



Performance Analysis of the E-Government Website of the Ministry of Religious Affairs of Cirebon Regency Using the Cobit 5 Framework

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Abstract

Information systems have a very important role in providing excellence in the business world and the world of government. Where the investment in information systems is getting bigger but does not support the achievement of the goals and strategies expected by the organization. For this reason, information technology governance is needed. COBIT 5 is one of the means to help organizations create optimal value in managing information technology governance so that organizations can finally achieve their vision and mission. COBIT 5 allows information technology to carry out overall governance and services, manage the business from end to end, be responsible for the entire area of information technology functions. The Ministry of Religious Affairs of Cirebon Regency realizes that to achieve its business goals, technology is needed that can support the running of the government process. Therefore, the use of information technology is very important for human resources. The research method carried out by the author is to conduct interviews and direct observations to disseminate questionnaires to the Ministry of Religion of Cirebon Regency with the aim of obtaining accurate information on the use of the website of the Ministry of Religion of Cirebon Regency. Based on the research that has been carried out by paying attention to 14 respondents to be a sample, the value of the use of the Cirebon Regency Ministry of Religion website emerges, namely the value of the IT process in each domain, namely in 5 cobit domains, all of which are assessed as a whole using the EDM domain, then the Cirebon Regency Ministry of Religion website is still at Level 1 (Performed Process), which already exists but has not been used optimally.

Keywords: Cobit 5, Analisis Website, E-Government



A. Introduction

Almost all companies and governments in this era of globalization have used technology to carry out their governance processes, because information technology is currently very important for companies and governments to achieve their goals and strategies (Aurabillah et al., 2024; Teresya et al., 2022).

Information Technology drives success in the 21st century. On the other hand, the governance and challenges of government and corporate services have become increasingly complex, this causes all companies to really anticipate all the weaknesses of their information systems. Therefore, it is necessary to audit the information system running in the company. There are many ways that can be taken to audit information systems, but this time the audit will focus more on the use of COBIT (Purwaningrum et al., 2021; Sahibudin et al., 2008; Alfaraj & Qin, 2011; Ilori et al., 2024).

The Ministry of Religious Affairs of Cirebon Regency is a government office that has used information systems for smooth operations and strategic goals in achieving the success of the government's vision and mission. Therefore, the author conducted an assessment on the governance of the use of information systems at the office of the Ministry of Religion of Cirebon Regency using the COBIT Method 5. The purpose of the assessment of information system governance is expected to be an evaluation material for the use of the information system of the Ministry of Religion of Cirebon Regency so that in the future it can make improvements (Fuada, 2019; Ikhsan et al., 2021; Khairani et al., 2025; Wabiser & Singgalen, 2022).

In addition, the results of the assessment of information system governance are based on the following Capability Level:

1. Level 0, Incomplete Process ± Incomplete Process;
2. Level 1, Performed Process ± Process executed (one attribute); At this stage, the organization has implemented but has not yet achieved the proposal.
3. Level 2, Managed Process ± Orderly process (two attributes); At this stage, the organization has carried out the IT process and achieved its goals in a well-managed manner, management here means its implementation through the process of planning, evaluation and adjustment for the better
4. Level 3, Established Process ± Fixed process (two attributes); At this stage, the organization has implemented IT processes and standardized.
4. Level 4, Predictable Process ± At this stage, the organization has carried out the IT implementation process within the specified limits to achieve the expected process outcomes.
5. Level 5, Optimising Process - Optimization Process (two attributes); At this stage, the organization has implemented IT processes and continues to improve continuously

B. The First Aspect of the Discussion, As the Second Section

The capability model is a measuring tool to determine the information technology process at the Ministry of Religion of Cirebon Regency. This measurement process is carried out to determine the governance of information technology and in this measurement activity will result in an assessment of the current condition of the entire cobit domain (Khther & Othman, 2013; Dhiaaul et al., 2023).

In the measurement of the capability of this model, data was collected through a questionnaire. The sample of respondents involved in filling out the questionnaire was in the information technology unit and users from other units who directly operate information technology on a daily basis and know problems related to the selected process. The respondents used in this study amounted to 14, because of these 14 respondents were able to represent the whole of the sample data needed (Richards & Rodgers, 1988; Burke et al., 2017).

Based on the results of the calculation of 40 COBIT processes that were evaluated, namely in all domains, the acquisition of the capability level that has been achieved by the Ministry of Religious Affairs of Cirebon Regency can be seen in the following table.

1. Domain EDM (Evaluate, Direct and Monitor)

The maturity level of the assessment of 14 respondents in the **EDM02 domain**, which is 2, shows that it is in the position of **Level 2 (Managed Process)**. This means that the process has been successfully carried out, but the existing procedures have not been implemented properly and consistently. However, if assessed as a whole using the EDM domain, the website of the Ministry of Religion of Cirebon Regency is still at **Level 1 (Performed Process)**, which already exists but has not been used optimally (Ho & Newman, 2003; Qudeiri et al., 2020).

Domain				Who does it?			Tingkat Kematangan	Jumlah
	IT	Other	Outside	Do Not Know	Audited	Formality		
EDM01	1	1	1	1	1	1	1	5
EDM02	2	2	2	2	2	2	2	12
EDM03	2	1,7	2	2	1	1	1,7	10
EDM04	1	0,8	1	1	1	0	0,8	5
EDM05	2	1,5	2	1	1	1	1,5	9
Jumlah								41
Rata-Rata Proses								8,2
Rata-Rata Sub Proses								1,64

2. Domain APO (Align, Plan and Organise)

The maturity level of the assessment of 14 respondents in the **APO01 and APO10** domains , namely 2, shows that it is in **the Level 2 (Managed Process)** position. This means that the process has been successfully carried out, but the existing procedures have not been implemented properly and consistently. However, if assessed as a whole using the APO domain, the website of the Ministry of Religious Affairs of Cirebon Regency is still at **Level 1 (Performed Process)**, which already exists but has not been used optimally (Handayani et al., 2023; Zai et al., 2023).

Domain	Who does it?						Tingkat Kematangan	Jumlah
	IT	Other	Outside	Do Not Know	Audited	Formality		
APO01	2	2	2	2	2	2	2	12
APO02	1	2	1	2	1	1	1,3	8
APO03	1	1	1	1	1	0	0,8	5
APO04	1	1	1	1	1	0	0,8	5
APO05	1	1	1	1	1	1	1	6
APO06	1	1	1	1	0	0	0,7	4
APO07	1	0	1	1	0	0	0,5	3
APO08	1	1	1	1	1	1	1	6
APO09	2	2	2	2	2	1	1,8	11
APO10	2	2	2	2	2	2	2	12
APO11	1	1	1	1	1	0	0,8	5
APO12	1	1	1	1	1	1	1	6
APO13	1	1	2	1	2	1	1,3	8
Jumlah								91
Rata-Rata Proses								7,00
Rata-Rata Sub Proses								1

3. Domain BAI (Build, Acquire and Operate)

The maturity level of the assessment of 14 respondents in the **BAI02 domain** , which is 2.17, shows that it is in the **Level 2 (Managed Process)** position. This means that the process has been successfully carried out, but the existing procedures have not been implemented properly and consistently. However, if assessed as a whole using the BAI domain, the website of the Ministry of Religious Affairs of Cirebon Regency is still at **Level 1 (Performed Process)**, which already exists but has not been used optimally (Fernando et al., 2023; Alfarisy & Sutabri, 2023).

Domain	Who does it?	Jumlah
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	IT	Other	Outside	Do Not Know	Audited	Formality	Tingkat Kematangan	
BAI01	2	1	2	2	2	1	1,67	10
BAI02	2	2	2	2	2	3	2,17	13
BAI03	2	2	1	2	2	2	1,83	11
BAI04	2	2	1	2	1	2	1,67	10
BAI05	2	1	2	1	2	1	1,5	9
BAI06	2	2	1	2	1	1	1,5	9
BAI07	2	1	2	1	2	2	1,67	10
BAI08	2	2	2	2	1	1	1,67	10
BAI09	2	1	2	2	2	2	1,83	11
BAI10	2	2	2	1	1	2	1,67	10
							Jumlah	101
							Rata-Rata Proses	10,1
							Rata-Rata Sub Proses	1,01

4. Domain DSS (Deliver, Service and Support)

The maturity level and Domain Level of DSS from the assessment of 14 respondents in the **DSS02** domain is 1.67 while for the whole it is 1.14 indicating that it is in the **position of Level 1 (Performed Process)** (Suryanto et al., 2023).

Domain	Who does it?						Tingkat Kematangan	Jumlah
	IT	Other	Outside	Do Not Know	Audited	Formality		
DSS01	1	1	2	1	1	1	1,17	7
DSS02	2	2	2	1	2	1	1,67	10
DSS03	1	1	1	1	1	2	1,17	7
DSS04	0	1	1	1	1	0	0,67	4
DSS05	1	1	1	1	1	1	1	6
							Jumlah	41
							Rata-Rata Proses	6,83
							Rata-Rata Sub Proses	1,14

5. Domain MEA (Monitor, Evaluate and Assess)

The maturity level of the assessment of 14 respondents in the **MEA03 domain** , which is 1.5, is at **Level 1 (Performed Process)**. However, if assessed as a whole using the MEA domain, the website of the Ministry of Religious Affairs of Cirebon Regency is still at **Level 2 (Managed Process)**, which means that the process has been successfully carried out, but the existing procedures have not been implemented properly and consistently (Windasari et al., 2022).

Domain	Who does it?						Tingkat Kematangan	Jumlah
	IT	Other	Outside	Do Not Know	Audited	Formality		
MEA01	1	1	1	1	1	1	1	6
MEA02	1	1	1	1	1	1	1	6
MEA03	1	2	1	1	2	2	1,5	9
							Jumlah	21
							Rata-Rata Proses	7
							Rata-Rata Sub Proses	2,33

Improvement Strategies

For the management of information technology in the government office of the Ministry of Religion of Cirebon Regency so that it is better and can be maintained from the results of the values obtained, the author provides recommendations for the improvement strategy of the Ministry of Religion of Cirebon Regency as follows:

1. It is necessary to have an IT team or IT division to create a mature program inside to support the website of the Ministry of Religion of Cirebon Regency to be more *user-friendly*.
2. Services on the website are made more transparent so that services to the public are easier

E. Concluding Remarks

Based on the analysis and assessment process of the level of information technology governance capability in the 5 COBIT 5 domains are as follows:

1. From the discussion that has been reviewed, we can see that the use of information systems has not been maintained, optimizing the problem information system properly. Information systems know what to do with if information technology is not being used properly
2. From the results of the assessment of 5 domains, only the MEA (Monitor, Evaluate and Assess) domain has a capability level of 2.33, which means that at this stage the organization has implemented but has not achieved the maximum goal in the use of information systems
3. While the APO domain has the lowest level capability value, which is 1, which means that the information system is already owned but not yet optimal.
4. However, it is good for the Ministry of Religion of Cirebon Regency to start designing an application that is more suitable for the government so that it can be used optimally.

5. Conducting agreements and monitoring by engineers to fill in the task of categorizing complaints from the application.

BIBLIOGRAPHY

- Alfaraj, H. M., & Qin, S. (2011). Operationalising CMMI: Integrating CMMI and CoBIT perspective. *Journal of Engineering, Design and Technology*, 9(3), 323–335. <https://doi.org/10.1108/17260531111179933/FULL/XML>
- Alfarisy, A., & Sutabri, T. (2023). Perancangan Manajemen Layanan Pengajuan Cuti Berbasis It Menggunakan Framework Cobit 5 Domain Build, Acquire And Implement (Bai) Pada Cv Profecta Perdana. *Indonesian Journal of Multidisciplinary on Social and Technology*, 1(2), 110–114. <https://doi.org/10.31004/ijmst.v1i2.124>
- Aurabillah, B., Putri, L. A., Fadhlilla, N. C., & Wulansari, A. (2024). Implementasi Framework Iso 27001 sebagai Proteksi Keamanan Informasi dalam Pemerintahan (Systematic Literature Review). *JATI (Jurnal Mahasiswa Teknik Informatika)*, 8(1), 454–460. <https://doi.org/10.36040/JATI.V8I1.8736>
- Burke, A., Lam, C. N., Stussman, B., & Yang, H. (2017). Prevalence and Patterns of Use of Mantra, Mindfulness and Spiritual Meditation Among Adults in the United States. *BMC Complementary and Alternative Medicine*, 17(1), 1–18. <https://doi.org/10.1186/s12906-017-1827-8>
- Dhiaaul, Z., Washilatul Arba'ah, K., Utami, E., Muhammad, A. H., & Yogyakarta, A. (2023). Information & Technology Audit of E-Government Using Cobit A Literature Review. *JIKO (Jurnal Informatika Dan Komputer)*, 6(1), 21–27. <https://doi.org/10.33387/JIKO.V6I1.5606>
- Fernando, E., Jullend Gatc, & Yuhefizar, Y. (2023). Evaluasi Kapabilitas Sistem Informasi Pasien ICU dan HCU Menggunakan COBIT 5 dengan Domain BAI. *Journal of Applied Computer Science and Technology*, 4(1), 27–33. <https://doi.org/10.52158/jacost.v4i1.451>
- Fuada, S. (2019). Incident Management of Information Technology in the Indonesia Higher Education based on COBIT Framework: A Review. *EAI Endorsed Transactions on Energy Web*, 6(22), e3–e3. <https://doi.org/10.4108/EAI.13-7-2018.156387>
- Handayani, R., Handayani, R., Utami, E., & Luthfi, E. T. (2023). Systematic Literature Review on Auditing Information Technology Risk Management Using the COBIT Framework. *Prisma Sains: Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram*, 11(4), 1028–1036. <https://doi.org/10.33394/j-ps.v11i4.8871>
- Ho, K. H., & Newman, S. T. (2003). State of the art electrical discharge machining (EDM). *International Journal of Machine Tools and Manufacture*, 43(13), 1287–1300. [https://doi.org/10.1016/S0890-6955\(03\)00162-7](https://doi.org/10.1016/S0890-6955(03)00162-7)

- Ikhsan, M., Ikhsan, M., Widodo, A. P., & Adi, K. (2021). Systematic Literature Review on Corporate Information Technology Governance in Indonesia using Cobit 2019. *Prisma Sains : Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram*, 9(2), 354–364. <https://doi.org/10.33394/j-ps.v9i2.4370>
- Ilori, O., Nwosu, N. T., & Naiho, H. N. N. (2024). A comprehensive review of it governance: effective implementation of COBIT and ITIL frameworks in financial institutions. *Computer Science & IT Research Journal*, 5(6), 1391–1407. <https://doi.org/10.51594/CSITRJ.V5I6.1224>
- Khairani, A., Aliyah, D. R., Bangun, M. H. B., Bangun, Y. R. B., & Sari, M. N. (2025). Literature Review of Library Information System Audit Using COBIT 5 Framework. *International Journal of Economic Research and Financial Accounting*, 3(2). <https://doi.org/10.55227/IJERFA.V3I2.272>
- Khther, R. A., & Othman, M. (2013). Cobit Framework as a Guideline of Effective it Governance in Higher Education: A Review. *International Journal of Information Technology Convergence and Services*, 3(1), 21–29. <https://doi.org/10.5121/ijitcs.2013.3102>
- Purwaningrum, O., Nadhiroh, B., & Mukaromah, S. (2021). Literature Review Audit Sistem Informasi Menggunakan Kerangka Kerja Cobit 5. *Jurnal Informatika Dan Sistem Informasi*, 2(3), 587–595. <https://doi.org/10.33005/jifosi.v2i3.409>
- Qudeiri, J. E. A., Zaiout, A., Mourad, A. H. I., Abidi, M. H., & Elkaseer, A. (2020). Principles and Characteristics of Different EDM Processes in Machining Tool and Die Steels. *Applied Sciences* 2020, Vol. 10, Page 2082, 10(6), 2082. <https://doi.org/10.3390/APP10062082>
- Richards, J. C., & Rodgers, T. (1988). Approaches and Methods in Language Teaching: a description and analysis . Cambridge: Cambridge University Press, 1986. In *The Canadian Modern Language Review* (Vol. 44, Issue 3). Cambridge University Press. <https://doi.org/10.3138/cmlr.44.3.551>
- Sahibudin, S., Sharifi, M., & Ayat, M. (2008). Combining ITIL, COBIT and ISO/IEC 27002 in order to design a comprehensive IT framework in organizations. *Proceedings - 2nd Asia International Conference on Modelling and Simulation*, AMS 2008, 749–753. <https://doi.org/10.1109/AMS.2008.145>
- Suryanto, T. L. M., Pratita, A., Nurhayati, E., Anidew, N., & Elfaretta, S. S. (2023). A Literature Review: Implementation of Information Technology Governance in Indonesia. *Inform : Jurnal Ilmiah Bidang Teknologi Informasi Dan Komunikasi*, 8(2), 111–115. <https://doi.org/10.25139/INFORM.V8I2.4761>
- Teresya, R., Rahmah Nabiilah, R., Tunnajah, S., & Penulis, K. (2022). Literature Review E-Commerce: Profitabilitas, Tekanan Eksternal dan

- Kemudahan Pengguna. *Jurnal Ekonomi Manajemen Sistem Informasi*, 3(4), 474-484. <https://doi.org/10.31933/JEMSI.V3I4.979>
- Wabiser, Y. D., & Singgalen, Y. A. (2022). An Evaluation of Control Objective for Information Related Technology (COBIT) 4.0 or 4.1: Systematic Literature Review. *Journal of Information Systems and Informatics*, 4(2), 300-320. <https://doi.org/10.51519/JOURNALISI.V4I2.255>
- Windasari, I. P., Rochim, A. F., Alfiani, S. N., & Kamalia, A. (2022). Audit Tata Kelola Teknologi Informasi Domain Monitor, Evaluate, and Asses dan Deliver, Service, Support Berdasarkan Framework COBIT 2019. *J. Sistem Info. Bisnis*, 11(2), 131-138. <https://doi.org/10.21456/vol11iss2pp131-138>
- Zai, A., Hendi, M. A., & Nasiri, A. (2023). Tinjauan Literatur Audit Teknologi Informasi pada Cobit 2019 Fokus Domain Apo14. *Jurnal Informatika Teknologi Dan Sains (Jinteks)*, 5(4), 607-611. <https://doi.org/10.51401/JINTEKS.V5I4.3507>