

EVALUATION OF INFORMATION TECHNOLOGY GOVERNANCE E-KINERJA SYSTEMS IN ASSESSING EMPLOYEE PERFORMANCE USING THE MODEL COBIT 2019 AT THE DISTRICT COMMINFO OFFICE WAS REALLY FUN

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Abstract

The Department of Communication and Information Technology (Kominfo) in developing an e-performance information system needs to carry out a governance evaluation. The aim of this research is to evaluate information technology governance in the E-Kinerja system in assessing employee performance at the Bener Meriah Regency Communication and Information Service using the COBIT 2019 model using the Action Research method. Data collection techniques use two sources of primary data and secondary data. The results of this research are three main domains in COBIT 2019, namely EDM02 (Ensured Benefits Delivery), APO10 (Managed Vendors), and BAI11 (Managed Projects). This evaluation is carried out to measure the targeted capability level (to-be), the current capability level (as-is), as well as the gaps (GAP) that exist between the two. So the capability level in the EDM02 domain is at level 4, the APO10 domain is at level 2 and the BAI11 domain is at level 2. These findings provide an overview of areas that require further improvement and development to achieve more effective and efficient information technology governance. Thus, it is hoped that this research can contribute to improving the quality of information technology governance at the Bener Meriah Regency Communication and Information Service, as well as becoming a reference for other government agencies in implementing the COBIT 2019 model for evaluating information technology systems.

Keywords: COBIT 2019; Capability Level; Gap Analysis; Domain; Action Research.

1. INTRODUCTION

Technological developments and advances regarding the governance of Information Systems or Information Technology, hereinafter referred to as IT, are things that are needed in activities in an organization (Hantoro, Widodo, 2021). In particular, it facilitates all matters in private and government agencies to become efficient and effective. Thus, the use of information technology in the government sector is very necessary to create a good governance process (good governance). (Hanif et al.). This shows that the organization has confidence in IT to make a positive contribution to improving organizational performance and goals.

The Communication and Information Technology Service (Kominfo) is a regional organization tasked with carrying out regional government affairs in the field of communication and informatics, such as developing an e-performance information system for assessing employee performance. Operational activities at the Communication and Information Service use IT in various functions, such as the availability of e-kinerja as an application to be used by government agencies in managing employee performance.

IT governance is important because it is not only a supporter but also a determinant of agency success, so that agencies can avoid business losses, avoid high costs and low quality, inefficiency of the company's core processes due to low quality IT use, as well as failed IT investments. Therefore, companies can take advantage of IT, one of which is to obtain service effectiveness by using IT. IT implementation is important because reliability with IT will meet business needs for companies and improve service quality. Therefore, based on the needs of agencies that adopt IT in operations, an evaluation (audit) of existing IT governance in the agency

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is needed so that all IT management mechanisms are in accordance with planning, as well as management objectives and processes. So it is necessary to evaluate and assess the level of governance and information technology management capabilities using the COBIT 2019 framework.

Control Objectives for Information and Related Technology(COBIT 2019) is an international standard used to measure and evaluate information technology governance, development processes and organizational management. Governance system tools contribute to IT operations such as services to users, data and information management. This is related to the successful implementation of the COBIT 2019 IT service governance framework to help utilize IT in accordance with agency objectives.(I Gusti Made Setia Dharma et al.).

According to previous research regarding the application of the Cobit 2019 framework to audits carried out at Sambas Polytechnic, hereinafter referred to as Poltesa, is one of the Polytechnics in Kalimantan that has implemented technology in administrative and academic processes to support activities. The audit carried out at Poltesa used the COBIT 2019 frame work. The methods used were planning, action, observation, data processing and analysis, as well as providing recommendations. Based on the results of the audit carried out on Poltesa information technology, an average score of 3.21 was obtained with a maturity level score in the domain between 2 and 4, which means the system has been operated well, but not optimally. The expected information technology management at Poltesa can be fulfilled and carried out well, because the value between the average level when the research was carried out compared to the recommended level shows that the gap is not too big(Saleh et al.).

Judging from previous research, regarding the Principles of Information Technology Governance, it is known that IT governance is an important thing that must be implemented and managed IT optimally by companies, especially at the Communication and Information Service agency. Therefore, this research will discuss the IT governance audit at the Communication and Information Service to determine the level of capability in existing IT management so that the agency can achieve *good corporate governance*. This research will use the COBIT framework as an important and effective standard to be applied in IT governance. The framework that will be used in this research is the COBIT 2019 framework with process objects that will be concluded in the design of the governance system, namely optimizing IT benefits, optimizing IT risks, optimizing IT resources, and transparency at the District Communication and Information Service. Really Merry. Before determining the process objective, an analysis will be carried out on the assessment focusing on employee performance assessment using COBIT 2019.

Based on the problems that occurred, researchers chose the COBIT 2019 framework because it is more flexible. COBIT 2019 adapts to the model of progress and development of information technology as well as adjustments to developments in other IT management frameworks carried out by companies to make them more adaptive to improve their implementation. For this reason, researchers conducted research on information technology governance at the Bener Meriah Regency Communications and Information Service with the title "Evaluation of E-Performance System Information Technology Governance in Assessing Employee Performance Using the 2019 Cobit Model at the Bener Meriah Regency Communications and Information Service."

2. PROBLEM FORMULATION

- 2.1** How to evaluate the employee e-performance system in determining the process objectives of using a system, especially in the IT governance process, optimizing IT benefits, optimizing IT risks, optimizing IT resources, and transparency at the Bener Meriah Regency Communication and Information Service?
- 2.2** How to evaluate employee e-performance systems to determine the current level of IT process capability and the expected level of IT process capability?

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2.3 What recommendations can be given from the results of evaluating the level of IT process capability for companies to achieve good corporate governance?

3. METHOD

3.1 Types of Research

The method used in research at the Bener Meriah Communication and Information Service is the Action Research method. In conducting an IT service audit, there are several stages of research implementation which include the IT governance evaluation stage using COBIT 2019, determining recommendations based on COBIT 2019 and implementation stages that can be carried out based on previously determined recommendations. The following can be seen in Figure 3.1 of the research stages which were made according to needs referring to the COBIT 2019 framework.

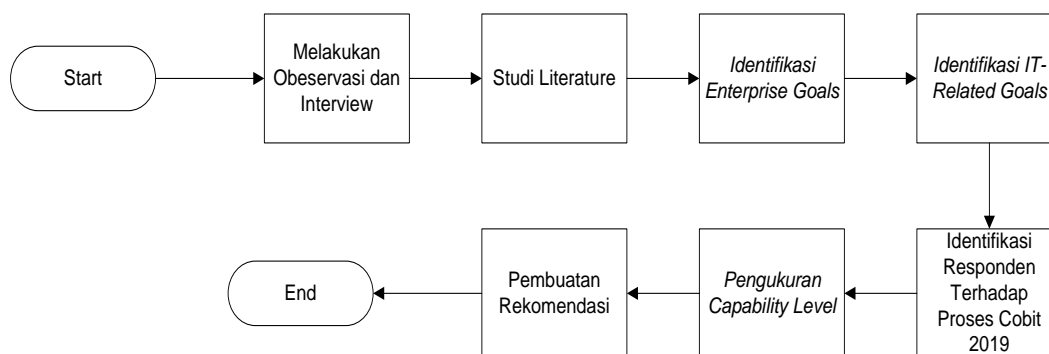


Figure 3.1 Research Stages of the 2019 Cobit Framework

Figure 3.1 is the flow of the audit research implementation stage to determine the level of capability at the Bener Meriah Communication and Information Service which includes:

1. At this stage, data collection is carried out, where the data collection method includes stages of observation and interviews with the parties concerned as well as conducting questionnaires.
2. The next stage is a literature study related to the problem being studied.
3. Identify Enterprise Goals. This stage identifies strategic plans that have been formulated by the Bener Meriah Communications and Information Service. Furthermore, this strategic plan will be mapped against the COBIT 2019 Enterprise Goals.
4. Identification of IT Related Goals for the COBIT 2019 process is a continuation stage from the previous stage which will be mapped to the COBIT 2019 processes.
5. Respondent identification will be continued with mapping results from the 2019 COBIT process, between the 2019 COBIT process and the party responsible for the process at the Bener Meriah Communication and Information Service to strengthen the assessment results.
6. Capability Level measurement is a continuation of the mapping results from Enterprise Goals to the COBIT 2019 process where capability level measurements will be carried out. In carrying out the capability level, it is necessary to check each process using the interview method with accountable and responsible parties.
7. Making Recommendations. Based on the results of the 2019 COBIT process which is the evaluation point, the next step is to determine the target capability level for each process which is the result of the evaluation. So, the IT system of the Bener Meriah Communication and Information Service runs optimally.

3.2 Quantitative Research

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- a) This research involves structured and numerical measurements, such as processing time, accuracy level, precision, recall, and F1 score.
- b) Data on student admissions, attributes of prospective students, as well as Support Vector Machine (SVM) prediction results can be measured numerically and analyzed using statistics.

3.3 Place and Time of Research

a) Research Place

In making this thesis, the researcher took the research location at the Benermeriah Regency Government on Jl. Serule Kayu Regional Government Office Complex, Kec. Bukit Bener Meriah District, Aceh.

b) Research Time

Research Time is needed for researchers to know the planned time limit for conducting audits. This research was carried out from March - July. For a detailed explanation, see the following scheduling table:

Table 3.1: Scheduling

Study	March				April				May				June				July			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Literature study	■	■																		
Secondary data collection and mapping			■	■	■															
Primary data collection				■	■	■														
Guttman scale data analysis						■	■	■												
As-is capability analysis								■	■	■										
Analysis of capability to-be										■	■	■								
Gap analysis													■	■	■					
Recommendation															■	■	■			

3.4 Data Collection Techniques

The data collection technique in this research uses two data sources, namely primary data and secondary data.

1. Primary Data

Primary data was obtained directly in the field when researchers carried out observations, interviews, and distributed questionnaires to the Bener Meriah District Government. The following is a description of the stages of collecting primary data sources, based on information from the sources provided:

- a. Data from questionnaires filled out by e-kinerja system users regarding the use of COBIT 2019 domain processes, such as processes EDM02, APO10 and BAI11 in evaluating the performance of Information Technology Governance of the E-Kinerja System in Assessing Employee Performance Using the Cobit 2019 Model at the Bener Meriah Regency Communication and Information Service.
- b. Data from questionnaire results highlighting the use of COBIT 2019 domain processes, such as processes EDM02, APO10 and BAI11 in providing information technology operational service support at the Bener Meriah Regency Communications and Information Service. By using primary data like this, evaluation of e-performance

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system information governance can be carried out in more detail and accurately in accordance with the COBIT 2019 framework.

2. Secondary Data

Secondary data was obtained from a literature review related to information technology governance. Secondary data for this research can be in the form of statistical data, analytical data, data from other references which are the basis for evaluation.

- a. Literature Study The literature study was carried out by studying theories related to information technology governance audits, COBIT 2019. These theories come from books, journals, ebooks and research that supports this thesis. Similar literature studies were obtained from research on the same topic regarding information technology governance audits and COBIT 2019 such as statistical data from the use of COBIT 2019 domain processes, such as processes EDM02, APO10 and BAI11 in evaluating the performance of Information Technology Governance of the e-kinerja system in assessing employee performance using the Cobit 2019 model at the Communication and Information Service of Bener Meriah Regency.

3.4 Data Analysis Techniques

After the data has been collected from the explanation in the data collection method section with two data sources, namely primary data and secondary data, the next stage in this research is the data analysis stage. Analysis of this research data was carried out using various techniques, such as:

1. Data collection
Collecting data from sources related to e-performance system information governance, such as data from questionnaires, documents or other resources that are the object of evaluation.
2. Data processing
Data processing to obtain relevant and accurate information, such as using data collection techniques, data reduction, data presentation, and data interpretation.
3. Data analysis
Data analysis to assess the performance of e-performance system information governance, such as using qualitative analysis techniques, descriptive interpretive, or quantitative analysis.
4. Drawing Conclusions
Drawing conclusions or verification from data that has been processed, such as using data collection techniques, data reduction, data presentation, and data interpretation.
5. Statistical Data Processing
Statistical data processing, such as calculating mean, median, mode, and variation, to assess the performance of e-performance information governance systems.

By using these techniques, evaluation of e-performance system information governance can be carried out in more detail and accuracy, so as to produce relevant and effective recommendations.

4. RESULTS AND DISCUSSION

4.1 Conduct an evaluation of the employee e-performance system in determining the process objectives of using a system, especially in the IT governance process, optimizing IT benefits, optimizing IT risks, optimizing IT resources, and transparency at the Bener Meriah Regency Communication and Information Service

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Evaluation of employee e-performance systems in the context of Information Technology (IT) governance can be carried out with a systematic approach and focuses on several main aspects, such as IT governance, optimizing IT benefits, optimizing IT risks, optimizing IT resources, and transparency. The following are steps that can be taken to carry out this evaluation:

1. Identify the Goal and Scope of the Evaluation
 - a. **Objective:**Determine whether the employee e-performance system is effective in supporting good IT governance and whether this system provides optimal benefits, manages risks well, optimizes resources, and ensures transparency.
 - b. **Scope:**Focus on IT governance processes, including aspects of performance management, use of technology, and regulatory compliance.
2. Evaluation of IT Governance (Governance)
 - a. **Compliance with Policies and Standards:**Ensure that the e-kinerja system complies with applicable IT policies and governance standards, such as COBIT (Control Objectives for Information and Related Technologies) or ISO/IEC 38500.
 - b. **Governance Structure:**Review the IT governance structure within the Communications and Information Service, whether this system has been integrated into the decision-making process involving key stakeholders.
 - c. **Control and Accountability:**Evaluate how controls are applied to the e-performance system, as well as whether there are clear accountability mechanisms in IT governance.
3. Optimizing IT Benefits
 - a. **Alignment with Organizational Goals:**Analyze whether the e-kinerja system supports the strategic goals of the Communication and Information Service, such as increasing the efficiency of employee performance and public services.
 - b. **IT Performance Measurement:**Evaluate how the benefits of the system are measured, for example through increased productivity, employee satisfaction, or cost savings.
 - c. **Continuous Improvement:**Review whether mechanisms exist to continuously identify and exploit opportunities to increase IT benefits.
4. IT Risk Optimization
 - a. **Risk Identification and Assessment:**Ensure that risks associated with the e-performance system have been identified, analyzed and managed. This includes risks related to personal data, data integrity and system continuity.
 - b. **Risk Mitigation:**Review implemented risk mitigation strategies, such as data backup, access controls, and encryption.
 - c. **Monitoring and Review:**Continuous evaluation of the risk monitoring process, as well as periodic reviews to ensure risks remain within acceptable limits.
5. IT Resource Optimization
 - a. **Resource Use Efficiency:**Review how resources (e.g., hardware, software, HR) are optimized to support the e-performance system.
 - b. **Capacity and Performance:**Evaluate whether the IT resources used are adequate to support future workloads and needs.
 - c. **Competency Development:**Analyze whether there are efforts to improve employee skills and knowledge in using the e-kinerja system.
6. Transparency
 - a. **Reporting and Accountability:**Evaluate how performance results and assessment processes are transparent to all stakeholders.
 - b. **Information Access:**Ensure that the system provides employees and management with easy and appropriate access to relevant information, as well as how reporting is done.
 - c. **Regulatory Compliance:**Review whether the system complies with applicable regulations, for example related to public transparency and information disclosure.
7. Assessment and Evaluation Results Report

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- a. **Results Documentation:** Create an evaluation report documenting findings and recommendations for improvement.
 - b. **Recommendation:** Provide specific and measurable recommendations to improve the effectiveness of the e-performance system in supporting IT governance.
8. Follow-up and Continuous Improvement
- a. **Implementation of Recommendations:** Follow up on recommendations given and monitor their implementation.
 - b. **Repeated Evaluation:** Plan regular evaluations to ensure that improvements are continuously made and that the system remains relevant to technological developments and organizational needs.

By following these steps, evaluation of the e-performance system at the Bener Meriah Regency Communication and Information Service can be carried out comprehensively and effectively, supporting good IT governance and ensuring optimization of benefits and resources, effective risk management and adequate transparency.

4.2 Evaluate employee e-performance systems to determine the current level of IT process capability and the expected level of IT process capability

Evaluation of employee e-performance systems to determine the current level of IT process capability and the expected level of capability can be done through a framework approach such as COBIT (Control Objectives for Information and Related Technologies) which has been widely used to assess and improve IT governance in organizations. Following are the steps that can be followed:

1. Determining the Scope of Evaluation
 - a. **Identify Relevant IT Processes:** Determine the IT processes to be evaluated, such as performance management, IT service management, information security management, etc., which are directly related to the e-performance system.
 - b. **Evaluation Objectives:** Make sure the purpose of the evaluation is clear, namely to identify the current level of IT process capability and set the expected capability targets.
2. Mapping and Data Collection
 - a. **Process Documentation:** Gather documentation about current IT processes. This includes operational procedures, policies, and performance documentation of the e-kinja system.
 - b. **Interviews and Questionnaires:** Conduct interviews with relevant stakeholders, such as IT managers, operational staff, and e-kinja system users. Questionnaires can also be used to gain additional insight into how IT processes work.
 - c. **Direct Observation:** Observe how e-kinerja systems are operated and managed in daily practice. Note any gaps between documentation and actual practice.
3. Assessment of Current IT Process Capability Levels
 - a. **Use a Framework Like COBIT:** COBIT provides an IT process capability model that can be used to assess current capabilities. COBIT has five levels of process capability:
 - b. **Level 0: Non-Existent (None)**- The process does not exist or is not implemented.
 - c. **Level 1: Initial/Ad Hoc**- The process is carried out irregularly and is not well documented.
 - d. **Level 2: Repeatable but Intuitive**- The process is carried out repeatedly, but has not been standardized and documented.
 - e. **Level 3: Defined Process (Documented Process)**- Processes are documented, standardized, and widely understood.
 - f. **Level 4: Managed and Measurable**- Processes are measured and managed well.
 - g. **Level 5: Optimized**- Processes are continuously optimized through continuous improvement.
 - **Evidence Based Assessment:** Use the evidence you have collected (documentation, interviews, observations) to determine what level each IT process currently resides at.
4. Determination of Expected Capability Levels

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- a. **Business Needs Analysis:** Determine the level of capability required based on business objectives, applicable regulations, and organizational needs. For example, IT processes that support data security may need to reach Level 4 (Managed and Measurable) or Level 5 (Optimized).
- b. **Stakeholder Engagement:** Discuss with relevant stakeholders to set capability level targets that are realistic and in line with organizational strategy.
5. Gap Analysis (Gap Analysis)
 - a. **Identify Gaps:** Compare the current capability level with the expected capability level for each IT process.
 - b. **Prioritize Gaps:** Determine which gaps are most critical and require immediate attention based on their impact on e-performance system performance and achievement of business goals.
6. Development of Capability Improvement Plan
 - a. **Upgrade Plan:** Create action plans to improve IT process capabilities that are below expected levels. This may include training, development of new procedures, or investment in additional technology.
 - b. **Assignment of Responsibilities:** Determine who is responsible for each improvement action and set clear deadlines.
7. Implementation and Monitoring
 - a. **Plan Implementation:** Implement improvement plans in accordance with established priorities.
 - b. **Periodic Monitoring:** Monitor progress periodically and adjust the plan as necessary. Re-evaluate processes after improvement actions to assess whether capability targets have been achieved.
8. Reports and Follow-up
 - a. **Documentation of Evaluation Results:** Create reports detailing evaluation results, gaps discovered, and improvement plans.
 - b. **Communication to Stakeholders:** Present results and plans to stakeholders to gain approval and support in implementation.
 - c. **Periodic Review:** Plan regular evaluations to ensure processes continue to evolve and adapt to changing organizational and technological needs.

By following these steps, you can conduct a comprehensive evaluation of employee e-performance systems in the context of IT process capabilities, as well as develop a plan to achieve the expected level of capability in accordance with the organization's strategic goals.

4.3 Recommendations that can be given from the results of evaluating the level of IT process capability for companies to achieve good corporate governance

Recommendations given from the results of evaluating the level of IT process capability to help companies achieve Good Corporate Governance (GCG) must focus on increasing IT process capability in supporting transparency, accountability, fairness and corporate responsibility. The following are some general recommendations that can be given based on the level of IT process capability that has been evaluated:

1. Improved IT Governance (IT Governance)
 - a. **Improving IT Governance Structure:**
 - Establish an IT governance committee involving senior executives to ensure that IT decisions are aligned with the company's business strategy.
 - Implement IT policies and procedures that support transparent and accountable decision making.
 - b. **Monitoring and Control:**
 - Implement stricter monitoring mechanisms for IT process performance through clear Key Performance Indicators (KPIs).

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- Use regular IT audits to ensure that all processes are running in accordance with applicable policies and regulations.
- 2. Optimizing IT Benefits
 - a. **Align IT Investments with Business Goals:**
 - Prioritize IT projects that provide maximum value to the company and support the achievement of strategic goals.
 - Conduct a benefits-performance analysis (benefit-realization analysis) to ensure that the benefits of IT initiatives can be measured and match expectations.
 - b. **Increasing Employee Competency:**
 - Provide ongoing training to employees regarding the use and utilization of new technology, to increase adoption and effective use of IT systems.
- 3. IT Risk Management
 - a. **Implementation of Proactive Risk Management:**
 - Develop and implement a comprehensive IT risk management framework, including identification, assessment, mitigation and ongoing monitoring of risks.
 - Ensure there is a strong incident management and disaster recovery plan to minimize the impact of risks on business operations.
 - b. **Increased Risk Awareness:**
 - Conduct risk training programs to increase employee awareness of IT risks, including cybersecurity threats and regulatory compliance.
- 4. IT Resource Optimization
 - a. **Resource Efficiency Management:**
 - Perform resource efficiency analysis to identify and reduce waste in the use of hardware, software and human resources.
 - Implement IT asset management practices to maximize utilization and extend the life of IT assets.
 - b. **Increasing IT Infrastructure Capacity:**
 - Invest in increasing the capacity and scalability of IT infrastructure to support company growth and changing business needs.
 - Use cloud-based technology for resource flexibility and better management.
- 5. Increased Transparency and Accountability
 - a. **Improved Reporting and Communication:**
 - Implement an integrated IT reporting system to increase operational transparency and enable timely access to information for management and stakeholders.
 - Ensure IT performance reports are accessible to all key stakeholders and accurately reflect IT status and performance.
 - b. **Compliance with Regulations and Standards:**
 - Ensure all IT processes comply with industry standards, such as ISO/IEC 27001 for information security, and local and international regulations related to data governance and privacy.
 - Regularly review IT policies and procedures to ensure that they remain compliant with evolving regulatory requirements.
- 6. Continuous Improvement (Continuous Improvement)
 - a. **Deming Cycle Implementation (PDCA):**
 - Implement the Plan-Do-Check-Act (PDCA) cycle to continually improve IT processes based on feedback from performance evaluations and results.
 - Create an organizational culture that supports innovation and continuous improvement, both in terms of technology and business processes.
 - b. **Benchmarking:**

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- Conduct regular benchmarking with other companies in the same industry to identify best practices and opportunities for improvement.
7. IT Integration and Collaboration with Business
 - a. **Strategic Collaboration:**
 - Ensure that the IT function works closely with other business units to identify business needs and opportunities that can be supported by technology.
 - Use a collaborative approach in developing IT strategies that are integrated with business strategies.
 8. Change Management (Change Management)
 - b. **Improved Change Management Process:**
 - Implement an effective change management process to ensure that any changes to IT systems or operational processes are properly adopted by the organization without disrupting business operations.
 - Communicate change plans clearly to all stakeholders and provide necessary training to reduce resistance to change.

By implementing these recommendations, companies can improve their IT process capabilities so as to support the achievement of Good Corporate Governance. This will not only strengthen control and accountability, but also ensure that IT proactively provides optimal added value to the business.

5. CLOSING

5.1 Conclusion

In this research, researchers conducted an evaluation of Information Technology Governance of the E-Kinerja System in Assessing Employee Performance Using the 2019 Cobit Model at the Bener Meriah Regency Communication and Information Service, which focuses on IT governance, optimizing IT benefits, optimizing IT risks, optimizing IT resources, and transparency is managed by the IT Sector, namely the Information and Communication Technology Sector and the E-Government Sector, using the COBIT 2019 framework. Based on the results of the discussion in the previous chapter, the conclusions obtained are as follows:

1. Level 2 capability analysis shows that the objective process EDM02 - Ensured Benefits Delivery at Diskominfo Bener Meriah Regency has a maturity level value of 77.7%, which means the capability level is at the Largely Achieved level (50-84). So it can be concluded that the capability level of the EDM02 objective process at the Diskominfo Bener Meriah Regency is at level 2, and audit status at level 2 has been achieved. In this case, EDM02 then carried out capability level 3 analysis, and obtained an average maturity value of 92%, which means the capability level is at the Fully Achieved level (85-100). So it can be concluded that the capability level of the EDM02 objective process at the Diskominfo Bener Meriah Regency is at level 3, and audit status at level 3 has been achieved. Then EDM02 then carried out capability level 4 analysis, and obtained an average maturity value of 92%, which means the capability level is at the Fully Achieved level (85-100). So it can be concluded that the capability level of the EDM02 objective process at the Diskominfo Bener Meriah Regency is at level 3, and audit status at level 3 has been achieved. Then EDM02 then carried out capability level 5 analysis, and obtained an average maturity value of 62.3%, which means the capability level is at the Largely Achieved level (50-84). So it can be concluded that the capability level of the EDM02 objective process at the Diskominfo Bener Meriah Regency is at level 5, with audit status at level 5 not yet achieved.
2. Level 2 capability analysis shows that the objective process APO10 - Managed Vendors at Diskominfo Bener Meriah Regency has a maturity level value of 88%, which means the capability level is at the Fully Achieved level (85-100). So it can be concluded that the APO10 capability level objective process at the Diskominfo Bener Meriah Regency has audit status achieved and continues to calculate capability level 3, and audit status at level 2 has been

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achieved. In this case, APO10 then carried out capability level 3 analysis, and obtained an average maturity value of 65%, which means the capability level is at the Largely Achieved level (50-84). So it can be concluded that the capability level of the APO10 objective process at the Diskominfo Bener Meriah Regency is at level 3, with audit status at level 3 not yet achieved and not continuing to calculate capability level 4.

3. Level 2 capability analysis shows that the BAI11 – Managed Projects objective process at the Bener Meriah Regency Diskominfo has a maturity level value of 85%, which means the capability level is at the Fully Achieved level (85-100). So it can be concluded that the capability level of the BAI11 objective process at the Diskominfo Bener Meriah Regency has achieved audit status. In this case, BAI11 then carried out capability level 3 analysis, and obtained an average maturity value of 62%, which means the capability level was at the Largely Achieved level (50-84). So it can be concluded that the capability level of the BAI11 objective process at Diskominfo Bener Meriah Regency is at level 3, with audit status at level 3 not yet achieved and not continuing to calculate capability level 4. In the gap analysis, it was concluded that IT governance is in the EDM02 process objective is at level 4 (as-is), while what is expected is level 5 (to-be), so the gap difference value is 1. Meanwhile for APO10 and BAI11, both are at level 2 (as-is), and what is expected is level 4 (to-be), so that the gap difference value is 2. The information technology governance audit carried out at the Diskominfo Bener Meriah Regency is the first to be carried out, and refers to the 2019 COBIT framework standards. It can be concluded that this research aims to get an idea of whether the activities carried out by the agency are in accordance with the standards regulated in COBIT 2019 or not.

5.2 Suggestions

Based on the analysis and conclusions previously explained, the following are several suggestions that can be given to improve IT governance at Diskominfo Bener Meriah Regency:

1. In future research, it is hoped that researchers will carry out audits of different objective processes such as DSS and MEA, so that various audits will be obtained.
2. Can increase the capability level of objective process APO10 and BAI11 to level 4.
3. It is also hoped that future research can use other frameworks so as to obtain different experiences and results in information technology governance audits.

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