Dynamic Systems Model of Organizational Performance in Improving Public Service Quality of BPS In Bandung Raya Region

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Abstract

Initial analysis shows that the performance of BPS in Bandung Raya has not provided maximum results. This has an impact on the non-optimal quality of BPS public services in Bandung Raya. By using descriptive analysis, SEM, and system dynamics, this research seeks to determine the implementation of BPS performance in Bandung Raya, analyze the factors that hinder the quality of public services, and analyze what performance models are effective in improving the quality of BPS public services in Bandung Raya. The results showed that there are still several things that need to be improved related to the strategy, process, and capability of BPS in Bandung Raya. From these three aspects, it was found that the process and organizational capability had a positive and significant effect on the quality of BPS services in Bandung Raya, while the business strategy did not have a significant effect. Several factors that hinder the performance and effectiveness of BPS services in Bandung Raya were also found. These factors are related to transformational leadership, training for human resources, technology and information, and data integrity. Therefore, this research provides 5 scenarios obtained based on the results of system dynamics simulation to be used as policy proposals. Of the 5 scenarios, it is found that scenario V, namely data integrity, is the best scenario because it is able to improve organizational performance up to 76.01% and service quality up to 70.82%. By applying the novelty of this research, it is expected to improve the quality of BPS public services in Bandung Raya.

Keywords: *Organizational Performance, Performance Prism, Public Service Quality, System Dynamics, BPS Bandung Raya.*

Introduction

The Central Bureau of Statistics/*Badan Pusat Statistik* (BPS) is a non-ministerial government agency directly responsible to the President. The main function of BPS is to provide statistical services for the public. Performance appraisal needs to be done to assess the success of a public organization's performance in providing services to the community, because basically the orientation of public organizations is not to seek profit, but rather to prioritize public services (service public oriented). The general phenomenon that has occurred over the past five years at BPS from 2017 to 2021 has fluctuated. However, almost all of them are above 100 percent except in 2017. The achievement of indicator performance decreased in 2019 and increased again to 107.30 percent in 2020, but again decreased in 2021 to 100.88 percent. This shows that BPS performance is still not optimal.
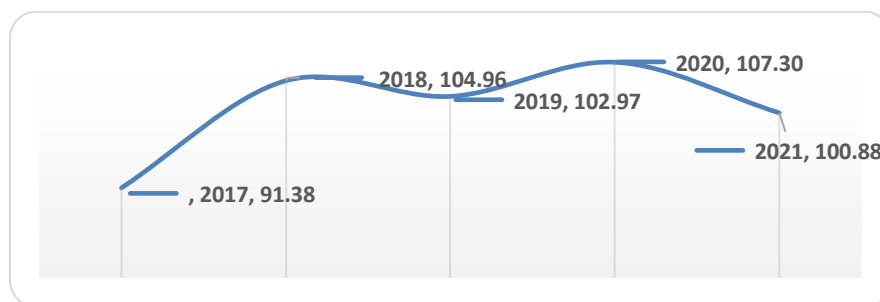

Figure 1. Average Performance Achievement of BPS Target Indicators in 2017-2021

The above phenomenon also occurs at BPS in Bandung Raya. BPS in Bandung Raya is a combination of BPS Bandung City, BPS Cimahi City, BPS Bandung Regency, and BPS West Bandung Regency which are located in an area around 20 km from the center of Bandung City. The reason for choosing the Bandung

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Raya area is because it has the third largest population after Jabotabek and Gerbang Kertosusila. This can be an approach that can be applied in other BPS regions.

Performance measurement issues can be approached with the value of the Government Agency Performance Accountability System/*Sistem Akuntabilitas Kinerja Instansi* Pemerintah (SAKIP) shown in the following figure.
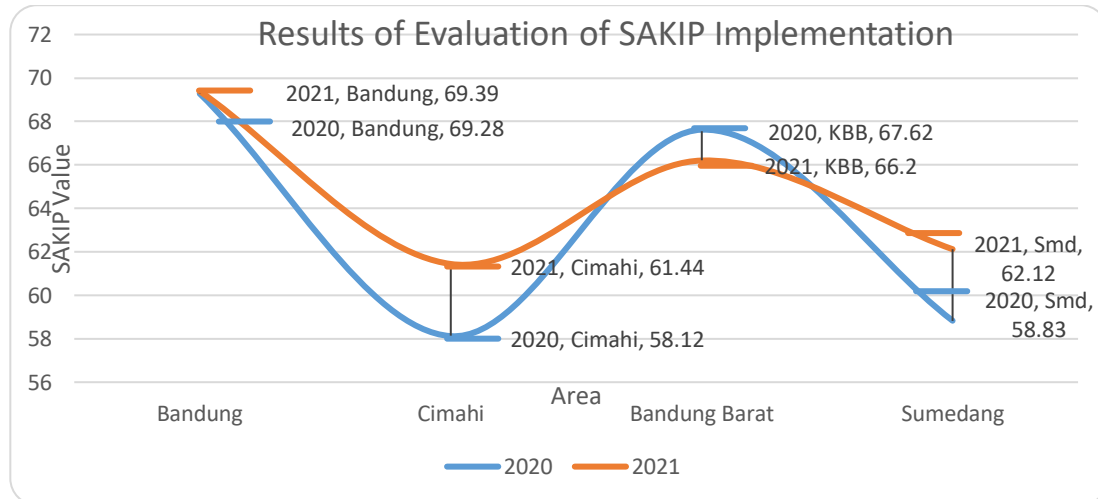

Figure 2. Results of Evaluation of SAKIP Implementation

From the data above, there is a problem that shows that BPS in Bandung Raya which includes BPS Bandung City, BPS Cimahi City, BPS West Bandung Regency, and BPS Bandung Regency has not obtained maximum assessment results. The assessment results above show that the City/Regency of Bandung Raya obtained an assessment in the CC and B categories. For the Cimahi and Sumedang City areas, they received CC scores in the 2020 assessment period. This shows that the performance of government agencies needs to be improved so that they can provide maximum public services to the community.

Other problems obtained based on the results of observations and initial interviews with the Head of the General Section of BPS West Java Province, Mr. Drs. H. Agus Praptono, M.Stat., found that there are still problems in performance that illustrate the role and function of BPS as a provider of basic statistical data for national development. The problems raised by the Head of the General Section are almost the same as the problems that have become public complaints on social media, as previously explained.

To strengthen the research problem, preliminary research was conducted at BPS in Bandung Raya by distributing questionnaires to 30 emplyees BPS in Bandung Raya. The following table is the result of the pre-survey to determine the performance phenomenon of BPS in Bandung Raya which indicates that there are still several rules that must be maximized in public services.

Table 1. Organizational Performance Pre-Survey Results

Statement	Strongly Agree	Agree	Slightly Disagree	Disagree	Strongly Disagree
The organization is able to meet the needs and desires of the people it serves	30%	35%	20%	10%	5%
The organization can be used as a process of providing services to the community in accordance with predetermined rules	20%	25%	25%	25%	5%
Organizations can be accountable for public resources in various ways, including fiscal, managerial, and programmatic matters	40%	40%	15%	5%	0%

Organizations can produce a product when compared to the resources used	40%	35%	15%	8%	2%
Organizations can improve the quality of society	60%	30%	5%	3%	2%
Leaders are able to provide rapid change and utilization of human resources	35%	35%	15%	10%	5%

Currently, BPS as a government organization has a general performance measurement. Therefore, the Performance Prism method is one of the options used in this research because this method not only looks at strategy, but also processes and capabilities (Neely et al., 2001). The theory developed by Neely is in the form of the Performance Prism model to measure performance that considers aspects that are measured not only based on consumers, such as organizational performance measurement models in general, but also from the stakeholder side. The Performance Prism model has 3 perspectives, namely Strategy, Process, and Capabilities. The objective to be achieved in this research is to design and conduct a performance measurement system using the Performance Prism model with a case study at BPS in Bandung Raya and provide suggestions for improvements to improve organizational performance. The theory used in this study to measure the quality of public services is Zeithaml's theory. Zeithaml et al. (1988) stated that there are five dimensions in measuring the quality of public services, namely tangible, responsiveness, reliability, empathy and assurance.

Many studies have examined the effect of organizational performance on the quality of public services. For example, research by Listiani (2011), Chin et al. (2013), and Tanjung (2020). There are also many studies that utilize the Performance Prism method to measure performance, such as research by Badariah (2012), Monteiro (2020), Akmal (2021), Helia et al. (2021), and Kusuma & Sulindawati (2023). However, research examining the effect of organizational performance on the quality of public services using Performance Prism to identify the level of performance is still limited, especially in the government agency sector.

Based on the description and explanation above, this study tries to analyze the system dynamics model of organizational performance in improving the quality of public services at BPS in Bandung Raya. The use of system dynamics model is used to obtain several simulation scenarios of organizational performance improvement to improve the quality of public services of BPS in Bandung Raya.

Interventions to the research model were carried out through Powersim simulation by formulating causal-loop diagrams, including through transformational leadership, training, utilization of technology and information, and data integrity. Some of these indicators are expected to be able to provide improvements to the quality of BPS services in Bandung Raya so that the organizational performance obtained is in accordance with community expectations. The best improvement scenario for organizational performance through this dynamic system is carried out by considering several important aspects such as cost, time, efficiency and effectiveness of improvement.

The expected final result is to obtain the best scenario of organizational performance at the Central Bureau of Statistics in accordance with the applicable limits and parameters. With the limitations of the intervention are transformational leadership, training, information technology, and data integrity. Based on this, in this dissertation research, the researcher intends to conduct research with the title: **"Dynamic Systems Model of Organizational Performance in Improving Public Service Quality of BPS In Bandung Raya Region".**

Literature Review

Public Administration is one part of administrative science. Administration can be defined as efforts and activities related to the implementation of policies to achieve goals. Public administration is closely related to state activities, power and politics. As stated by Nigro & Nigro (2007) that "Public administration is what the government does", which means that public administration is everything that is done by the government (executive, legislative and judicial institutions) in bureaucratic means to solve societal or public problems

(Nigro, 2007). Public administration is therefore an intermediary between the state and society, with the primary objective of ensuring that public needs and problems are addressed in an effective and efficient manner. The function of public administration is to achieve program objectives that have been determined by a country's public policy makers so that public administration not only formulates policies, but at the level of implementing policies.

Policy is basically a decision intended to overcome certain problems, carry out certain activities, or achieve certain goals carried out by authorized government agencies in the context of carrying out the duties of state government and nation building.

According to Ridwan (2019), a policy is a series of actions or activities proposed by a person, group, or government in a certain environment where there are obstacles and possibilities where the policy is proposed to be useful in overcoming them to achieve the intended goals. In line with this, (Sedarmayanti and Yaya Mulyana, 2020) argue that all the dynamics that occur in the process of implementing various policies carried out by the government and its officials are a series of policies that have been agreed upon and decided to be implemented into a written rule so that anyone who violates it will be sanctioned. Purwanto and Afandi (2021) also argue that public policy is a legal and legitimate choice of action because public policy is made by institutions that have legitimacy in government.

Organizational Performance

Organizational performance is an indicator of the level of achievement that can be achieved and reflects the success of an organization, and is the result achieved from the behavior of organizational members. Organizational performance is defined as the organization's ability to achieve its goals through the use of resources efficiently and effectively and describes how far an organization achieves its results after being compared with previous performance and the performance of other benchmarking organizations, as well as how far it reaches the goals and targets that have been set (Nugrahayu and Retnani, 2015).

Performance Prism is a model used for performance measurement that describes organizational performance as a 3-dimensional wake (prism) which has 5 side fields, namely the side of stakeholder satisfaction, strategy, process, capability, and stakeholder contribution (Neely et al, 2001). The performance measurement used comes from the vision and strategy of the organizational body which is described in five Performance Prism perspectives so as to form a Performance Prism framework.

Figure 3. Performance Prism

Stakeholder Satisfaction

Who are the organization's stakeholders and what are their wants and needs? Stakeholders considered here include consumers, workforce, suppliers, owners/investors, as well as government and the surrounding community.

Strategies

What strategies are needed to satisfy the wants and needs of the stakeholders? Strategy in this case is very necessary to measure the performance of the organization because it can be used as a monitor (reference) to what extent the organization's goals have been achieved. According to Al Humeisat (2022), there are several important indicators in formulating business strategies, such as Environmental Scanning, Strategy Formulation, Strategy Implementation and Strategy Evaluation.

Processes

What processes are needed to achieve the strategy that has been set? The process here is likened to an engine for success, which is how the organization is able to obtain high revenue with the lowest possible expenditure, for example by optimizing the procurement system. According to Skrinjar & Trkman (2013), some important indicators in business processes include a strategic view, process definition and documentation, organizational process structure, organizational culture processes, human management and community orientation.

Capabilities

What capabilities are needed to run the process? Capability here means the ability possessed by the organization including the expertise of its resources, business practices, utilization of technology, and supporting facilities. Some indicators used in capabilities include managing the complexity of change, visible vision and values, competent individuals, involving people in change, management development and ensuring change (Stewart, 2014).

Stakeholder Contribution

What contributions do companies need and want from stakeholders to develop their capabilities? To determine what should be measured, which is the ultimate goal of performance measurement with this Performance Prism model, the organization must consider what it wants and needs from its stakeholders.

Public Service Quality

The quality of public services is a standard that must be achieved by service providers in providing services in accordance with the needs and desires of the community so that the community is satisfied and their rights are fulfilled. Ibrahim (2008) defines public service quality as a dynamic condition related to products, services, people, processes, and the environment where quality assessment is determined when the provision of public services occurs.

To measure how good the quality of public services is, indicators are needed that can show the quality of a public service. Zeithaml (1988) explains that the measure of public service quality has five dimensions, namely as follows:

- Tangible

- Reliability

- Responsiviness

- Assurance

- Empathy

Theoretical Framework

Organizational performance measurement is needed as monitoring and reporting of ongoing programs that must be completed to achieve predetermined goals (Sulisworo, 2009). One of the organizational performance measurement models used in this study is Neely's theory, namely Performance Prism. Performance Prism is a model used for performance measurement that describes organizational performance as a 3-dimensional building (prism) that has 5 side fields, namely the side of stakeholder satisfaction, strategy, process, capability, and stakeholder contribution (Neely et al, 2001). However, in this study, only three performance perspectives are used as variables, namely strategy, process, and capability.

On the basis of the description of the variables that have been explained previously, it can be described in the framework of the paradigm of thought as follows.
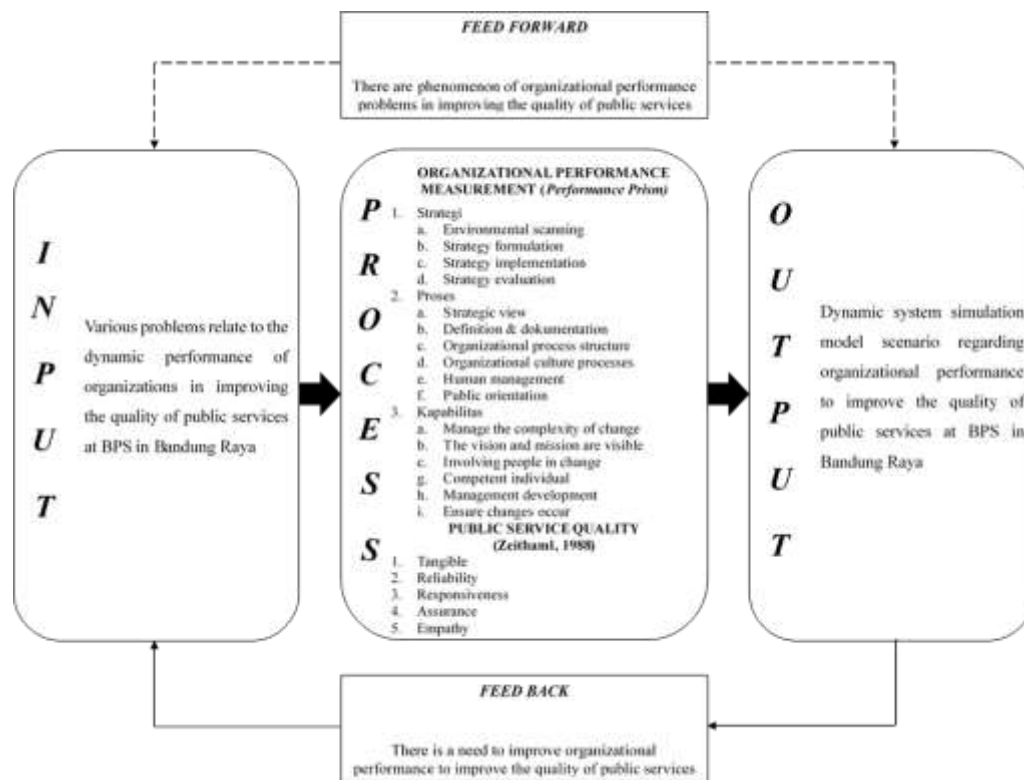

Figure 4. Thinking Framework Paradigm

Hypothesis

Based on the background, literature review and framework that has been built above, the following is the hypothesis of this study.

- The implementation of organizational performance measurement carried out by BPS in Bandung Raya has not been effective.

- There are factors that affect the quality of public services at BPS in Bandung Raya.

- There are factors that hinder the ineffective quality of public services at BPS in Bandung Raya as seen from strategies, processes, and capabilities.

- There is an effective performance measurement model scenario that is intervened by Transformational Leadership, training, information technology, and data integrity of BPS in Bandung Raya.

Methods

Object and Data Collection

The research object is BPS in Bandung Raya, which consists of BPS West Java Province, BPS Bandung City, BPS Bandung Regency, BPS West Bandung Regency, and BPS Cimahi City. For quantitative data, data collection was carried out through distributing questionnaires to civil servants of BPS in Bandung Raya. The qualitative data collection was conducted through structured interviews with all civil servants of BPS in Bandung Raya and indepth interviews with 8 informants, namely the Head of BPS of West Java Province, Head of BPS Bandung City, Head of BPS Bandung Regency, Head of BPS Cimahi City, Head of BPS West Bandung Regency, Head of Regional Development Planning Agency/Badan Perencanaan Pembangunan Daerah (Bappeda) of West Java Provincial Government, and Head of Communication and Information Agency/Dinas Komunikasi dan Informatika (Diskominfo) of West Java Provincial Government.

Data Analysis

This research is descriptive and verification. Descriptive research aims to obtain a description of the characteristics, nature and characteristics of the variables studied. While verification aims to determine the relationship between variables through hypothesis testing. This research uses a quantitative and qualitative mixed method approach. Mixed method research is a research method that combines or combines quantitative and qualitative research methods to be used together in a research activity so that more comprehensive, valid, reliable and objective data are obtained (Almeida, 2018). To answer the hypotheses in Chapter II, descriptive analysis of questionnaires and interviews is used for hypotheses 1 and 3, Structural Equational Modeling (SEM) with LISREL software to answer hypothesis 2, and system dynamics with Powersim software to answer hypothesis 4.

Result and Discussion

Implementation of Organizational Performance Implemented by BPS in Bandung Raya

Performance measurement of civil servants at BPS Se-Jawa Barat uses the Government Agency Performance Accountability/*Sistem Akuntabilitas Kinerja Instansi Pemerintah* (SAKIP) System and the head performance agreement is part of the performance management system that refers to government regulations.

Government Agency Performance Accountability/Sistem Akuntabilitas Kinerja Instansi Pemerintah (SAKIP)

SAKIP is a performance management approach in the public sector designed to ensure that every activity carried out by government agencies supports the achievement of the organization's strategic goals and objectives. SAKIP is a system designed to integrate government planning, budgeting, implementation, and performance reporting. Performance measurement with SAKIP involves several important steps.

- Performance planning, consisting of strategic plans, annual performance plans, and key performance indicators.

- Performance agreements, consisting of the preparation of performance agreements, commitments, and performance agreement structures.

- Activity implementation

- Performance collection, consisting of data collection and performance analysis.

- Work reporting, in the form of a Government Agency Performance Report.

- Periodic performance evaluation (quarterly and annually)

Head Performance Agreement

The Head's performance agreement is a document that contains specific targets to be achieved by the Head of BPS and its subordinate units during a certain period (usually annually). This document is part of the performance management system and becomes a benchmark in performance evaluation. Currently, performance measurement in BPS is in accordance with the theory of Neely, et al. (2001). The following is the content of BPS Performance Agreement 2024.

Table 2. Content of BPS Performance Agreement 2024

Goal/Objective	Performance Indicators	Unit	Target
Objective 1. Provide statistical data to be utilized as a basis for development			
1.1 Increased utilization of quality statistical data	Percentage of data users who use BPS data as the basis for planning, monitoring, and evaluating national development (%)	Percent	100
	Percentage of statistical publications that apply accuracy standards that are utilized as the basis for planning, monitoring, and evaluating national development (%)	Percent	100
Objective 2. Increased collaboration, integration, and standardization in SSN implementation			
2.1 Strengthening the commitment of K/L/D/I to SSN	Percentage of ministries/institutions that receive recommendations on statistical activities (%)	Percent	40
	Percentage of ministries/institutions/ institutions that submit sectoral statistical metadata according to standards (%)	Percent	60
Objective 3. Improved service excellence in the implementation of SSN			
3.1 Strengthening K/L/D/I sectoral statistics	Percentage of K/L/D/I that receive statistical guidance (%)	Percent	100
Objective 4. Strengthening institutional governance and bureaucratic reforms			
4.1 Excellent and competitive statistical human resources within the framework of institutional governance	SAKIP Implementation Assessment Results	Point	74,75
	Percentage of data user satisfaction with BPS service facilities and infrastructure (%)	Percent	100

Factors Affecting the Public Service Quality of BPS in Bandung Raya

Path Analysis is part of Structural Equation Modeling (SEM) which is used to analyze the relationship between variables. This technique is useful for testing hypotheses about direct and indirect effects between variables. The following are the results of path analysis to answer hypothesis 2.
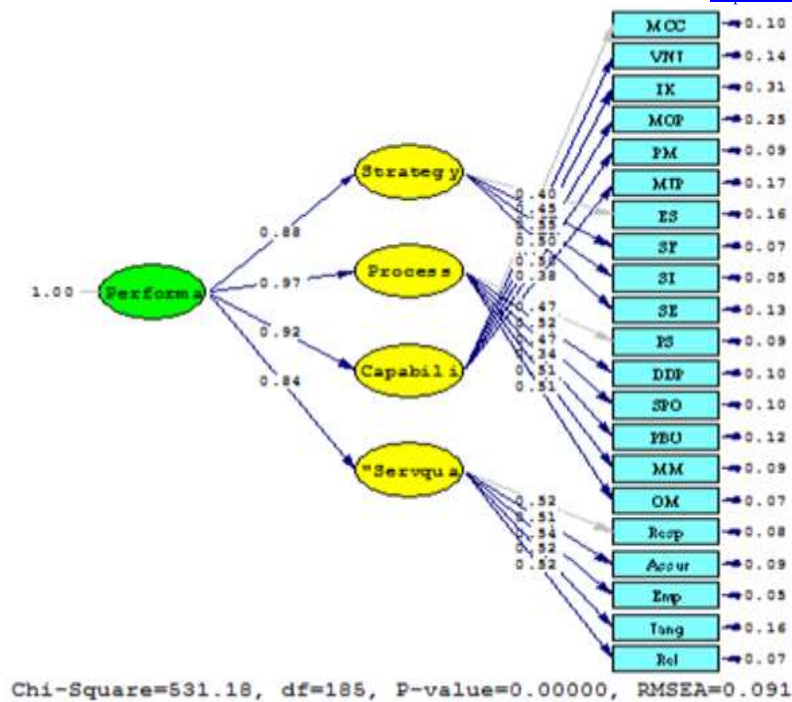
Figure 5. SEM Model

The results of path analysis using LISREL show that business processes and organizational capabilities are factors that have a positive and significant influence on service quality at BPS in Bandung Raya. Based on the organizational capability dimension, it is known that the most influential indicators in this study are Visible Vision and Values with a coefficient value of 0.49 and Management Development with a coefficient value of 0.50. In relation to the visible vision and mission, things that can be improved by BPS organizations include the vision and values of our organization are consistent with readiness for change and the development of employee competence is an important goal in our organization. Furthermore, with regard to management development, things that need to be improved are the involvement of managers in human resource development, team-based organizational structure is an important feature in our organization and efforts made to develop good managers.

Based on the business process dimension, the indicators considered most influential are Process Definition and Documentation with a coefficient value of 0.52, human management, and community orientation with a coefficient value of 0.51 each. Things that need to be improved with regard to process definition and documentation are the definition of business processes, business process documentation, responsibilities and methodologies used in business processes. Furthermore, related to human management is the development and training provided to civil servant and increasing civil servant's creativity in solving problems. For community orientation indicators related to research on community needs, suggestions and input from the community which are used as material for evaluating business processes.

On the other hand, business strategy does not have a significant effect. Service quality that is still not good in certain aspects is caused by business processes and organizational capabilities that are not yet optimal. So that through this research it is hoped that it can provide suggestions for improvements to improve organizational performance which has an impact on improving the service quality of BPS in Bandung Raya.

Factors Inhibiting the Ineffective Public Services Quality of BPS in Bandung Raya

Factors inhibiting the ineffective public services quality of BPS in Bandung Raya are things that cause organizational performance to be not optimal and affect BPS' ability to provide quality public services.

Based on the results of interviews that have been conducted, the following are some examples of factors that can hinder the performance of BPS in Bandung Raya.

Transformational Leadership

Transformational leadership is a leadership style that is able to inspire and motivate employees to achieve higher organizational goals. However, if this leadership style has not been implemented optimally in BPS Bandung Raya, several performance barriers can occur, such as:

- Lack of meetings between BPS and regional apparatus

- Lack of vision and motivation

- Low support for innovation

- Ineffective communication

Training of Human Resources (HR)

Competent human resources are the key to providing quality public services. However, several factors can hinder the improvement of the quality of public services at BPS in Bandung Raya related to aspects of HR training and development:

- Lack of encgoing training programs, both technical and nontechnical

- The need for training on Integrated Statistical Services/*Pelayanan Statistik Terpadu* (PST)

- Limited training budget

- Lack of awareness of the importance of self-development

Utilization of Technology and Information

Technology and information play an important role in supporting BPS operations and services to the public. However, a number of barriers can reduce the effectiveness of technology utilization in public services:

- Lack of social media management

- Lack of technology infrastructure

- Low level of understanding and skills in technology

- Resistance to technological change

Data Integrity

Valid, accurate, and reliable data is the foundation for BPS in providing quality statistical information. However, data integrity often faces challenges that can impact on service quality:

- Not maximizing the development of sectoral statistics and the "*Desa Cinta Statistik*" program

- Inconsistent data quality

- Vulnerability to data security

Scenario of Effective Performance Measurement Model for BPS in Bandung Raya

In Powersim simulations, the proposal system plays a key role in testing and evaluating decision scenarios that have potential to affect organizational performance. By identifying key variables and designing relevant scenarios, Powersim allows users to integrate changes in their models. Through the simulation process, users can analyze the impact of each scenario on the final outcome, be it in financial, operational, or strategic terms. This provides the opportunity to consider various options without facing immediate risks, aiding in better and more informed decision-making for the organization.

Scenario I: Baseline Simulation

This scenario is also referred to as the baseline scenario that follows the development or conditions that occur in the current actual system without any policy intervention. By showing the baseline scenario, researchers can see the behavioral trends of the variables that will be given inteventions as proposed improvements. The simulation results in scenario I (baseline) show the achievement of service quality of 41.23% - 42.01%. then the achievement obtained for performance is 39.63 - 40.68% .
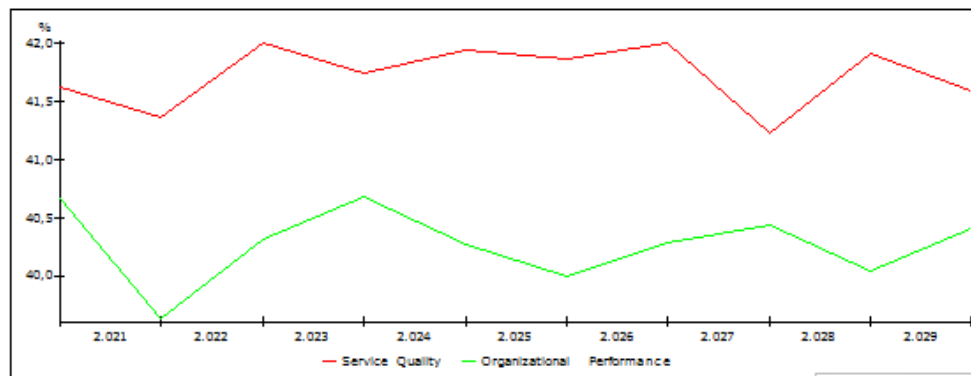

Figure 6. Scenario I (Baseline)

Scenario II: Transformational Leadership

Transformational leadership is an approach that focuses on inspiring and motivating people to achieve shared goals by changing the way they view themselves, their work, and their environment. Transformational leadership not only strive to achieve results, but also influence organizational culture by building a strong and compelling vision, empowering team members to innovate, and facilitating their personal and professional growth. Based on the simulation resulrs, through the role of transformation leadership, a better service quality graph and organizational performance are obtained compared to the baseline scenario. The organizational performance in scenario II show the achievement of service quality of 43.68% - 45.80%, an increase from the previous scenario. Likewise, organizational performance has an increase in achievement to 45.24% - 48.45% so that it can be concluded that the role given by transformational leadership has a positive impact on improving organizational performance and the quality of public service at BPS in Bandung Raya.
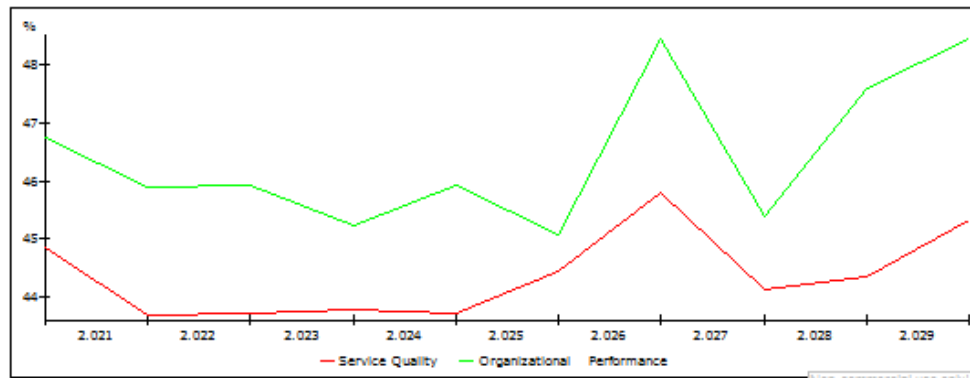
Figure 7. Scenario II (Transformational Leadership)

Scenario III: Increased Training of Human Resources

The scenario in this section focuses on increasing training for human resources aimed at improving the skills of empoyees related to their respective job descs. Through this increased training, it is hoped that employees can have better competence, especially in presenting data that is more representative, accurate and in accordance with existing conditions in the community.
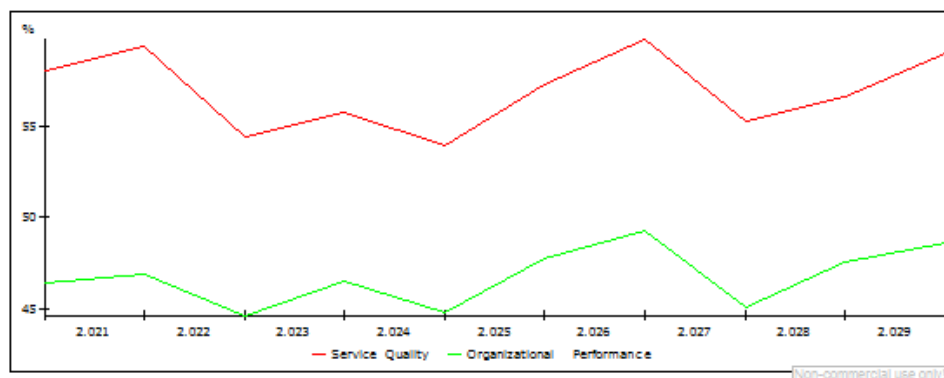

Figure 8. Scenario III (Increased Training of Human Resources)

From the above simulation, it can be seen that the resulting BPS organizational performance is better than the previous scenario. Thus, the role of transformational leadership and increased training can improve organizational performance and service quality of BPS in Bandung Raya. The simulation results in scenario III show the achievement of service quality of 55% - 58.51%, an increase from the previous scenario. Likewise, organizational performance has increased to 45% - 49.34%.

Scenario IV: Utilization of Technology and Information

This variable covers the sophistication of technology used by BPS in collecting, processing, and presenting statistical data. The use of more sophisticated technology can improve the efficiency and accuracy of the work process. The simulation results in scenario IV show the achievement of service quality of 60.43% - 64.12%, an increase from the previous scenario. Likewise, organizational performance has increased to 60.38% - 62.74%.
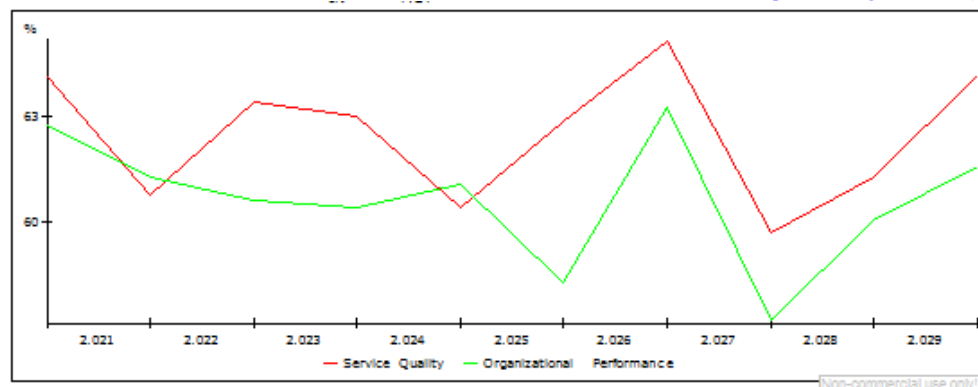
Figure 9. Scenario IV (Utilization of Technology and Information)

Scenario V: Data Integrity

This scenario is used as a proposal for improvement based on complaints from the public regarding information data provided by BPS that is not in accordance with the acutalization in the field. Improvements to data integrity and errors are expected to improve the overall performance of the organization. Overall, data integrity is a fundamental prerequisite in building a strong and effective public information system. It not only impacts on public trust in government and public institutions, but also on the quality of public policies produced and the organization's ability to carry out its tasks efficiently and effectively. This variable includes BPS' success in maintaining the integrity of statistical data from manipulation or misuse. A strong data security system can maintain data integrity from cyber or internal threats. Adding a variable that measures the level of error or inaccuracy in statistical data produced by BPS. Monitoring and reducing this error rate is important to ensure reliability and trust in statistical data.
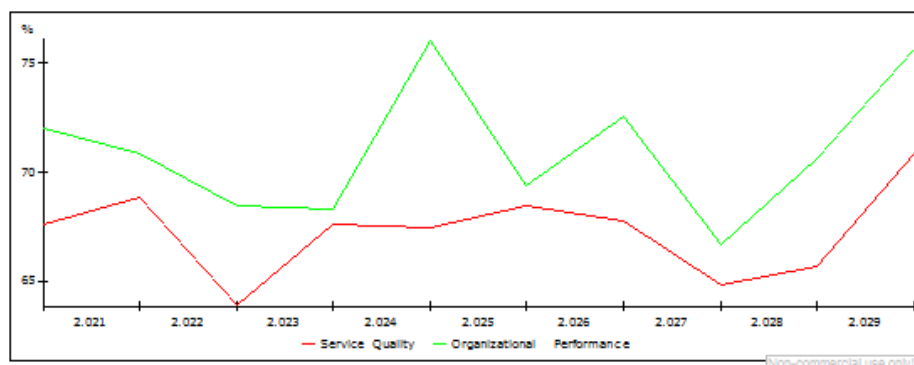

Figure 10. Scenario V (Data Integrity)

The simulation results in scenario V show the achievement of service quality of 63.86% - 70.82%, an increase from the previous scenario. Likewise, organizational performance has increased to 60.38% - 76.01%. So that through this series of policies, an increase in service quality and organizational performance from the baseline simulation is quite significant by 20% - 35%.

Novelty

This research fills a significant gap in the existing literature by applying a dynamic system model to analyze BPS organizational performance at the local level, specifically in the Bandung Raya area. Although previous studies have explored the performance of public organizations using various methodologies, the application of a dynamic system model to BPS organizations in Bandung Raya is relatively new.

After conducting this study, the researcher can conclude that the performance measurement theory proposed by Neely et al (2001) which is used as a theoretical basis to overcome the problems in this study is still relevant in analyzing the measurement of performance models in BPS in Bandung Raya. However, it was also found that there were still dimensions that were not comprehensively discussed in the theory, so the researchers criticized and modified Neely's theory (2001) by adding four dimensions of intervention, namely Transformational leadership, *training*, information technology, and data integrity.

This research also conducted dynamic system modeling using four intervention dimensions, namely transformational leadership, training, information technology, and data integrity. The *novelty* of this research resulted in 5 scenarios of dynamic system simulation models that were used as policy proposals in the future. The performance of the five scenarios in influencing the percentage of organizational performance achievement and the quality of public services at BPS in Bandung Raya is presented in the following figure.
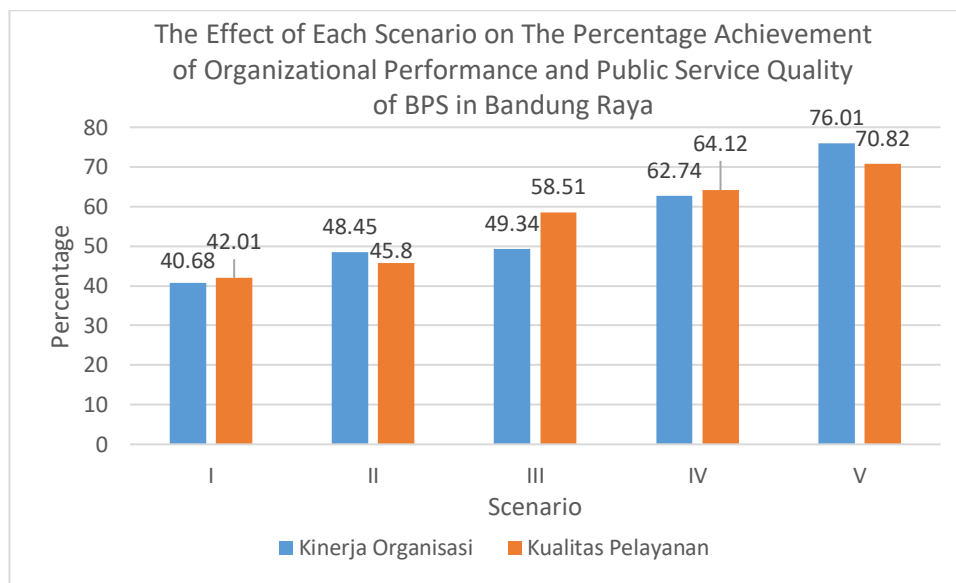

Figure 11. The Effect of Each Scenario

From the figure, it can be seen that scenario V is the best scenario. Through this set of policies, an increase in service quality and organizational performance from the *baseline* simulation is quite significant, amounting to 29% - 35%. Therefore, scenario V can be applied to BPS in Bandung Raya, and even BPS in Indonesia.

Table 3. Novelty

Ahmaddien Theory (2024)			
Dimension	**Performance Indicator**	**Unit**	**Target**
1. Data Integrity	Response rate of establishment/company-based survey	Percent	90
	Basic Needs Survey/*Survei Kebutuhan Dasar* (SKD) Score	Point	90
	Percentage of policy insights produced against the number of Official Statistical Reports/*Berita Resmi Statistik* (BRS) and ARC publications	Percent	100
	Percentage of "*Desa Cinta Statistik*" program development to the total number of villages	Percent	5
	SAKIP Score	Criteria	B
	Percentage of sectoral statistics to the number of regional apparatus organizations	Percent	40

2. Utilization of Technology and Information	Percentage of ARC publication hits to total internet users	Percent	10
	Percentage of BPS Instagram and TikTok followers and engagement to total internet users	Percent	2
3. Increased Training of Human Resources	Number of technical trainings outside BPS, attended in the last 1 year by each employee	Amount	1
	Number of non-technical training outside BPS, attended in 1 year by each employee	Amount	1
	Percentage of employees who received Integrated Statistical Services/*Pelayanan Statistik Terpadu* (PST)/*Service Excellent* training to the total number of employees	Percent	20
	Percentage of employees who received Indesign certification to the total number of employees	Percent	20
4. Transformational Leadership	Innovative programs to improve data dissemination	Amount	4
	Number of new policies produced based on BPS data (can be in the form of laws and regulations/circulars/instructions of regional leaders both executive and legislative/KUA PPAS/proof of meeting minutes)	Amount	2
	Number of awards from external parties	Amount	2
	Number of BPS high level meetings with regional leaders attended by at least governors/deputy governors/regents/deputy regents/mayors/deputy mayors	Amount	3
	Budget Performance Value (BVV)	Percent	95

Discussion

Based on the previous section, it is found that the results of this study support all hypotheses, with details as follows.

H1: The implementation of organizational performance measurement carried out by BPS in Bandung Raya, namely SAKIP and Head Performance Agreement, has not been effective.

H2: Factors that have a significant effect on the quality of BPS public services in Bandung Raya are business processes and organizational capabilities, while the influence of strategy is not very significant.

H3: There are factors that inhibit the ineffective quality of public services at BPS in Bandung Raya based on aspects of transformational leadership, training, information technology utilization, and data integrity.

H4: There are 5 scenarios of effective performance measurement models that are intervened by transformational leadership, training, information technology, and data integrity of BPS in Bandung Raya. It is found that scenario 5 (data integrity) is the most effective scenario.

Research conducted by Ati & Rapina (2022) that business strategy and organizational culture have an influence on the quality of management accounting information systems, while business processes do not optimally affect the quality of management accounting information systems. In line with research conducted by Mohamad (2018) that there is an effective relationship between organizational capabilities in terms of organizational learning capabilities in improving service quality. Organizations develop and change through restructuring their routines and capabilities, which is a service development process, thereby eliminating existing capabilities and restructuring to enable and develop new services. Therefore, businesses

need to gradually evolve through selection processes and decisions that may lead to the abandonment of current organizational structures for new ones. Organizational capabilities are high-level organizational processes that include the ability to develop repeatable standards of activity, also called routines. These capabilities are developed through complex interactions between material and non-material resources that require a long period of time.

Conclusions

Based on the results of the research and the previous discussion, it can be concluded as follows:

- The implementation of BPS performance model in Bandung Raya that is currently used, namely SAKIP and the Head Performance Agreement, is still not fully effective in terms of business strategy, business processes, and organizational capabilities.

- Factors that have a significant effect on the quality of BPS public services in Bandung Raya are business processes and organizational capabilities, while business strategy is not very significant. Therefore, to improve service quality, there needs to be a comprehensive improvement in both business processes and organizational capabilities.

- Several factors hinder the performance and effectiveness of service quality in BPS in Bandung Raya, including transformational leadership, training, information technology utilization, and data integrity.

- The effective performance model that can be applied by BPS in Bandung Raya through the results of this research is as described in scenario V of the proposed model. The effective performance model that can be applied by BPS in Bandung Raya through the results of this research is as described in scenario V of the proposed model. In addition, organizational performance is also expected to increase, with achievements in the range of 70-75%.

Theoretical Implications

- As a contribution to the development of public administration management science as a *grand theory*, especially those related to organizational performance and service quality that need to be compared with practical reality.

- The results of this study can encourage other studies related to the role model of organizational performance to realize quality public services at BPS in Bandung Raya.

- Providing scientific insights, especially for researchers and generally for readers related to the theory and application of the organizational performance model to realize quality public services at BPS in Bandung Raya.

Practical Implications

Practically, this research is expected to provide information in the form of factors that influence the effectiveness of public service quality so as to enable stakeholders to set the right strategy in increasing public satisfaction through more efficient and effective services.

Future Research Directions

- Future research is expected to develop a comprehensive systems dynamics model that includes all key variables that affect organizational performance and public service quality. These variables could include human resources, technology, work processes and stakeholder interactions. The

model should be able to describe the complex cause-and-effect relationships and temporal dynamics of these variables.

- Future research is recommended to integrate various organizational and management theories, such as contingency theory, open systems theory, and human resource theory, in the development of systems dynamics models. This integration will provide a more holistic and in-depth perspective on the factors that influence organizational performance and service quality.

- It is recommended to conduct further testing and development of the systems dynamics model on a regular basis. The external and internal environment of the organization may change, so the model needs to be adjusted and improved continuously to remain relevant and accurate.

- It is recommended to increase employee training and development in the use of systems dynamics technology and methodology. This training will help employees understand and implement the models developed, as well as improve their skills in data analysis and modeling.

- Continuous monitoring and evaluation of organizational performance and service quality is recommended. Use the evaluation results to make necessary adjustments to the systems dynamics model and organizational strategy. This will help ensure that improvement efforts continue to adapt to the changing environment and user needs.

- Transparency and accountability in performance reporting to the public should be improved. Publish performance results regularly and openly to gain public trust and increase the credibility of BPS.

- Transformational leadership encourages the active involvement of employees in the change process. A practical suggestion is to provide the necessary training and development to build skills in using systems dynamics models. Empowering employees to proactively contribute to improving organizational performance is also important.

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