Accountability variable (X2) can increase the Improvement of Service Quality (Y) by 1,500 with the estimated variables of Digital Transformation of Land Services (X1), Organizational Culture (X3) and Community Participation (X4) constantly.

Third Hypothesis

H0 : b3 = 0 : there is no influence of Organizational Culture (X3) on Service Quality Improvement (Y)

H1 : b3 ≠ 0 : there is an influence of Organizational Culture (X3) on Improving Service Quality (Y)

If t calculates > t_{table}, then H_0 is rejected and H_1 is accepted

1. T test

Based on calculations using *SPSS 25 for Windows, it* was obtained that the$_{t\text{-value of}}$ the calculation was 14.167 and the t-value$_{of\ the}$ df table (81) was 1.990 or the t-count (14.167) > $t_{of\ the\ table}$ (1.990) means what is the influence between the variable of Organizational Culture (X3) partially on the variable of Service Quality Improvement (Y). Thus the hypothesis is acceptable and proven.

Coefficient Determination Analysis

Based on calculations using *SPSS 25 for Windows*, the value of the determination coefficient was 0.712 or 71.2%. The value of this determination coefficient means that 71.2% of Service Quality Improvement (Y) is due to Organizational Culture (X3), while the rest (28.8%) is due to other variables.

Simple Linear Regression Equation

Based on calculations using *SPSS 25 for Windows, the* values of the simple linear regression equation are obtained as follows:

- $\hat{Y} = a + b3X3$
- $\hat{Y} = 0.496 + 0.846X3$

The value of the simple linear regression equation above, has the understanding that every increase of 1 value of the Organizational Culture variable (X3) can increase the Improvement of Service Quality (Y) by 1.342 with the estimated variables of Digital Transformation of Land Services (X1), Accountability (X2) and Community Participation (X4) constant.

Fourth Hypothesis

H0 : b4 = 0 : there is no effect of Community Participation (X4) on Service Quality Improvement (Y)

H1 : b4 ≠ 0 : there is an influence of Community Participation (X4) on Improving Service Quality (Y)

If t calculates > t_{table}, then H_0 is rejected and H_1 is accepted

T test

Based on calculations using *SPSS 25 for Windows, it* was obtained that the$_{t\text{-value of}}$ the calculation was 9.213 and the t-value$_{of\ the\ df}$ table (81) was 1.990 or $t_{of\ the\ table}$ (9.213) > t_{table} (1.990) meaning what is the influence between the variable of Community Participation (X4) partially on the variable of Service Quality Improvement (Y). Thus the hypothesis is acceptable and proven.

Coefficient Determination Analysis

Based on calculations using *SPSS 25 for Windows, a* determination coefficient value of 0.512 or 51.2% was obtained. The value of this determination coefficient has the understanding that 51.2% of Service Quality Improvement (Y) is due to Community Participation (X4), while the rest (48.8%) is due to other variables.

Simple Linear Regression Equation

Based on calculations using *SPSS 25 for Windows, the* values of the simple linear regression equation are obtained as follows:

$\hat{Y} = a + b4X4$

$\hat{Y} = 1.365 + 0.647X4$

The value of the simple linear regression equation above, has the understanding that every increase of 1 value of the Community Participation variable (X4) can increase the Improvement of Service Quality (Y) by 2.012 with the estimated variables of Digital Transformation of Land Services (X1), Accountability (X2) and Organizational Culture (X3) constant.

Fifth Hypothesis

H0: b1,b2,b3,b4 = 0 : there is no effect of Digital Transformation of Land Services (X1), Accountability (X2), Organizational Culture (X3), and Community Participation (X4) on Service Quality Improvement (Y)

H1: b1,b2,b3,b4 ≠ 0 : there is an effect of Digital Transformation of Land Services (X1), Accountability (X2), Organizational Culture (X3), and Community Participation (X4) together on Improving Service Quality (Y).

If the fcount > Ftable H0 is rejected and H1 is accepted.

Test F

Based on calculations using *SPSS 25 for Windows*, the value of F_{is} 115,563 and the value of $F_{of\ table}$ df (78) is 2,489 or F_{count} (115,563) > F_{table} (2,489) meaning that there is an influence between the independent variable simultaneously on the variable of Service Quality Improvement (Y). Thus the hypothesis is acceptable and proven.

Determination Analysis

Based on calculations using *SPSS 25 for Windows*, a determination coefficient value of 0.856 or 85.6% was obtained. The value of this determination coefficient means that 85.6% of the Improvement in Service Quality (Y) is due to Digital Transformation of Land Services (X1), Accountability (X2), Organizational Culture (X3), and Community Participation (X4) while the rest (17.0%) is due to other variables.

Multiple Linear Regression Equations

Based on calculations using *SPSS 25 for Windows, the* value of the double linear regression equation was obtained as follows:

$\hat{Y} = a + b1X1 + b2X2 + b3X3 + b4X4$

$\hat{Y} = 0.026 + 0.145\ X1 + 0.299\ X2 + 0.378X3 + 0.229\ X4$

The double regression equation above, has the understanding that:

Every 1 increase in the value of Digital Transformation of Land Services (X1), can increase the value of the variable value of Service Quality Improvement (Y) by 0.171, assuming the variables Accountability (X2), Organizational Culture (X3) and Community Participation (X4) are constant.

Every increase of 1 value of the Accountability variable (X2) can increase the value of the Junior High School Service Quality Improvement (Y) variable by 0.325, assuming that the variables Digital Transformation of Land Services (X1), Organizational Culture (X3) and Anti-Corruption Behavior (X_4) are constant.

Every increase of 1 value of the Organizational Culture variable (X3) can increase the value of the variable value of Service Quality Improvement (Y) by 0.404, assuming that the variables Digital Transformation of Land Services (X1), Accountability (X2) and Anti-Corruption Behavior (X_4) are constant.

Every increase of 1 value of the Anti-Corruption Behavior variable (X4) can increase the value of the variable value of Service Quality Improvement (Y) of junior high schools in North Padang Lawas Regency, North Sumatra Province by 0.155, assuming that the variables Digital Transformation of Land Services (X1), Accountability (X2) and Organizational Culture (X3) are constant.

The Relationship Between the Influence of Digital Transformation of Land Services, Accountability, Organizational Culture and Community Participation on Improving Service Quality at the Agrarian and Spatial Planning Office of the National Land Agency of Batam City.

The Relationship of Digital Transformation of Land Services to Service Quality

According to **Budi Supriyatno (2020),** the definition of digital transformation is a fundamental change in the way organizations provide services to customers by utilizing digital technology. It involves adopting modern technologies such as cloud computing, artificial intelligence, data analytics, and high connectivity to transform the way customers work, interact, and deliver value.

Thus, the digital transformation of services can improve the quality of services at the Agrarian and Spatial Planning Office of the National Land Agency of Batam City by increasing efficiency, service quality, and innovation.

Furthermore, **Tita Aisyah et al.., (2024)** explained that the digital transformation process is related to good planning so that it can run smoothly, through several steps that can be taken to prepare for the implementation of digital transformation:

Technology Evaluation

Business actors need to review the technology infrastructure that they currently have, then identify which areas need to be upgraded or improved.

Business Process Optimization

Companies need to review their current business processes and identify which parts need to be improved to be more efficient.

Making Vision and Strategy Changes

The third step is to develop a vision at the leadership level to be open to digital change.

Expanding partnerships.

The digital transformation process will be difficult if it is done thoroughly by the Company. This process will be resource-intensive and time-consuming.

Furthermore, digital transformation, according to **Dull and Gellinas (2012),** has a relationship with the characteristics of quality information, namely:
Effectiveness: Relating to relevant information and related to business processes that are delivered in a timely, correct, systematic and usable manner.
Efficiency: Information related to the provision of information optimally on the use of resources.
Confidentiality: The characteristics of information related to the accuracy and completeness of the information and its validity in accordance with business values and expectations.
Integrity: The characteristics of information related to the protection of sensitive information from unauthorized disclosure.
Availability: A characteristic of information that relates to information that is available at the time required by business processes both now and in the future, it also concerns the protection of the necessary resources and related capabilities (Purba & Amrul, 2017; Wiguna & Dwilingga, 2020; Siti Maryam, 2017; Omoregie, 2014).
Compliance: That is the characteristic of information related to compliance with regulations and contractual agreements where business processes are the subject of internal and external business criteria.
Reliability: The characteristics of information related to the provision of appropriate information for management to operate an entity and carry out responsibilities and governance.

In some theories, in general, the quality of service is basically to satisfy the community, where public services, both government and companies are aware of the importance of good service to consumers as a form of responsibility. According to **Harbani Pasolong, (2019)** quality is basically a word that has a relatively abstract meaning, quality can be used to assess or determine the level of adjustment of something to its requirements or specifications.

According to **(Paiman Napitupulu, 2012)** service is a series of activities or processes of fulfilling the needs of others more satisfactorily in the form of service products with a number of characteristics such as intangible, quickly lost, more perceptible than owned, and customers are more able to actively participate in the process of consuming these services.

The quality of service according to **Sedarmayanti, (2013)** is:
Compliance with requirements.
Usage compatibility.
Sustainability improvements or improvements.
Free from damage.
Fulfillment of customer loyalty from the beginning and at all times.
Doing everything right from the start.
Something that can make customers happy.

The above relationship can be seen from the r-calculated values of the Land Services Digital Transformation variable (X1) which is obtained with the greatest average from the r-table or r-calculate > r-table. In addition, the highest r-calculated value was obtained, namely in instrument no. 1 in the *Effectiveness* indicator, in instrument no. 7 in the *Reliability* indicator, next in instrument no. 9 in the Service Quality Improvement indicator and the lowest r-calculation, namely in instrument no. 5 in the *Availability indicator*

The Effect of Accountability on Improving Service Quality

According to **Budi Supriatno (2020:19),** the definition of Accountability is the ability of an organization or individual to be accountable for the actions and decisions taken. Accountability involves transparency, openness, and accountability for the outcomes and impacts of actions taken.

The Relationship of Service Digital Transformation to Increase Accountability at the Agrarian and Spatial Planning Office of the National Land Agency of Batam City:

Increased Transparency: Digital transformation can increase transparency by providing the public with wider access to information about organizational activities and decisions.
Increased Openness: Digital transformation can increase openness by enabling more effective oversight and evaluation of organizational activities and decisions.
Increased Responsibility: Digital transformation can increase accountability by enabling organizations to monitor and evaluate the results and impact of actions taken.

Furthermore, according to **Mahmudi (2019),** public accountability has several indicators, namely:

1. Legal Accountability and Honesty
   a. Compliance with the law
   b. Distribution of corruption and collusion
2. Process accountability
   a. Compliance with procedures
   b. The existence of responsive public services
   c. The existence of careful public services
   d. The existence of public services at low costs
3. Program accountability
   a. Alternative programs that provide optimal results
   b. Hold policies accountable
4. Policy accountability
   a. Hold accountable policies that have been taken
   b. Consider future impacts

In some theories, in general, the quality of service is basically to satisfy the community, where public services, both the government and companies are aware of the importance of good service to consumers as a form of responsibility. According to **Harbani Pasolong, (2019)** quality is basically a word that has a relatively abstract meaning, quality can be used to assess or determine the level of adjustment of something to its requirements or specifications.

According to **(Paiman Napitupulu, 2012)** service is a series of activities or processes of fulfilling the needs of others more satisfactorily in the form of service products with a number of characteristics such as intangible, quickly lost, more perceptible than owned, and customers are more able to actively participate in the process of consuming these services.

The quality of service according to **Sedarmayanti, 2013)** is:

1. Compliance with requirements.
2. Usage compatibility.
3. Sustainability improvements or improvements.
4. Free from damage.
5. Fulfillment of customer loyalty from the beginning and at all times.
6. Doing everything right from the start.
7. Something that can make customers happy.

The above relationship can be seen in the r-calculated values of the Accountability variable (X2) which are obtained with the greatest average of the r-table or r-calculate > r-table. In addition, the highest r-count value was obtained, namely in instrument no. 7 in the Process Accountability indicator, in instrument no. 1 in the indicator Understanding and accepting responsibility, and then in instrument no. 10 in the indicator Considering future impacts, and the lowest r-calculation, namely in instrument no. 5 in the indicator Not to use its position of authority to affect the normal functioning of the administration.

The Relationship of Organizational Culture to Improving Service Quality

Furthermore, according to **Emron, Yohny & Komariah (2018)** stated that organizational culture is to perform a number of functions in an organization, namely:

1. Providing nuances that distinguish from other organizations and their own impression so as to give a positive image for the organization/company in the eyes of the public/customers.
2. It has symbols and values that are the pride of the members in it.
3. Guiding the behaviors of its members towards constructive thinking, contributing positively, and working effectively in achieving the goals of the organization/company.
4. Building solid teamwork and a high sense of togetherness among members.

Meanwhile, according to **Budi Supriyatno (2023),** the definition of culture is a system of values, norms, and behaviors owned by a group or society. Culture influences the way we think, behave, and interact with others.

An organization is a system consisting of individuals who work together to achieve a common goal. Organizations can be companies, government agencies, or non-profit organizations.

Definition of Organizational Culture is a system of values, norms, and behaviors owned by an organization. Organizational culture influences the way members think, behave, and interact between members of the organization.

Furthermore, **Edy Sutrisno (2018**) stated that some of the benefits of organizational culture are as follows:

1. Limiting roles that differentiate between one organization and another. Each organization has a different role so it needs to have strong cultural roots in the system and activities in the organization.
2. Creating a sense of identity for the members of the organization. With a strong organizational culture, the members of the organization will feel that they have an identity that is a hallmark of the organization.
3. Attaching importance to common goals rather than prioritizing individual interests.
4. Maintain organizational stability. The unity of organizational components glued together by the same cultural understanding will make the organizational condition relatively stable.

In some theories, in general, the quality of service is basically to satisfy the community, where public services, both the government and companies are aware of the importance of good service to consumers as a form of responsibility. According to **Harbani Pasolong, (2019)** quality is basically a word that has a relatively abstract meaning, quality can be used to assess or determine the level of adjustment of something to its requirements or specifications.

According to **(Paiman Napitupulu, 2012)** service is a series of activities or processes of fulfilling the needs of others more satisfactorily in the form of service products with a number of characteristics such as intangible, quickly lost, more perceptible than owned, and customers are more able to actively participate in the process of consuming these services.

The quality of service according to **Sedarmayanti, 2013)** is:

1. Compliance with requirements.
2. Usage compatibility.
3. Sustainability improvements or improvements.
4. Free from damage.
5. Fulfillment of customer loyalty from the beginning and at all times.
6. Doing everything right from the start.
7. Something that can make customers happy.

The above relationship can be seen by obtaining the highest r-count value, namely in instrument no. 4 in the indicator Building solid teamwork and a sense of togetherness, in instrument no. 1 in the indicator Providing nuances of values and norms, and then in instrument no. 9 in the indicator Maintaining organizational stability, and the lowest r-count, namely in instrument no. 3 in the indicator of formal and informal guidance.

The Relationship of Community Participation to Improving Service Quality

According to **Budi Supriatno (2023:32),** community participation is the process of active community involvement in activities or decision-making processes that affect their lives. Community participation can be in the form of participation in the process of planning, implementing, or evaluating activities.

Thus, community participation can improve the quality of decisions and activities taken by ensuring that the needs and aspirations of the community are represented and met.

As for the definition of society, **Mohammad Mulyadi (2019)** argues that "society is a large or small group consisting of several human beings, who by or because of themselves are related as a group and affect each other". It is quite possible to consider that society is a collection of various meetings that influence each other.

There are several important aspects in order to mobilize community participation in development, as said by **Hajar S Tanjung (2018).** There are four important aspects in the context of participation, namely:

1. Involvement and participation in accordance with the mechanism of the political process according to the State also determines the direction, strategy and policy of development should reflect the interests of the community.
2. Improve the articulation (ability) to formulate goals and especially the best ways to plan those goals.
3. Community participation in real activities that are consistent with the direction of the strategy and plan that has been determined in the political process planned.
4. There is a formulation and participation programs in planned development.

In some theories, in general, the quality of service is basically to satisfy the community, where public services, both the government and companies are aware of the importance of good service to consumers as a form of responsibility. According to **Harbani Pasolong, (2019)** quality is basically a word that has a relatively abstract meaning, quality can be used to assess or determine the level of adjustment of something to its requirements or specifications.

According to **Paiman Napitupulu, (2012)** service is a series of activities or processes to meet the needs of others more satisfactorily in the form of service products with a number of characteristics such as intangible, quickly lost, more perceptible than owned, and customers are more able to actively participate in the process of consuming these services.

The above relationship can be seen from the r-calculated values of the Community Participation variable (X4) which are obtained the most average from the r-table or r-calculate > r-table. In addition, the highest r-count value was obtained, namely in instrument no. 4 in the indicator of Participation of a person or community group, in instrument no. 7 in the indicator Reflecting the interests of the community, and then in instrument no. 1 in the indicator of mental and emotional involvement of a person in a group situation, and government services and r-count, namely in instrument no. 3 in the indicator Supporting the achievement of goals.

CONCLUSION

There is a positive and significant effect of the Digital Transformation of Services on Improving Service Quality at the Agrarian and Spatial Planning Office of the National Land Agency of Batam City positively and significantly by 50.4%. The magnitude of the influence of Attitude on the Professional Integrity of ASN is determined by the dimensions of Technology and processes and Data and analysis. There is a positive and significant effect of Accountability on Improving Service Quality at the Agrarian and Spatial Planning Office of the National Land Agency of Batam City positively and significantly by 69.6%. The magnitude of the influence of Subjective Norms on the Professional Integrity of ASN is determined by the dimensions of Control Instruments and Characteristics and Indicators. There is a positive and significant

influence of organizational culture on improving service quality at the Agrarian and Spatial Planning Office of the National Land Agency of Batam City by 71.2%. The magnitude of the influence of Perception of Behavior Control on the Professional Integrity of ASN is determined by the dimensions of Values and Norms, Communication and leadership, and Collaboration and Benefits. There was a positive and significant effect of Community Participation on the Improvement of Service Quality at the Agrarian and Spatial Planning Office of the National Land Agency of Batam City positively and significantly by 51.2%. The magnitude of the influence of Anti-Corruption Behavior on the Professional Integrity of ASN is determined by the dimensions of Participation and Main Aspects. There is a positive and tangible influence of the Digital Transformation of Land Services, Accountability, Organizational Culture and Community Participation on the Improvement of Service Quality at the Agrarian and Spatial Planning Office of the National Land Agency of Batam City positively and tangibly by 85.6%.

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