

Governance Audit Using COBIT 5 in CV. XYZ on Accounting Information System



Cindy Fadila Anggraini¹, Ni Made Estiyanti², Putri Anugrah Cahya Dewi³
Accounting Information System, STMIK Primakara^{1,3}, University of Debrecen²
Tukad Badung Street No. 135, Renon, South Denpasar, Denpasar – Bali 80226
(0361) 8956085
Indonesia^{1,3}, Hungary²
e-mail: fdlindcy98@gmail.com¹, estiyanti@primakara.ac.id², cahya@primakara.ac.id³,

Author
Notification
04 January
2023
Final Revised
11 January
2023
Published
12 January
2023

To cite this document:

Anggraini, C. F., Estiyanti, N. M., & Dewi, P. A. C. (2023). Governance Audit Using COBIT 5 in CV. XYZ on Accounting Information System. ADI Journal on Recent Innovation, 4(2), 201–209.

DOI : <https://doi.org/10.34306/ajri.v4i2.870>



Abstract

This study aims to determine the results of audits and governance in accounting information systems using COBIT 5 in CV. XYZ. Data collection in this research process uses interview, observation and documentation methods. This research is carried out in stages, starting from determining the needs of the company, determining the scope of identification, the data collection process, determining and assessing the capability level of previously selected IT processes, and providing recommendations based on selected IT processes. This research focuses on the domains EDM02 (Ensuring Achievement of Benefits), APO01 (Managing IT Management Framework), APO04 (Managing Innovation) and APO07 (Managing Human Resources). Based on the results of the evaluation and analysis carried out, it is currently CV. XYZ has an average maturity level of 2.69 or is at level 3 (Established) with an expected maturity level of level 4 (Predictable), so it has an average gap of 1.31 in each of its domains.

Keywords: COBIT 5, Accounting Information Systems, Information System Audits.



1. Introduction

The development of the current era of globalization has caused increasingly fierce competition between companies, where companies are required to be able to provide the best service to increase customer satisfaction and loyalty by considering appropriate strategies to face all problems that occur, as well as competing to compete in achieving their target market[1]. Based on this, the company must increase its business's effectiveness. The company can also increase its added value by innovating and improving to maintain its business conditions, so it needs an accounting information system[2]. An accounting information system is a system used to produce a process used to plan, control and operate a business within a company[3].

Accounting information systems have a very important role in the company's business activities, especially in operational activities carried out by management to make the right decisions[4]. An accounting information system is built to help management process information so that it can be recorded and authorized correctly and accurately and can protect activities within the company effectively and efficiently[5]. The accounting information system has five cycles in it, including the revenue cycle, the expense cycle, the payroll cycle, the production cycle, and the financial cycle[6].

CV. XYZ is an advertising company founded in 2005. CV. XYZ has the vision to be part of the IT development process in Indonesia, receive wide recognition from clients, and maintain its characteristics without compromising consumer satisfaction[7]. The vision will be achieved by CV. XYZ by carrying out its mission, namely controlling quality in a company supported by its resources, creating creative and innovative ideas, providing digital-based interactive communication services to clients, and using Zahir Accounting 6 to record computerized accounting to make it easier to store and obtain information. Based on this, my CV. XYZ realizes that IT has become an important thing to use in evaluating the company's performance processes[8]. Well-managed IT can help companies to determine which parties have the authority and responsibility to make a decision, help show the right procedures for making these decisions, and show the right decisions to be able to help align the company's business with the development of information technology so that the use of information technology itself can be considered effective for the company[9].

2. Theoretical Research

2.1 Information System Audit

An information system audit is an audit process that focuses on computer-based aspects of a company's information systems and modern systems at the level of significance of technology[10]. An information system audit is a process of collecting and evaluating evidence used to determine whether a system can protect and maintain company assets that have been integrated to realize a company's goals through efficient resources[11]. Information system audits are used to evaluate whether the running system follows established procedures through several implementations, such as whether the system can run effectively and efficiently, has good security securities, and has adequate integrity[12].

2.2 Information Technology Governance

Information technology governance is a structure and process used to make information technology decisions at the corporate level to direct the behavior of information technology personnel to suit the desired and ensure achievements in the success of information technology in the context of creating value for a company[13]. Information technology governance is a rule for managing a company, starting from the leadership and organizational structure as well as existing management processes to ensure that the development of information technology carried out can help the company in achieving its goals[14].

2.3 Accounting Information System

An accounting information system is used to collect, record, store, and process accounting data to produce the right information so that it can be used to make decisions[15]. Accounting information systems include people, procedures, data, software, IT infrastructure, internal control, and security[16]. Accounting information systems are data in the form of formulas, notes, or reports that are processed to produce financial information used by

management to manage their company[17]. An accounting information system is used to process transaction data to produce information to plan, control, and operate a business[18].

2.4 COBIT 5

COBIT 5, published by ISACA, is a guide used to carry out IT management within the company to maximize the benefits from the IT investment made so that it can support the realization of the goals of a company that uses it[19]. COBIT is a collection of documentation of best practices issued by ITGI and well received internationally as a control practice over information used by users in linking between business risks within a company and the needs and technical problems posed by IT developments[20]. The characteristic of COBIT is that it has a controlled and measurable process[21]. Its purpose is to provide information to realize company goals by managing existing resources[22].

3. Research Method

Darmadi stated that research instruments are tools used to measure information. Qualitative research instruments are used in the research itself. They can use questionnaires containing a sequence of questions or statements guided in conducting interviews and notebooks to help record the information obtained in the study. The research conducted by this author uses several research instruments, including:

- In the interview guidelines there is a list of questions related to the domain to be researched on the CV. XYZ. In this method, the author will conduct a question and answer directly to the CV leader. XYZ by asking twenty-two questions contained in the COBIT 5 framework. Assessment of the maturity level of the questionnaire results given based on the capability level process consisting of levels 0-5.
- A questionnaire containing various questions or statements related to the domain of the problem will be studied to eleven respondents, consisting of leaders, managers, team heads and Zahir Accounting 6 user staff.
- Observation is data collection by observing and recording data from company activities, in this study observations were carried out during self-assessment using the COBIT 5 framework. The results of these observations will be research material and can be used as a basis for evaluation.
- The data collection method with this documentation is carried out by collecting data and information obtained from the archives owned by CV. XYZ. This technique is used to obtain data on documents, records, procedures and internal control systems.
- Literature Studies are carried out by searching and reading literature that has to do with writing material. These theories come from books, journals, ebooks and research that supports the writing of this journal.

4. Result and Discussion

Based on the conclusions and analysis previously presented, the researcher provides suggestions and evaluations related to improving the management of IT governance at CV. XYZ :

- a. CV. XYZ can carry out the recommendations given by researchers to increase the level of capability of the EDM02, AP001, AP004 and AP007 process domains.
- b. CV. XYZ suggests paying attention to the amount of available resources available and the allocation of these resources in order to meet the needs in carrying out business processes.
- c. Future research can use different scale measurements or uses, but the domains are still combined with the COBIT 5 framework so that they can produce a more complete evaluation.

4.1 Domain Selection

The process of selecting priority domains from several domains that have been selected is carried out by selecting domains that have more than five P or Primary numbers. The summary of the selected COBIT 5 processes based on the priorities that are the evaluation points are EDM02 (Ensuring Benefit Achievement), APO01 (Managing IT Management Framework), APO04 (Managing Innovation), and APO07 (Managing Human Resources).

Figure 23—Mapping COBIT 5 IT-related Goals to Processes

		IT-related Goal																	
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	
		Financial					Customer			Internal							Learning and Growth		
COBIT 5 Process																			
Evaluate, Direct and Monitor	EDM01 Ensure Governance Framework Setting and Maintenance	P	S	P	S	S	S	P		S	S	S	S	S	S	S	S	S	
	EDM02 Ensure Benefits Delivery	P	S		P	P	P	S			S	S	S	S	S	S	S	P	
	EDM03 Ensure Risk Optimisation	S	S	S	P		P	S	S		P			S	S	P	S	S	
	EDM04 Ensure Resource Optimisation	S		S	S	S	S	S	S	P		P		S			P	S	
	EDM05 Ensure Stakeholder Transparency	S	S	P			P	P						S	S	S	S	S	
Align, Plan and Organise	APO01 Manage the IT Management Framework	P	P	S	S		S			P	S	P	S	S	S	S	P	P	
	APO02 Manage Strategy	P		S	S	S		P	S	S		S	S	S	S	S	S	P	
	APO03 Manage Enterprise Architecture	P		S	S	S	S	S	S	P	S	P	S					S	
	APO04 Manage Innovation	S		S	P			P	P		P	S		S				P	
	APO05 Manage Portfolio	P		S	S	P	S	S	S	S		S		P				S	
	APO06 Manage Budget and Costs	S		S	S	P	P	S	S			S		S					
	APO07 Manage Human Resources	P	S	S	S			S	S	S	P			P	P		S	P	
	APO08 Manage Relationships	P	S	S	S	S	P			S		S		P	S		S	P	
	APO09 Manage Service Agreements	S		S	S	S	P	S	S	S	S			S	S	P	S	S	
	APO10 Manage Suppliers		S		P	S	P	S	P	S	S					S	S	S	S
	APO11 Manage Quality	S	S		S	P		P	S	S	S				P	S	S	S	S
	APO12 Manage Risk	P		P		P	S	S	S	P					P	S	S	S	S
	APO13 Manage Security	P		P		P	S	S	S	P						P			

Picture 1. 23—Mapping COBIT 5 IT-related Goals to Processes

APO07	2,91	4,00	1,09
Total			5,25
Average			1,31

4.3 Findings and Recommendations

Findings	Recommendations	Information
In carrying out their work, employees are still often not in accordance with predetermined work targets	Assessing employee performance, as well as evaluating employee performance regularly	Creation of employee performance appraisal form and workload analysis form
The resources to be used are often unavailable, as well as not updating information that takes a long time to delay some work	Check the tools regularly, so that they can increase stock inventory (if needed), and provide a period of time to update information regularly to minimize the process of delaying work	Making stock forms (opname) and scheduling important information updates and making SOPs for fulfilling information
The communication carried out is still not good so that there are often <i>missed</i> communication between the leadership and its members	Conducting morning meetings to discuss obstacles to work that has been completed and to be done, as well as holding evaluation meetings once a month between team heads on a regular basis	Creation of communication SOPs
Lack of operational standards with guidelines	Operational standards that are currently applied only in oral form, should be stated in written form to make it easier to remember and also applied by each employee	Making SOPs for operational management in writing and socialized to employees
Does not yet have a standard assessment of infrastructure and work environment	It is necessary to have an assessment form on infrastructure and work environment that is distributed to employees periodically, maybe it can be given every six months, in order to improve the work environment and employee productivity	Creation of employee satisfaction assessment form
There is no limit on the number of variations used in analyzing the management of IT management frameworks	Assessing employee performance, as well as evaluating employee performance regularly. Based on this, it will be formed by itself how the right variations are used in the assessment process for the management of IT management frameworks	Creation of employee performance appraisal form

	that are in accordance with the company	
It has not improved the process of managing the IT management framework based on new technological developments	Analyze frameworks and revisions to adapt to new technologies and then create standards for monitoring and evaluation	Creation of monitoring and evaluation forms for IT frameworks, especially on operational tools
There is no assessment of the competence and role of employees in carrying out the innovation management process	Compile KPIs that contain innovation targets then monitor and evaluate with KPIs that have been made	KPI form creation

5. Conclusion & Advice

Based on the results of the evaluation and analysis carried out, it can be concluded that:

- The current maturity value with an average of 2.69 which is at level 3 (Established) and the maturity level expected by CV. XYZ is at level 4 (Predictable) and with an average gap analysis result of 1.31.
- In improving the current governance or maturity level to the expected maturity level, the recommendations that can be submitted are as follows:
 - The author recommends creating an employee performance appraisal form and a workload evaluation form aimed at CV. XYZ can conduct regular employee performance assessments.
 - The author recommends making stock items (opname) aimed at CV. XYZ is easier to check resources regularly, so that it can increase stock inventory (if needed).
 - The author recommends scheduling important information updates, so that work that requires such information is not delayed too long through the creation of SOPs for information fulfillment.
 - The author recommends making communication SOPs that aim to make the communication carried out better than before, so as to reduce communication misses that often occur. This can make it easier to monitor the progress of the work of each division or team in the company.
 - The author recommends making operational management SOPs in writing that aim to make them easier to remember and apply by each employee on the CV. XYZ
 - The author recommends creating an employee satisfaction form that aims to create a CV. XYZ can improve the quality of the work environment and the productivity of its employees.

Based on the conclusions and analysis previously presented, the author provides suggestions and evaluations related to improving IT governance management on CV. XYZ :

- CV. XYZ can make recommendations given by researchers to improve the capability level of the process domains EDM02, APO01, APO04 and APO07.
- CV. XYZ is advised to pay attention to the amount of availability of existing resources and the allocation of these resources in order to meet the needs in carrying out business processes.
- Further research can use measurement scales or the use of different domains, but still combined with the COBIT 5 framework so that it can produce a more complete evaluation.

References

- [1] A. J. Fernandes, H. Hartono, and C. Aziza, "Assessment IT governance of human resources information system using COBIT 5," *Int. J. Open Inf. Technol.*, vol. 8, no. 4, pp. 59–63, 2020.
- [2] Q. A. Al-Fatlawi, D. S. Al Farttoosi, and A. H. Almagtome, "Accounting information security and it governance under cobit 5 framework: A case study," *Webology*, vol. 18, no. Special Issue on Information Retrieval and Web Search, pp. 294–310, 2021.
- [3] L. N. Amali, M. R. Katili, S. Suhada, and L. Hadjaratie, "The measurement of maturity level of information technology service based on COBIT 5 framework," *TELKOMNIKA (Telecommunication Comput. Electron. Control.)*, vol. 18, no. 1, pp. 133–139, 2020.
- [4] R. Y. Sianida, F. N. Afiana, and R. Wahyudi, "IS Governance Evaluation Using COBIT 5 Framework on the Central Statistics Agency of Banyumas District," *J. Comput. Sci. Eng.*, vol. 1, no. 1, pp. 1–9, 2020.
- [5] A. D. Dwipayana, N. L. Darmayanti, and B. Wijonarko, "Challenges and Opportunities for Leadership and Talent Development Graduates of Cadets," *ADI J. Recent Innov.*, vol. 4, no. 2, pp. 122–127, 2023.
- [6] P. N. A. Putra, N. M. Estiyanti, and I. G. J. E. Putra, "Audit Tata Kelola Sistem Informasi Menggunakan Framework COBIT 5 Studi Kasus Pada LPD Desa Temesi," in *Prosiding Seminar Nasional Ilmu Sosial dan Teknologi (SNISTEK)*, 2022, no. 4, pp. 423–427.
- [7] K. Sofa, T. L. M. Suryanto, and R. R. Suryono, "Audit Tata Kelola Teknologi Informasi Menggunakan Kerangka Kerja COBIT 5 Pada Dinas Pekerjaan Umum Kabupaten Tanggamus," *J. Teknol. Dan Sist. Inf.*, vol. 1, no. 1, pp. 39–46, 2020.
- [8] I. M. M. Matin, L. K. W. Arini, and L. K. Wardhani, "Analisis Keamanan Informasi Data Center Menggunakan Cobit 5," 2020.
- [9] S. Hartati, A. Syamsuadi, and L. Elvitaria, "Tranformasi Manajemen Universitas menggunakan Framework Cobit 5 di Era Industri 4.0," *Ganaya J. Ilmu Sos. Dan Hum.*, vol. 3, no. 1, pp. 163–174, 2020.
- [10] H. Tussa'diah and N. Y. Kartika, "Critical Discourse Analysis on Linguistic Ideology of The Netizens CommenTussa'diah, Halimah, and Nursyah Yuni Kartika. 'Critical Discourse Analysis on Linguistic Ideology of The Netizens Comments.' ADI Journal on Recent Innovation, vol. 4, no. 2, 2023, p," *ADI J. Recent Innov.*, vol. 4, no. 2, pp. 110–121, 2023.
- [11] M. J. Jasmin, F. Ulum, and M. Fadly, "Analisis Sistem Informasi Pemasaran Pada Komunitas Barbershops Menggunakan Framework COBIT 5 Domain Deliver Service And Support (DSS)," *J. Teknol. dan Sist. Inf.*, vol. 2, no. 3, pp. 66–80, 2021.
- [12] N. P. A. Awiawati and N. M. Estiyanti, "Evaluasi Tata Kelola Quickbooks Software Pada CV Seni Echo Menggunakan Cobit 5," *Jutisi J. Ilm. Tek. Inform. dan Sist. Inf.*, vol. 10, no. 2, pp. 217–230, 2021.
- [13] M. W. A. Bawono, M. A. Soetomo, T. Apriatin, and W. Wicaksono, "Analysis corellation of the Implementation Framework COBIT 5, ITIL V3 and ISO 27001 for ISO 10002 Customer satisfaction," *Int. J. New Technol. Res.*, vol. 3, no. 1, pp. 34–41, 2020.
- [14] D. Pasha, A. thyo Priandika, and Y. Indonesian, "Analisis Tata Kelola It Dengan Domain Dss Pada Instansi Xyz Menggunakan Cobit 5," *J. Ilm. Infrastruktur Teknol. Inf.*, vol. 1, no. 1, pp. 7–12, 2020.
- [15] A. Dudhat and M. A. Abbasi, "Discussion of Agile Software Development Methodology and its Relevance to Software Engineering," *ADI J. Recent Innov.*, vol. 3, no. 1, pp. 105–114, 2021.
- [16] N. M. Sarminiati, P. A. C. Dewi, and N. M. Estiyanti, "Analisis Tata Kelola Sistem Informasi Koperasi Simpan Pinjam Berbasis Framework COBIT 5," *Jutisi J. Ilm. Tek. Inform. dan Sist. Inf.*, vol. 11, no. 3, pp. 613–626, 2022.
- [17] N. Zainuddin, W. W. Winarno, N. Ningsi, Y. P. Pasrun, and M. Muliyadi, "IT governance evaluation at the population and civil registry office in Kolaka district using COBIT 5 framework," *Regist. J. Ilm. Teknol. Sist. Inf.*, vol. 6, no. 2, pp. 86–95, 2020.
- [18] T. Rahayu, N. Matondang, and B. Hananto, "Audit Sistem Informasi Akademik Menggunakan Metode Cobit 5," *J. Teknol. Inf. dan Pendidik.*, vol. 13, no. 1, pp. 117–123, 2020.

- [19] A. S. Bist, V. Agarwal, Q. Aini, and N. Khofifah, "Managing Digital Transformation in Marketing:" Fusion of Traditional Marketing and Digital Marketing," *Int. Trans. Artif. Intell.*, vol. 1, no. 1, pp. 18–27, 2022.
- [20] A. Justitia, B. Zaman, and D. K. Putra, "Evaluating the quality of a help-desk complaint management service using six-sigma and COBIT 5 framework," in *AIP Conference Proceedings*, 2021, vol. 2329, no. 1, p. 50009.
- [21] R. E. Santoso, A. G. Prawiyogi, U. Rahardja, F. P. Oganda, and N. Khofifah, "Penggunaan dan Manfaat Big Data dalam Konten Digital," *ADI Bisnis Digit. Interdisiplin J.*, vol. 3, no. 2, pp. 88–91, 2022.
- [22] S. Tangprasert, "A study of information technology risk management of government and business organizations in Thailand using COSO-ERM based on the COBIT 5 framework," *J. Appl. Sci.*, vol. 19, no. 1, pp. 13–24, 2020.
- [23] Y. Kusumaningrum, "Adoption of COBIT 5 Framework in Risk Management for Startup Company," *Turkish J. Comput. Math. Educ.*, vol. 12, no. 3, pp. 1446–1452, 2021.
- [24] S. Surjandy, E. Fernando, A. R. Condrobimo, and M. R. Yudho, "Evaluasi Penerapan IT Governance pada Bank berdasarkan Cobit 5 (Studi Kasus pada Bank XYZ)," *J. Teknol. Inf. dan Ilmu Komput.*, vol. 7, no. 3, pp. 453–460, 2020.
- [25] B. Rawat, N. Mehra, A. S. Bist, M. Yusup, and Y. P. A. Sanjaya, "Quantum Computing and AI: Impacts & Possibilities," *ADI J. Recent Innov.*, vol. 3, no. 2, pp. 202–207, 2022.