ANALYSIS OF INFORMATION TECHNOLOGY GOVERNANCE TO IMPROVE THE SEMARANG DISTRICT COMMUNITY AND CIVIL SERVICES USING COBIT 2019 FRAMEWORK

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ABSTRACT

This research aims to analyze Information Technology (IT) governance implemented in the Semarang Regency Community and Civil Service with the aim of improving service performance. The research method used is a case study using the COBIT 2019 Framework. Data was collected through in-depth interviews, observation and documentation studies. The research results show that the adoption of the 2019 COBIT Framework in the IT governance of the Semarang Regency Dukcapil Disdukcapil is not optimal enough. IT governance may result in limited access to public services resulting from population data, such as producing identity documents, birth certificates or death certificates. Some weaknesses in the IT management process were identified that hampered service performance. The implication of this research is the need to increase the understanding and application of COBIT 2019 in the IT governance of the Semarang Regency Community in order to improve the IT management process. IT governance also to improve the quality of services provided to the community.

Keywords: Department of Community and Civil Service, 2019 COBIT Framework, Regional Government Service Performance, Governance, Information Technology.

1. INTRODUCTION

The Semarang Regency Community and Civil Service is a regional government organization in the field of community administration and manages various civil registration processes, especially in Semarang Regency. The Department of Community and Civil Service is a government organization that has implemented Information Technology (IT) by having many website-based hardware and software systems that are used to maximize information in carrying out its operations. Good governance will influence service and play an important role in the service performance process to improve information processing and service to applicants and to improve the performance of government institutions with transparency and accountability in order to move towards good governance. Aspects such as effectiveness and accountability can be improved by using IT in government administration [1].

Evaluation and improvement of IT governance is very important because supports organizations to control of IT whether make effective IT management and ensure the benefits and management of related risks. Evaluation: Good corporate governance can influence the level of trust and provide more secure investment protection in the future. Apart from that, information technology that is not managed well will certainly affect company's performance [2]. An organization's expectations for IT contributions can be seen from the increasingly large IT investments made by most organizations. To achieve these expectations, IT administrators to view IT as a service. As a service, IT user expectations and satisfaction are important

factors. User expectations are a measure of service quality [3]. Evaluation in governance is very necessary because it is to increase optimal services and can also manage risks related to information technology [4]. The Semarang Regency Community and Civil Service has a business process for carrying out government affairs in the field of population administration and civil registration. Initially, the Population and Civil Registration Service was called the Manpower and Migration Office. Then in 2011 the name of the Manpower and Migration Office was officially replaced with the community and civil service. The duties and functions of the Community and Civil Service include: population registration and civil registration services;

- a. management of population administration information;
- b. preparation of population profiles;
- c. formulation of technical policies in the field of population registration and civil registration;
- d. implementation of the administration of the Population and Civil Registration Service; And
- e. implementation of other tasks assigned by the Regent in accordance with his duties and functions.

The Department of Community and Civil has the following Vision and Mission:

a. Vision: Creating orderly population administration with excellent service. United, sovereign, prosperous and independent. DIKARI with a spirit of mutual cooperation based on Pancasila within the framework of the Unitary State of the Republic of Indonesia which has Bhinneka Tunggal Ika.

b. Mission

- 1. Improve population registration administration services completely and accurately.
- 2. Organizing data and information systems that are accurate and on target
- 3. Creating a skilled and professional apparatus Improving good governance, democratic, responsible, supported by competent and professional officials, free from practices of corruption, collusion and nepotism

2. LITERATURE REVIEW

IT governance audits need to be carried out to improve the performance of an agency, improve the management and distribution of information. IT Governance is also an important part of ensuring that Company's information and available technology can support the achievement of business goals. Various methods are used to achieve the company's business goals, one of which is by conducting an audit of information systems and technology to evaluate evidence to determine whether the relevant resources provide the information needed by management in accordance with its fulfillment of the Company's business goals [5]. Audit is a process of accumulating and evaluating evidence carried out systematically, objectively with the aim of determining the level of conformity between statements of economic activities and incidents with established criteria, as well as conveying the results to interested parties [6]. IT audits must be carried out to maintain the security of information systems as organizational assets, to maintain the integrity of information stored and processed and of course to increase the effectiveness of the use of information technology and support efficiency in the organization [7]. IT Governance is applied in companies to manage IT services better and an IT management framework that can help organizations achieve goals and face challenges in digital transformation is COBIT (Control Objective for Information and Related Technology). Based on research that implemented the COBIT 2019 framework, it has been proven to be able to identify problems and produce several IT governance/management designs, so that important processes can be obtained that have a high level of capability [8].

3. RESEARCH METHODS

In this paper there are steps for paper, which can be seen in Figure 1. The first stage is to identify the problems that exist in the community and Civil Registration Service of Semarang Regency. Then conduct an interview with the head of Community Administration Information Management (PIAK). During research, literature studies are carried out by identifying information from various literature sources, with the aim of obtaining examples of valid

data to improve and support research [9]. The next stage is data analysis, at this stage what is done is analyzing the current maturity level, analyzing the expected maturity level, and analyzing the gap that occurs between the current maturity level and the expected maturity level [10]. After the data analysis stage, findings will emerge. From these findings, recommendations or improvements can be made to information technology governance at the Community and Civil Registration Service. The best recommendations would describe the actions that should be taken. [11].

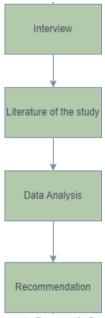


Figure 1. Research Stages

After each step has been carried out, research results will be obtained that describe the entire research. The results of this research can be a future reference for the governance that currently exists. Governance is the rules or methods used to achieve organizational goals that have been set and planned to face problems. This structure consists of various components, in this case involving humans, because it is a functional component in terms of design, decision making, implementation and evaluation [12]. In the digital era, information technology governance has become a crucial element in achieving success for organizations, both in the business and public sectors. To achieve the best results from the use of information technology, organizations need to accept and implement an appropriate framework in their information technology governance. [13]. Good IT governance must be auditable. The audit aims to evaluate IT infrastructure so that it can be used as a basis for correcting errors or irregularities that may occur. In implementation, the evaluation results from audits are used as a tool to assess the maturity of an organization [14]. COBIT 2019 is an update of COBIT5 with the latest technology and new security

requirements. COBIT 2019 can be collaborated with other IT management frameworks such as ITIL, CMMI, and TOGAF, which can provide added value as a framework for unifying processes throughout the organization [15]. COBIT has the added advantage of helping management understand the IT governance system, as well as helping management decide what controls are needed. [16].

COBIT 2019 and COBIT 5 are two versions of the COBIT (Control Objectives for Information and Related Technologies) framework developed by ISACA (Information Systems Audit and Control Association). Here are some differences between COBIT 2019 and COBIT 5

Table 1. Differences	between	COBIT 5	and	COBIT	2019
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Aspect	COBIT 5	COBIT 2019		
Business Value	More emphasis on alignment between business goals and information technology.	Has a stronger approach towards creating business value through the management and control of information technology.		
Process Structure	Uses four domains, namely Evaluate, Direct, and Monitor (EDM); Align, Plan, and Organize (APO); Build, Acquire, and Implement (BAI); and Deliver, Service, and Support (DSS).	Using five domains consisting of Evaluate, Direct, Monitor (EDM); Align, Plan, and Organize (APO); Build, Acquire, and Implement (BAI); Deliver, Service, and Support (DSS); and Monitor, Evaluate, and Assess (MEA)		
COBIT Principles	Presents five basic principles, namely Meeting stakeholder needs, Presenting all company goals, Using an integrated framework, Enables a holistic approach, and Separating management from control.	Integrates the seven COBIT principles that include assigning responsibilities, understanding context, establishing a framework, designing systems to achieve goals, managing change, monitoring and evaluating performance, and ensuring the framework is continually relevant.		
Calculating Timeliness	This is the previous version which has been replaced by COBIT 2019.	Is the latest update of COBIT and reflects the latest developments in the technology and information security environment.		
Principles- Based Approach	Focuses more on providing practical guidance for managing and controlling information technology.	Brings a stronger principles-based approach to help organizations achieve success in dynamic environments.		

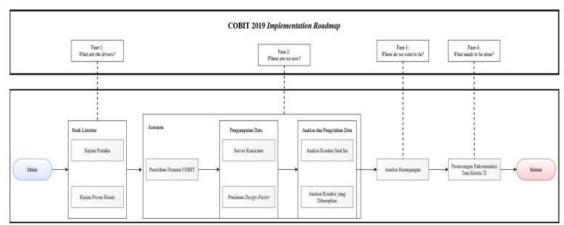


Figure 2. COBIT 2019 Implementation Roadmap

The methodology flow adopts phases 1-4 of the COBIT 2019 Implementation Roadmap as in Figure 2 which is mapped to more detailed stages.

3.1. Phase 1 – What are the drivers

The first step taken in this research is problem identification. Identification is carried out through literature review and business process studies. Literature review is an activity to explore all the information needed to carry out research, including basic theory, methods and governance models. Meanwhile, the business process study is an activity to study company documents including the vision,

mission and organizational structure of the Semarang Regency Community and Civil Service.

3.2. Phase 2 – Where are we now

The second step taken in this research was determining the COBIT domain. Determining the COBIT domain was carried out through measuring 10 design factors using the COBIT 2019 Governance System Design Toolkit and discussions with stakeholders at the Semarang Regency Community and Civil Registry Service. Then, an assessment of the process domain is carried out through a questionnaire which will be distributed to

parties within the scope of the Semarang Regency Community and Civil Service who are related to the implementation of each process. After the data from the questionnaire was collected, the data was processed to facilitate the process of analyzing the current conditions of IT process implementation at the Semarang Regency Community and Civil Registry Service.

3.3. Phase 3 – Where do we want to be

The next step is to analyze the gap between the current IT process implementation conditions and those expected by the Semarang Regency Community and Civil Service. The expected IT process implementation conditions can be obtained from the final results of measuring 10 design factors using the COBIT 2019 toolkit.

3.4. Phase 4 – What needs to be done

The results of the gap analysis are used as a reference in preparing improvement plans. The improvement plan contains recommendations that must be carried out by the Semarang Regency Community and Civil Service to achieve the expected level of IT process implementation at the Semarang Regency Community and Civil Registry Service.

4. RESULTS AND DISCUSSION

After conducting a series of interviews with related parties at the Semarang Regency Community and Civil Service, the following results were obtained

4.1. Understanding Organizational Strategy

The Semarang Regency Community and Civil Registration Service implements a business strategy oriented towards improving public services, as stated in the main mission of the Semarang Regency Community and Civil Service. In this case, the Semarang Regency Community and Civil Registration Service focuses on always developing and innovating to improve the quality of organized and transparent public services.

4.2. Understanding Organizational Goals

The Semarang Regency Community and Civil Service develops public services and good governance with a focus on the implementation of information technology which is currently developing or is often referred to as the digitalization era.

4.3. Understanding the Risk Profile

A government agency or division definitely has risks that will occur. The impact depends on what risks may occur, which can be small in scope but can also spread to a wider scope. One of the risks that can affect the Semarang Regency Community and Civil Service is the risk in utilizing IT resources,

developing and implementing application systems in an organizational and also system failures that can affect IT and ongoing business processes.

4.4. Understanding IT Related Issues

IT problems related to IT risks can be assessed as realized IT risks. IT-related problems that occur at the Semarang Regency Community and Civil Service include staff resources with inadequate skills and also a security system that is still at risk in terms of data breaches.

The identification results based on interviews, observations and supporting documents were implemented into the COBIT 2019 factor design toolkit as follows:

4.5. Design Factor 1

Design factor 1 represents the strategy of an organization or company. Each organization certainly has differences in its basic strategy modeling. Organizational strategy consists of 4 types, namely growth/acquisition, innovation/differention, cost-leadership and client service/stability. The results of identifying design factor 1 at the Semarang Regency Community and Civil Service can be seen in Figure 3 below.

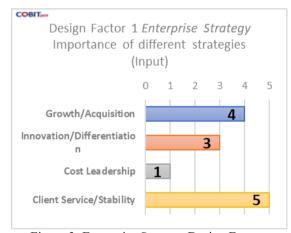


Figure 3. Enterprise Strategy Design Factors

Based on figure 3 above, the focus of interest of the Semarang Regency Community and Civil Service for organizational strategy is on the client services/stability point which is worth 5, this assessment is based on the main objectives and focus of the Semarang Regency Community and Civil Service which are listed in in its vision and mission and realizing good governance. Apart from that, growth is worth because the Semarang Regency Community and Civil Service will continue to develop both in government governance and public services. Innovation is also included in the strategy of the Semarang Regency Community and Civil Service, but in this case it is not the main focus because basically the innovations made depend on public needs. The value of cost leadership has point because basically the Semarang Regency

Community and Civil Service is a government service agency that operates according to central agencies and facilities regardless of the costs incurred.

4.6. Design Factor 2

In design factor 2, an organization's strategy is used to achieve a set of goals. This goal can be described in the COBIT 2019 framework in the Enterprise Goals factor 2 design. The identification results are as follows.

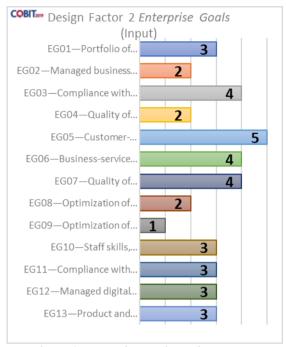


Figure 4. Enterprise Goals Design Factors

Based on Figure 4, it can be seen that the main focus of the Semarang Regency Community and Civil Service is the customer oriented services dimension contained in EG05-EG07 with point 4. Furthermore, the dimension of compliance with the law contained in EG03 also gets point 4 because as an institution government tasks and work under the orders of the central institute.

4.7. Design Factor 3

In design factor 3 is the identification of risks that exist in an organization, the risk profile is the current issue related to IT that is currently being faced and shows the areas that are most at risk. There are 11 risk categories that must be considered, along with the results of risk profile identification at the Semarang Regency Community and Civil Service.

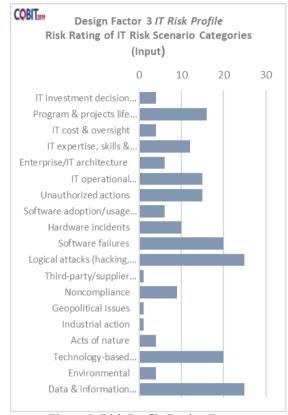


Figure 5. Risk Profile Design Factors

Based on Figure 5, the highest value is 25 which has a big influence if this risk occurs, the Logical attacks and Data & information management categories are assets that should be maintained and managed well by the Semarang Regency Community and Civil Service because if hacking or leaks occur data will have very fatal consequences, community data, especially if it enters the scope of big data, will have fatal government consequences for and society. Furthermore, the technology-based innovation category also needs to be planned carefully, the presence of technology will complicate the Semarang Regency Community and Civil Service in achieving its vision and mission.

4.8. Design Factor 4

Design factor 4 identifies an overview of the problems currently faced by the Semarang Regency Community and Civil Service. In this stage, it is an assessment of the organization's IT by considering IT-related issues or problems currently being experienced. The following are the results of identifying the IT assessment that is currently occurring.

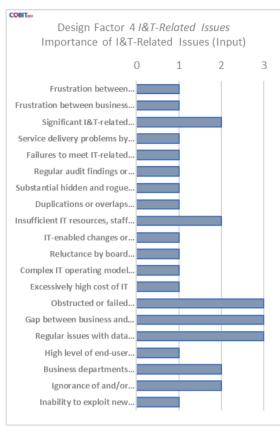


Figure 6. I&T Design Factors Related Issues

Based on Figure 6, the most common issues experienced by the Semarang Regency Community and Civil Service are IT-related issues, including the lack of optimal implementation of previously planned innovations, as well as the lack of ability of staff to be able to maximize technology to create innovations that can simplify and help in government management and public services. In terms of data management, the Semarang Regency Community and Civil Service is also not optimal, especially in terms of managing big data and its security system.

The identification results based on interviews, observations and supporting documents were implemented into the COBIT 2019 factor design toolkit as follows:

4.9. Design Factor 5

Design factor 5 is a threat view that can be useful in identifying threats that could pose a risk in the Semarang Regency Community and Civil Service's operations. The identification results can be seen in Figure 7.

Based on Figure 7, the normal threat percentage at the Semarang Regency Community and Civil Service is 70%. This is based on the results of the identification that has been carried out, namely in carrying out its duties and obligations. The Semarang Regency Community and Civil Registration Service can still control operational threats which include disruption of connections.

internet, electrical problems and problematic devices. Furthermore, this 30% range is a threat from outside which can disrupt operations, in one form, namely system failure and data leaks.

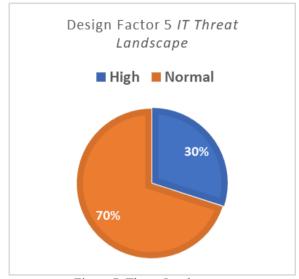


Figure 7. Threat Landscape

4.10. Design Factor 6

Design factor 6 Compliance Requirements are the compliance requirements that underlie an organization in carrying out its obligations and duties. The identification results can be seen in Figure 8 below.



Figure 8. Compliance Requirements

Based on Figure 8, the percentage of normal compliance requirements at the Semarang Regency Community and Civil Registration Service is 60% because in its operations it has met general requirements for the public and government systems based on applicable government regulations. The percentage of high requirements is 40% because in managing data and other supporting resources there needs to be a strict mechanism and legal permits.

4.11. Design Factor 7

Design factor 7 is the role of Information Technology for an organization. The identification results can be seen in Figure 9 below.

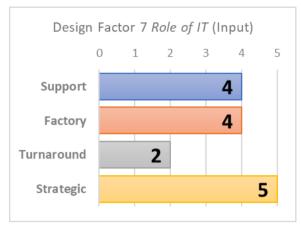


Figure 9. Role of IT

Based on Figure 9, the support and factory sections get an assessment point of 4 because the Semarang Regency Community and Civil Service uses Information Technology in operating and carrying out its obligations and duties as a manager in the government system and also in public services. Furthermore, strategic gets point 5 because the use of IT has a significant influence considering that the Semarang Regency Community and Civil Registration Service is the institution that designs and implements IT in the era of digitalization.

4.12. Design Factor 8

In design factor 8 is the procurement adopted by an organization. The identification results can be seen in Figure 10 below.

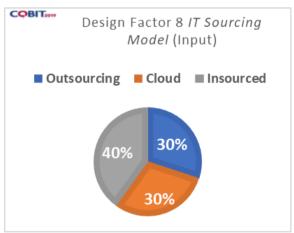


Figure 10. IT Sourcing Model

The outsourcing percentage is worth 30% due to some IT services Semarang Regency Community and Civil Service use third party services to provide IT services, such as Internet services and Application development assistance. Also, the cloud

share is worth 30%. because Semarang Regency Community and Civil Service storing the data is no longer in the form of files but in the form of cloud storage.

4.13. Design Factor 9

Design factor 9 is the method adopted by the organization in implementing IT. The identification results can be seen in Figure 11 below.

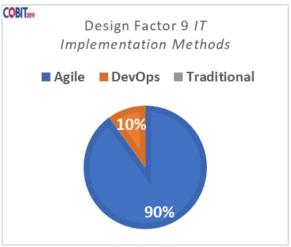


Figure 11. Implementation Methods

Based on the results of the image above, the Semarang Regency Community and Civil Registration Service implementing Agile development in formulating and implementing information technology so that it gets a percentage of 90%. The DevOps part is worth 10% due to the Semarang Regency Community and Civil Registration Service also applies DevOps ways of working to build, deploy and operate software.

4.14. Design Factor 10

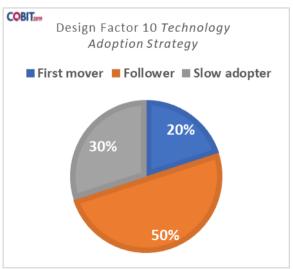


Figure 12. Technology Adaptation Strategy

This design factor is the strategy used by the organization in adopting the new technology used. The results of identifying design factors can be seen from Figure 12.

Based on the identification results, the follower share is worth 50% due to the Semarang Regency Community and Civil Registration Service Most of the innovations in the technology used following technology that has been developed by the Semarang Regency Community and Civil Service other big cities which will later be tried to be implemented in Semarang Regency. Furthermore, the slow adapter section received a score of 30% because of the Semarang Regency Community and Civil Service It takes time to be able to adopt the technology that will be used and whether it will be relevant to the situation in Semarang Regency.

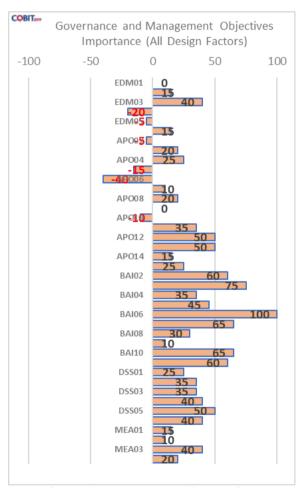


Figure 13. Governance Design Results

COBIT 2019 consists of 5 domains which are the core model and contains 40 processes. The Evaluate Direct and Monitoring (EDM) domain is the part that regulates, evaluates and also monitors the achievement of the strategies used in an organization. Align Plan and Organize (APO) covers the overall management of the organization, strategy and supporting activities for the organization's IT. Build Acquire and Implement

(BAI) handles the definition, acquisition and implementation of IT solutions as well as integration into business processes. Deliver Service and Support (DSS) covers the handling of operational delivery and IT service support. Monitor Evaluate and Assess (MEA) handles operational monitoring, performance targets and also internal control.

The collection of inputs from the previous steps is used to complete the governance system design. The resulting IT governance design is in the form of a core model with target priorities and capability levels. COBIT 2019 describes critical processes based on priority and target capability level. A process with a priority score more or equal to score ≥ 75 will have a target capability level 4. A process that gets a priority score between score ≥ 50 to <75 will have a target capability level 3. A process that gets a priority score or score ≥ 25 to <50 will have a target capability level 2. Processes with a Priority Value or Score < 25, the process must achieve Target Capability Level 1. The results of the IT governance design obtained can be seen in Figure 13.

The results of the governance design were obtained from the identification at design factor stages 1 to design factor 10 which had been carried out previously. A high positive value means the process is the main focus for the Semarang Regency Community and Civil Registration Service. Then for those with negative values, it means that the process is not the main focus for the Semarang Regency Community and Civil Service. Core model or main focus on the Semarang Regency Community and Civil Registration Service with known values ≥50, namely APO12, APO14, BAI02, BAI03, BAI06, BAI07, BAI10, BAI11, DSS05.

5. CONCLUSIONS

This research was conducted to determine design factors that can influence governance and provide a workflow for planning a governance structure that is appropriate and relevant to the Semarang Regency Community and Civil Service. The results of the governance analysis at the Semarang Regency Community and Civil Service produced 9 very important processes with the assessment criteria that have been carried out. Processes with level 3 capability targets include APO12, APO14, BAI02, BAI07, BAI10, BAI11 and also DSS05. Furthermore, the targets at level 4 capability are BAI03 and BAI06 where these two processes are related to determining solutions, designing and implementing them according to needs and managing all changes related to digitalization changes related to business processes and organizational infrastructure. Furthermore, this research on governance planning at the Semarang Regency Community and Civil Service can be implemented further in subsequent research to improve and perfect the level of IT governance

capability at the Semarang Regency Community and Civil Registration Service.

Based on the results of this research, several suggestions that can be given to the Semarang Regency Community and Civil Registry Service in order to improve the implementation of IT governance and service performance are as follows: it is important to continue regular monitoring and evaluation of the implementation of the 2019 COBIT framework. This will help in identifying changes in the IT environment and ensuring that IT governance remains relevant and effective. (2) Conducting Outreach and Training: Efforts are needed to increase personnel understanding and awareness regarding the importance of good IT governance. Through appropriate training and outreach, personnel will be better able to implement COBIT 2019 principles in their daily practices. Integrating IT Performance with Organizational Strategy: Community and Civil Registry Services need to ensure that their IT management strategy is in line with overall organizational goals and strategies. This will help in achieving synergy between IT and operations, which in turn will improve overall performance. Adopt a Risk-Based Approach: In managing IT, it is important to adopt a risk-based approach. By identifying, evaluating, and managing risks related to IT, the Community and Civil Registry Service can reduce potential negative impacts and increase system reliability. Core model or main focus on the Semarang Regency Community and Civil Registration Service with known values ≥50, namely APO12, APO14, BAI02, BAI03, BAI06, BAI07, BAI10, BAI11, DSS05.

REFERENCES

- [1] A. Rocky Tanaamah, A. Fritz Wijaya, S. Ayu Maylinda, U. Kristen Satya Wacana, and P. Korespondensi, "Information Technology Governance in the Public Sector: Aligning Information Technology with Leadership Vision (Case Study: Salatiga City and Bengkayang Regency) Information Technology Governance in the Public Sector: Information Technology Alignment Wi," vol. 8, no. 6, pp. 1319–1330, 2021, doi: 10.25126/jtiik.202185379.
- [2] LN Amali, "Effective IT Governance in Regional Government Organizations," Semin. Nas. Sis. Inf. Indonesia., pp. 37–43, 2013.
- [3] EH Fanida and F. Niswah, "Government Resource Management System (Grms): Public Service Innovation in Regional Financial Management in the Surabaya City Government," Public, J. Adm., vol. 12, no. April, pp. 35–44, 2015.

- [4] M. Huda, "Public Service Management Innovation Through the Government Resources Management System (GRMS) in Central Java Province," JPW (Walisongo Political Journal), vol. 2, no. 2, pp. 67–82, 2020, doi: 10.21580/jpw.v2i2.6658.
- [5] N. Widodo, "Development of e-Government in Regional Government in the Context of Realizing a Smart City (Study in Malang City Regional Government)," J. Ilm. Adm. Public, vol. 2, no. 4, pp. 227–235, 2016, doi: 10.21776/ub.jiap.2016.002.04.15.
- [6] ISACA, "COBIT ® 2019 Governance System Design Workbook — Instructions COBIT ® 2019 Governance System Design Workbook — Instructions," 2020.
- [7] ISACA, COBIT® 2019: Designing an Information and Technology Governance Solution. 2018.
- [8] SY Lee, A. Ramasamy, and JH Rhee, Introduction and Methodology. 2014. doi: 10.1007/978-3-642-55058-4_1.
- [9] M. Gilang Ginanjar, L. Ramadani, and R. Adhitya Nugraha, "Designing Information Technology Governance Using the Cobit 2019 Framework at DISKOMINFOSAN Sukabumi Regency," Smart Comp Journal of Orang Pint. Comput., vol. 10, no. 3, pp. 160–166, 2021, doi: 10.30591/smartcomp.v10i3.2943.
- [10] E. Nachrowi, Yani Nurhadryani, and Heru Sukoco, "Evaluation of Governance and Management of Information Technology Services Using Cobit 2019 and ITIL 4," J. RESTI (Information Systems and Technology Engineering), vol. 4, no. 4, pp. 764–774, 2020, doi: 10.29207/resti.v4i4.2265.
- [11] M. Solehuddin et al., "Information Technology Governance Planning Using the Cobit 2019 Framework in DPMPTSP," J. Ilm. Computing, vol. 20, no. 2, pp. 155–164, 2021, doi: 10.32409/jiktik.20.2.2750.
- [12] S. Fitrasha Bayastura, S. Krisdina, and A. Puji Widodo, "Analysis of Information Technology Governance Using the Cobit 2019 Framework at Pt. Xyz," JIKO (Journal of Information and Computers), vol. 4, no. 1, pp. 68–75, 2021, doi: 10.33387/jiko.v4i1.2977.
- [13] R. Khoirunnisak, D. Arishanti, and DD Vebrianti, "Implementation of E-Budgeting by the Surabaya City Government in Achieving Good Governance," Pros. Semin. Nas. and Call Pap. Econ. and Business, vol. 2017, pp. 249–250, 2017, [Online]. Available: https://jurnal.unej.ac.id/index.php/prosiding/article/view/6715