 ISSN:2302-8149
e-ISSN:2540-9719

Stock Management Information System Audit at CV Gudcare Indonesia Corp using COBIT 5

Eli Nurhayati, Silvy Milda Puspita, Rhizma Elliza Putri, Isyana Valda Choirila Vernanda, Anita Wulansari*
Department of Information Systems, Faculty of Computer Science, University of Pembangunan Nasional "Veteran" Jawa Timur
Jl. Raya Rungkut Madya Gunung Anyar Surabaya, East Java, Indonesia
*e-mail: anita.wulansari.sisfo@upnjatim.ac.id

(***received*:** 1 January 2024, ***revised*:** 9 January 2024, ***accepted*:** 11 January 2024)

Abstract

CV Gudcare Indonesia Corp is a company that operates in the fragrance or perfume sector and oversees 2 brands within it. CV Gudcare Indonesia has an information system that is used to carry out stock management. The evaluation was carried out to ensure that the use of information system CV Gudcare Indonesia Corp was running effectively and in line with organizational goals and was able to fulfill the company's vision and mission. Using the COBIT 5 framework subdomains APO10 and APO11, which is useful for measuring the capability level of the performance of the stock management website and knowing how far the process is going. The results of the evaluation that have been carried out show that the capability level gap value produced in the APO10 process is 2, with the Managed Suppliers process at Level 1 (Performed). Meanwhile, in the APO11 domain, the resulting capability level gap value was found to be 2, with the Managed Quality process being at Level 1 (Performed). In future research, more process domains can be added in both the Governance and Management areas, so that evaluations can be carried out more comprehensively.

Keywords: Information System, COBIT 5, APO10, APO11

1 Introduction

CV Gudcare Indonesia Corp is a company in the fragrance or perfume sector that manages two main brands, namely Freshcubs as a fabric mist brand and Penatu Home as a laundry perfume brand. Previously, in 2018, this company operated as a distributor of household health supplies (PKRT) products. However, because it was not getting adequate profits, CV Gudcare Indonesia Corp made a strategic decision to develop its own new brand, namely Freshcubs, in 2019. After launching Freshcubs, the company carried out rebranding to increase its appeal and attract more consumers. Over time, CV Gudcare Indonesia Corp expanded its brand portfolio by adding a new brand, Laundry Home. These changes resulted in adjustments to the company's business goals and strategies. Apart from changes in business and brand, CV Gudcare Indonesia Corp is also experiencing developments in its business processes by adopting information system. One of the implementations of information system is a management information system to manage stock of goods. However, the implementation of this system experienced several obstacles, especially related to the efficiency of the company's information system.

Information system evaluation is a process carried out by companies to assess the performance and effectiveness of information systems that have been used in a company [1]. So, to ensure that the use of information system at CV Gudacare Indonesia Corp has run effectively and is in line with the organization's goals, and is able to fulfill the company's vision and mission, it is necessary to evaluate information system for CV Gudcare Indonesia Corp. Evaluation helps assess the performance of information systems to ensure that they are operating according to company expectations and needs. By identifying potential performance problems or obstacles, companies can take the necessary corrective steps to increase efficiency and effectiveness [2].

COBIT 5 is a type of IT audit framework, which provides best practices to help organizations manage and optimize the use of information system to achieve their business goals [3]. One type of domain in COBIT 5.0 is APO (Align, Plan, and Organize). This APO domain can help in achieving

 ISSN:2302-8149
e-ISSN:2540-9719

the right balance between information system and the business goals of CV Gudcare Indonesia Corp. The APO domain also assists in risk management and long-term planning for sustainable growth and development for CV Gudcare Indonesia Corp.

Based on the problems that have been described, the need for IS evaluation at CV Gudcare Indonesia Corp using the COBIT 5 framework, with the aim of measuring the capability level of the performance of the stock management website and finding out how far the process is running. The evaluation process is focused on the APO10 subdomain which relates to supplier management and APO11 which relates to quality management in the overall process standards on the CV Gudcare Indonesia Corp stock management system.

2 Literature Review

This paper explores several fundamental aspects that highlighted as the main focus of discussion. Several key points have been identified and form the theoretical foundation for the topic addressed in this paper.

A. Information System

An information system is a functioning system created to gather, handle, store, and disseminate information. The key components of an information system from a sociotechnical perspective encompass hardware resources, software resources, human resources, data resources, and network resources. [4].

Information systems have several important roles, such as [5]:

1) Gather, analyze, store, and distribute information to aid the organization in decision-making and internal monitoring.
2) Convey and disseminate information pertaining to specific business procedures, fostering a cohesive and streamlined operational environment conducive to effective decision-making.
3) Unveils the connections between individuals and diverse hardware and software components involved in the processing and storage of information.

B. Information Systems Audit

An information system audit is recognized as the procedure of gathering and assessing evidence to ascertain whether an information system can protect organizational data, uphold data integrity, and aid the efficient and effective achievement of the organization's goals while optimizing available resources [6]. The IS audit stage is planning, on-site examination, reporting, and subsequent actions. Information system audit objectives include securing assets, maintaining data integrity, maintaining system effectiveness, and achieving resource efficiency [7]. Information systems audits can help organizations maintain data security, increase efficiency, and ensure compliance with applicable standards and regulations [8].

C. Stock Management System

A stock management system is a system consisting of a set of procedures and methods that are able to produce, disseminate and collect information regarding records of goods entering and leaving the warehouse in an organization/company. The stock management system is designed to increase time efficiency and minimize the occurrence of human error in the manual recording process. Errors in recording information will have an impact on decreasing company performance due to the acquisition of inaccurate information [9]. Therefore, it is important for an organization to have a management system that is able to support the business processes running in the organization.

D. COBIT 5

COBIT (Control Objectives for Information and Related Technologies) is defined as a tool that is a standard for controlling information and technology. COBIT was developed by ISACA. COBIT 5 is one version of the COBIT framework that has gone through a development process and was introduced in 2012. COBIT 5 is designed comprehensively with the aim of helping organizations manage IT/IS effectively by providing guidance related to IT governance so that the organization may fufill its vision and mission and be able to achieve goals and create optimal value for the organization [10].

1) Subdomain APO10

The process name for the APO10 subdomain is manage suppliers. The APO10 subdomain's goal is to manage IT-related services from all kinds of providers in order to satisfy corporate needs. This

 ISSN:2302-8149
e-ISSN:2540-9719

includes managing requirements, choosing suppliers, managing contracts, and reviewing and monitoring on suppliers' performance to ensure compliance and effectiveness [11].

2) Subdomain APO11

The process name for the APO11 subdomain is manage quality. The objective of the APO11 subdomain is to set and communicate quality standards for every process, procedure, and outcome. This encompasses implementing control and monitoring measures, as well as employing established methods and standards to ensure efficiency and facilitate ongoing enhancements [11].

3) Capability Level

Capability level is an approach that is part of COBIT 5 which is used to assess and measure the performance of a process in an organization. This model focuses on the capabilities of a process, both in the context of governance (EDM-based) and management (PBRM-based) [12]. This is known as the Maturity Model in COBIT 4.1. Even though both use the same scale of 0-5, their scoring methods are completely different.

The following is a mapping of the six Capability Level levels in COBIT 5 [12]:

1. Level 0 (Inclomplete Process)
2. Level 1 (Performed Process)
3. Level 2 (Managed Process)
4. Level 3 (Established Process)
5. Level 4 (Predictable Process)
6. Level 5 (Optimising Process)

4) Rating Levels

The rating level serves as a measurement scale for evaluating attained process attributes. The following is a mapping of the four Rating Level levels in COBIT 5 specified in the ISO/IEC 15504 standard [13]:

1. N (Not Achieved), the value range is 0 – 15%.
2. P (Partially Achieved), the value range is 15 – 50%.
3. L (Largely Achieved), the value range is 50 – 85%.
4. F (Fully Achieved), the value range is 85 – 100%.

3 Research Method

Methodology is a set of procedures that determine the processes involved in a particular research. Research method is a collection of steps, activities, rules, and procedures used by researchers in a specific field of study. The following research method used in this study can be illustrated as shown in Figure 1.

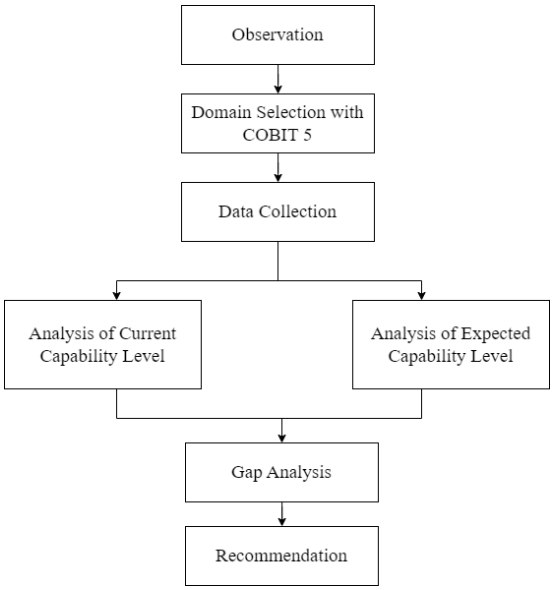

Figure 1. Research Metodology

The stages listed in the research flow above are explained as follows:

A. Observation

 ISSN:2302-8149
e-ISSN:2540-9719

This phase involves firsthand observation of activities at the research site to gain a comprehensive understanding of the ongoing issues. In this context, an examination was conducted at CV Gudcare Indonesia Corp, the focus of the study, to identify and analyze obstacles or problems. This process also involved reviewing and analyzing previously conducted audit documents.

B. Domain Selection with COBIT 5

At this stage, the domains contained in COBIT 5 are first mapped to the results of identifying business objectives. Then the next step is to identify what will deliver the IT Related Goals. The next step is to map between IT-Related Goals and COBIT Processes.

C. Data Collection

The data collection stage was carried out to support assessments, field evaluations and also to find out the real conditions of CV Gudcare Indonesia Corp regarding the audit carried out. This stage was carried out through surveys and interviews derived from the outcomes of the prior COBIT 5 mapping process.

1) Survey

This approach involves examining the stock management procedures at CV Gudcare Indonesia Corp to understand the dynamics of the management process.

2) Interview

This method is carried out by asking questions directly to the parties involved regarding the stock management website on CV Gudcare Indonesia Corp in order to obtain data that is useful for research. In this research, a questionnaire was used with the Likert scale method. A comparision was made between the interviewee's statements and the work products discovered during the observation in order to verify the information gathered from the interviewee [14].

D. Analysis of Capability Level

The next stage is to analyze the capability level of CV Gudcare Indonesia Corp's IT governance which is currently running. This stage was carried out using the COBIT 5 framework. The COBIT 5 domains used are APO 10 and APO 11 domains. APO 10 domain is a domain related to supplier management while APO 11 is related to quality management.

At this stage, an assessment of base practices is carried out by looking at the achievement of the objective processes of the base practices that should be achieved by the organization. Data was obtained through interviews conducted with the organization by representing 1 and 0 as present and absent. The assessment carried out in this research had two stages, namely (1) and (2). The overall score is determined by computing the mean as follows (3). This assessment is a Guttman scale assessment [15].

$$\textbf{\textit{Base Practice Score}} = \frac{\text{Total Base Practice Score}}{\text{Total Base Practice}} \quad (1)$$

$$\textbf{\textit{Work Product Score}} = \frac{\text{Total Work Product Score}}{\text{Total Fulfille Work Products}} \quad (2)$$

$$\textbf{\textit{Process Score}} = \frac{\text{Base Practice Score} + \text{Work Products Score}}{2} \quad (3)$$

E. Gap Analysis

In this phase, discrepancies or gaps in capability levels, identified through prior calculations, are examined. The process involves comparing the achieved capability level with the desired one.

F. Recommendation

The final stage carried out in this research is providing recommendations or improvements to processes that have been running in IT governance. This stage is carried out after carrying out an analysis of capability levels and gaps so that later suitable improvements in IT governance at CV Gudcare Indonesia Corp can be identified.

4 Results and Analysis

This section explains the selection of COBIT 5 domains to be researched, determination of the RACI diagram, calculation of gap analysis, and preparation of improvement recommendations for CV Gudcare Indonesia Corp based on the results obtained.

A. Identify Enterprise Goals and IT Related Goals

 ISSN:2302-8149
e-ISSN:2540-9719

Based on the results of observations by CV Gudcare Indonesia Corp, the business objectives of the stock management website have been identified based on their function as follows:

1) Optimizing the process of managing product stock in and out.
2) Providing convenience in the availability and access of data in and out of products, thereby simplifying the decision making process.

Furthermore, the identification results of these business goals are used as a reference in mapping based on enterprise goals and IT related goals in COBIT 5 [16]. COBIT 5 Enterprise Goals is shown in Figure 2.

Figure 5—COBIT 5 Enterprise Goals

BSC Dimension	Enterprise Goal	Relation to Governance Objectives		
		Benefits Realisation	Risk Optimisation	Resource Optimisation
Financial	1. Stakeholder value of business investments	P		S
	2. Portfolio of competitive products and services	P	P	S
	3. Managed business risk (safeguarding of assets)		P	S
	4. Compliance with external laws and regulations		P	
	5. Financial transparency	P	S	S
Customer	6. Customer-oriented service culture	P		S
	7. Business service continuity and availability		P	
	8. Agile responses to a changing business environment	P		S
	9. Information-based strategic decision making	P	P	P
	10. Optimisation of service delivery costs	P		P
Internal	11. Optimisation of business process functionality	P		P
	12. Optimisation of business process costs	P		P
	13. Managed business change programmes	P	P	S
	14. Operational and staff productivity	P		P
	15. Compliance with internal policies		P	
Learning and Growth	16. Skilled and motivated people	S	P	P
	17. Product and business innovation culture	P		

Figure 2. Enterprise Goals COBIT 5

Source : [12]

Based on Figure 2, 2 enterprise goals have been identified that are in line with the business objectives of the stock management website. The two enterprise goals are Optimization of Business Process Functionality in number 11 which focuses on primary results (P) in Benefit Realization and Resource Optimization and Managed Business Change Programs which focuses on primary results (P) in Benefit Realization and Risk Optimization.

Table 1. Results of Identifying Enterprise Goals

No.	*Enterprise Goal*	*Relation to Governance Objectives*		
		Benefit Realisation	***Risk Optimisation***	***Resource Optimisation***
1.	*Optimisation of business process functionality*	P		P
2.	*Managed business change programmes*	P	P	

B. Mapping Enterprise Goals and IT Related Goals

After successfully identifying IT-Related Goals, the next stage is to map IT-Related Goals with Cobit Processes. This process produces COBIT 5 domains that will be used and have a primary relationship (P) with IT-Related Goals which have been identified previously. The results of the COBIT 5 processes mapping from IT-Related Goals aim to manage IT performance on the stock management website in order to achieve the identified goals. The results of identifying IT-Related Goals can be seen in Table 2.

Table 2. Results of Identifying It-Related Goals

No.	IT-Related Goal
04	Managed IT-related business risk
05	Realised benefits from IT-enabled investments and services portfolio
07	Delivery of IT services in line with business requirements
09	IT agility
13	Delivery of programmes delivering benefits, on time, on budget, and meeting requirements and

 ISSN:2302-8149
e-ISSN:2540-9719

quality standards

C. Results of Domain and Sub Domain

After successfully identifying IT-Related Goals, the next stage is to map IT-Related Goals with COBIT Processes. This process produces COBIT 5 domains that will be used and have a primary relationship (P) with IT-Related Goals which have been identified previously. The results of the COBIT 5 processes mapping from IT-Related Goals aim to manage IT performance on the stock management website in order to achieve the identified goals. The results of identifying IT-Related Goals can be seen in Table 3.

Table 3. Results of Domain and Sub Domain

Domain	Sub Domain
APO10 (*Manage Suppliers*)	APO10.01, APO10.02, APO10.03, APO10.04, APO10.05
APO11 (*Manage Quality*)	APO11.01, APO11.02, APO11.03, APO11.04, APO11.05, APO11.06

D. RACI Diagram Mapping

To ensure that the calculations are carried out validly, first determine the parties within who interact directly with the goods entry management system and are responsible for existing processes [17]. The results of mapping respondents from CV Gudcare Indonesia Corp using the RACI diagram can be seen in Table 4 below:

Table 4. Raci Diagram Mapping

Respondent	Amount	Scope	Process Involved
CEO (Owner)	1	Planning, Decision Maker	APO10, APO11
HRD	1	HRD	APO10, APO11
Head of production	1	Operational	APO10, APO11

The following are the results of the base practice of the APO10 and APO11 processes obtained from interviews and observations with CV Gudcare Indonesia Corp. The base practice results of the APO10 and APO11 processes can be seen in Table 5 and Table 6:

Table 5. APO10 Base Practice Score

Process Goal	*Base Practices*	*Score*	*Process Goal Score*
APO10.01	APO10-BP2	F (100%)	F (92.5%)
	APO10-BP5	L (85%)	
APO10.02	APO10-BP4	L (85%)	L (85%)
APO10.03	APO10-BP1	P (50%)	L (71.25%)
	APO10-BP2	F (100%)	
	APO10-BP3	P (50%)	
	APO10-BP5	L (85%)	
Average Base Practice Score			L (83%)

Table 6. Base Practice Score

Process Goal	*Base Practices*	*Score*	*Process Goal Score*
APO11.01	APO11-BP3	F (100%)	F (90%)
	APO11-BP5	L (85%)	
	APO11-BP6	L (85%)	
APO11.02	APO11-BP3	F (100%)	F (92.5%)
	APO11-BP4	L (85%)	
APO11.03	APO11-BP1	L (85%)	L (85%)

 ISSN:2302-8149
e-ISSN:2540-9719

APO11-BP2	L (85%)	
APO11-BP4	L (85%)	
APO11-BP5	L (85%)	
APO11-BP6	L (85%)	
Average Base Practice Score		L (89%)

E. Capability Level and Gap Analysis

Based on the data and evidence available at CV Gudcare Indonesia Corp regarding the implementation of the APO10 and APO11 processes, at this stage we will assess the level of achievement of the APO10 and APO11 processes that have been carried out at CV Gudcare Indonesia Corp through work products based on observation results. and interviews. The work product results of the APO10 process can be seen in Table 7.

Table 7. Work Products Score

Base Practice	Work Products	Finding	Score
APO10.01	Supplier significance and evaluation criteria	1	66,7%
	Supplier catalogue	0	
	Potential revisions to supplier contracts	1	
APO10.02	Supplier requests for information (RFIs) and requests for proposals (RFPs)	1	100%
	RFI and RFP evaluations	1	
	Decision results of supplier evaluations	1	
APO10.03	Supplier roles and responsibilities	0	33,3%
	Communication and review process	1	
	Results and suggested improvements	0	
APO10.04	Identified supplier delivery risk	1	100%
	Identified contract requirements to minimise risk	1	
APO10.05	Supplier compliance monitoring criteria	1	100%
	Supplier compliance monitoring review results	1	
Average Work Product Score			**30,7%**

By referring to the average objective process value and the average work product value, the total score calculation for the APO10 process is as follows (Calculation Ref):

$$\text{APO10 Score} = \left(\frac{83+30.7}{2}\right)\%$$

$$\text{APO10 Score} = 61.85\%$$

The score from the APO10 process was 61.85% which is included in the L (Largely Achieved) score category. This shows that the APO10 process has been largely achieved with signifies the presence of a systematic approach and substantial accomplishments in the process, although with several weaknesses still present. Therefore, the Managed Suppliers APO10 process is categorized at Level 1 (Performed). This score shows that the supplier management process implemented in CV Gudcare Indonesia Corp is good. However, regular monitoring and evaluation are also needed to identify specific areas that can be optimized in order to improve the quality and consistency of supplier management. By paying attention to these aspects, CV Gudcare Indonesia Corp can continue to improve its sustainability and competitiveness in managing suppliers so that it can have a positive impact on the company's entire supply chain. According to the assessment of the APO10 process, the capability level gap value between current conditions and expected conditions is 2, as stated in Table 8.

Table 8. APO10 Process Score

APO10	Level					
	0	1	2	3	4	5

 ISSN:2302-8149
e-ISSN:2540-9719

Rating by criteria	F (100%)	L (61.85%)
Current Level	1	
Expected Level	3	
Gap	2	

Table 9 below is the result of the APO11 process work product at CV Gudcare Indonesia Corp, which is based on the results of observations and interviews.

Table 9. APO11 Work Products Score

Base Practice	Work Products	Finding	Score
APO11.01	QMS roles, responsibilities and decision rights	1	66,7%
	Quality management plans	0	
	Results of QMS effectiveness reviews	1	
APO11.02	Quality management standards	1	100%
APO11.03	Customer requirements for quality management	0	33,3%
	Acceptance criteria	0	
	Review results of quality of service, including customer feedback	1	
APO11.04	Results of quality reviews and audits	1	100%
	Process quality of service goals and metrics	1	
APO11.05	Results of solution and service delivery quality monitoring	1	100%
	Root causes of quality delivery failures	1	
APO11.06	Communications on continual improvement and good practices	1	66,7%
	Examples of good practice to be shared	1	
	Quality review benchmark results	0	
Average Work Product Score			**33,3%**

By referring to the average objective process value and the average work product value, the total score calculation for the APO11 process is as follows (Calculation Ref):

$$\text{APO11 Score} = \left(\frac{89+33.3}{2}\right)\%$$

$$\text{APO11 Score} = 61.15\%$$

The score from the APO11 process was 61.15% which is included in the L (Largely Achieved) score category. This shows that the APO11 process has been largely achieved with signifies the presence of a systematic approach and substantial accomplishments in the process, although with several weaknesses still present. Therefore, the APO11 Managed Quality process is categorized at Level 1 (Performed). This score shows that the quality management process implemented in CV Gudcare Indonesia Corp is good. However, to ensure continuity and continuous improvement, CV Gudcare Indonesia Corp can identify specific improvement opportunities in the implementation of quality management. A regular evaluation process and continuous monitoring will help identify potential areas that can be further optimized. According to the assessment of the APO1 process, the capability level gap value is 2, as stated in Table 10.

Table 10. APO11 Process Score

APO11	Level					
	0	**1**	**2**	**3**	**4**	**5**
Rating by criteria	F (100%)	L (61.85%)				
Current Level	1					
Expected Level	3					
Gap	2					

 ISSN:2302-8149
e-ISSN:2540-9719

F. Improvement Recommendations

The following are recommendations for improvements to reduce gaps in the APO10 and APO11 process domains which are used to assist in achieving the right balance between information system and the business objectives of CV Gudcare Indonesia Corp, as well as ensuring that IT resources are used effectively to support the achievement of organizational objectives:

1) Recommendations for APO10.01

The performance of the APO10.01 domain is good, but regular review and monitoring still needs to be carried out to maintain its performance, especially in recording and maintaining a list of suppliers and their contracts.

2) Recommendations for APO10.02

Efforts need to be made to ensure the implementation of the rights and responsibilities of all parties engaged in contractual provisions, along with an enhanced examination and assessment of RFIs and RFPs. In this case, documentation and communication are the main keys in working with suppliers.

3) Recommendations for APO10.03

The performance of the APO10.03 domain is good but an evaluation of the contract regarding practices and internal control needs to be carried out as a form of effort to improve organizational performance.

4) Recommendations for APO10.04

The performance of the APO10.04 domain is already very good, but monitoring efforts are still needed so that the organization can maintain its performance, especially on the performance of suppliers to ensure the services provided are in accordance with existing standards and compliance.

5) Recommendations for APO10.05

The performance of the APO10.05 domain is very good, but it is necessary to periodically review supplier performance by establishing and documenting the criteria required by the company.

6) Recommendations for APO11.01

It is necessary to carry out more detailed review and evaluation efforts regarding the efficiency and effectiveness of the management process in order to improve quality. In this case, input from management and internal and external stakeholders is very necessary.

7) Recommendations for APO11.02

The performance of the APO11.02 domain is very good and is at level 4. However, efforts to maintain performance still need to be made, especially in establishing quality management standards, work methods and procedures that run in the organization.

8) Recommendations for APO 11.03

To improve organizational performance, it is necessary to carry out better quality management towards customers. Organizations need to determine and ensure customer needs meet standards. The organization must record these criteria in the Services Level Agreement. In this case, organizations also need to consider customer opinions in order to meet customer expectations.

9) Recommendations for APO 11.04

Quality monitoring, control and review efforts need to be carried out. Organizations need to create quality metrics as a guide in achieving organizational goals.

10) Recommendations for APO 11.05

In order to improve organizational performance in terms of quality management for service development and delivery, organizations must be able to resolve any discrepancies as quickly as possible by communicating this to management and stakeholders so that they can be handled immediately.

11) Recommendations for APO 11.06

The performance of this domain is good but discussion and monitoring efforts are still needed. In this case, the organization needs to provide or develop an integrated platform/application that is able to meet the organization's needs.

5 Conclusion

The COBIT 5 framework can be implemented in all organizations or companies, especially CV Gudcare Indonesia. The audit of the capability level at CV Gudcare Indonesia has succeeded in finding the total score value in the APO10 and APO11 domains which is obtained from the average

value between the objective process and work product. Also obtained were the capability level gap values for each domain in APO10 and APO11. In the APO10 domain, the total score was found to be 61.85%, which shows that the supplier management process implemented in CV Gudcare Indonesia Corp is good. This score is included in the L (Largely Achieved) score category, which indicates that the Managed Suppliers process in APO10 is at Level 1 (Performed). This shows that the process in APO10 has largely been achieved. The capability level gap value produced through the results of the evaluation of the APO10 process which was carried out previously by comparing the current condition and the expected condition is 2. Meanwhile in the APO11 domain the total score value was found to be 61.15%, which shows that the quality management process implemented in CV Gudcare Indonesia Corp is good. This score is included in the L (Largely Achieved) score category, which indicates that the APO11 Managed Quality process is at Level 1 (Performed). This shows that the process in APO11 has largely been achieved. The capability level gap value produced through the results of the evaluation of the APO11 process which was carried out previously by comparing the current conditions and the expected conditions is 2. There are several recommendations for improvements that can be used to reduce the gap in the APO10 and APO11 process domains. This recommendation can also help in achieving a balance between information system and the business objectives of CV Gudcare Indonesia Corp. And in further research, we can add more process domains in both the Governance area and Management area.

Reference

[1] S. Tuerah, "Evaluasi Efektivitas Sistem Informasi Akuntansi Pembelian dan Pengeluaran Kas pada UD Roda Mas Manado," *J. EMBA*, vol. 1, no. 3, pp. 225–232, 2013.

[2] H. A. Salsabila and Iriyadi, "Evaluasi atas Penerapan Sistem Informasi Akademik dan Keuangan terhadap Tingkat Kepuasan Mahasiswa," *JAS-PT (Jurnal Anal. Sist. Pendidik. Tinggi Indones.*, vol. 4, no. 2, p. 137, 2020, doi: 10.36339/jaspt.v4i2.348.

[3] W. S *et al.*, *Audit Sistem Informasi*. Global Eksekutif Teknologi, 2023. [Online]. Available: https://books.google.co.id/books?id=ee69EAAAQBAJ

[4] O'Brien and & Marakas, "Management Information Systems Sixteenth Edition. New York: McGraw-Hill/Irwin," 2013.

[5] J. I. H. Pangemanan, "Memahami Komponen Sistem Informasi serta Unsur dan Tipe-tipenya."

[6] D. F. Murad, E. Fernando, M. Irsan, R. R. Kosala, B. Ranti, and S. H. Supangkat, "Implementation of COBIT 5 Framework for Academic Information System Audit Perspective: Evaluate, Direct, and Monitor," *Proc. ICAITI 2018 - 1st Int. Conf. Appl. Inf. Technol. Innov. Towar. A New Paradig. Des. Assist. Technol. Smart Home Care*, pp. 102–107, 2018, doi: 10.1109/ICAITI.2018.8686700.

[7] N. R. Radliya, A. Hadiana, and I. Afrianto, "Audit Sistem Informasi Manajemen Rumah Sakit (Studi Kasus pada RSUD Kota Tasikmalaya)."

[8] J. Suhartono, "Audit Sistem Informasi." Accessed: Dec. 11, 2023. [Online]. Available: https://sis.binus.ac.id/2021/06/15/audit-sistem-informasi-2/

[9] M. Aziz, M. Jepri, M. Z. Ilman, and Saprudin, "Perancangan Sistem Informasi Persediaan Barang berbasis Web pada PT Stanindo Artha Langgeng menggunakan Metode Agile," vol. 1, no. 4, pp. 801–812, 2023.

[10] M. A. Azis and A. Yoraeni, "Audit Sistem Informasi Persediaan Barang di PT. Karoseri Jaya Mandiri menggunakan Framework Cobit 5," *J. Ilmu Komput. dan Bisnis*, vol. 14, no. 2, pp. 175–181, Nov. 2023, doi: 10.47927/jikb.v14i2.517.

[11] D. D. Kurniawan and T. Sutabri, "Analisis IT Services Management (ITSM) Layanan Sistem Informasi Meteorologi Penerbangan menggunakan Framework Cobit 5", Indonesian Journal of Multidisciplinary on Social and Technology, vol. 1, no. 3, pp. 196–205, 2023,

[12] Information Systems Audit and Control Association., *COBIT 5 : A Business Framework For The Governance and Management of Enterprise IT*. ISACA, 2012.

[13] ISACA, *Self-assessment Guide : Using COBIT 5*. 2013.

[14] A. Wulansari, C. L. Prasetyo, S. Mukaromah, A. Faroqi, E. M. Safitri, and A. R. E. Najaf, "Risk Management Capability Level of Mail Information System in Surabaya Government," *Proceeding - IEEE 8th Inf. Technol. Int. Semin. ITIS 2022*, pp. 363–367, 2022, doi:

10.1109/ITIS57155.2022.10010147.

[15] J. Sihotang, E. Setiawan Panjaitan, R. Yunis, M. Teknologi Informasi, and S. Miskroskil, "Evaluation of Information Technology Governance by using Cobit 5 Framework at Higher Education," *J. Mantik*, vol. 4, no. 3, pp. 2194–2203, 2020.

[16] A. Suprapto and M. Prabowo, "Audit Process Capability Level Information Technology Governance (ITG) di Perguruan Tinggi Keagamaan Islam menggunakan Framework Cobit 5 (Studi Kasus: IAIN," *J. Telemat.*, vol. 15, no. 1, pp. 7–12, 2020, [Online]. Available: https://journal.ithb.ac.id/telematika/article/view/339

[17] Y. Megasyah and A. A. Arifnur, "Academic Information System Security Audits using Cobit 5 Framework Domains Apo12, Apo13 and Dss05," *J. Appl. Eng. Technol. Sci.*, vol. 1, no. 2, pp. 124–135, 2020, doi: 10.37385/jaets.v1i2.79.