

## PERANCANGAN ALAT UKUR TINGKAT KAPABILITAS MANAJEMEN SDM BERDASARKAN COBIT 5 DOMAIN APO07

### DESIGN OF MEASUREMENT TOOL FOR HUMAN RESOURCE MANAGEMENT CAPABILITY LEVEL BASED ON COBIT 5 DOMAIN APO07

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#### Abstrak

Sumber daya manusia merupakan salah satu faktor yang menunjang kesuksesan proses bisnis. Adanya sumber daya manusia yang memadai harus dikelola dengan baik agar hasilnya maksimal. Salah satu cara mengukur keberhasilan dalam manajemen sumber daya manusia ini adalah melalui audit. Salah satu penilaian audit yang terkait dengan hal ini adalah COBIT 5 domain *Align, Plan and Organise*. Beberapa kebijakan dan aturan yang terkait dengan manajemen sumber daya manusia telah tercatat, terproses, dan terdokumentasikan dengan baik di lembaga XYZ, terutama yang berkaitan dengan evaluasi performa kinerja pegawainya. Penelitian ini bertujuan untuk merancang alat ukur manajemen sumber daya manusia yang sesuai dengan domain APO07 pada COBIT5. APO07 dipilih karena merupakan domain yang berkaitan dengan IT-related Goals nomor 16 yaitu *Competent and Motivated business and IT Personnel*. Dari penelitian ini akan dihasilkan alat ukur tingkat kapabilitas manajemen sumber daya manusia yang berdasarkan pada *Process Assessment Model* (PAM) COBIT 5 yang kedepannya dapat digunakan Lembaga XYZ untuk melakukan pengukuran terkait hal tersebut. Alat ukur ini juga bisa digunakan peneliti lain yang memiliki permasalahan terkait manajemen sumber daya manusia.

**Kata kunci:** manajemen sumber daya manusia, COBIT 5, domain, APO07, lembaga XYZ.

#### Abstract

*Human resources are one of the factors that support the success of business processes. The existence of adequate human resources must be managed properly so that the results can be maximized. One way to measure success in human resource management is through an audit. One of the audit assessments related to this is COBIT 5 Align, Plan and Organize domain. Several policies and regulations related to human resource management have been recorded, processed, and well-documented at the XYZ institution, especially those related to evaluating the performance of its employees. This research aims to design a measuring tool for human resource management according to the APO07 domain in COBIT5. APO07 was chosen because it is a domain related to IT-related Goals number 16, namely Competent and Motivated business and IT Personnel. This research will produce a measuring tool for the level of human resource management capability based on the COBIT 5 Process Assessment Model (PAM) which XYZ Institute can use in the future to make measurements related to this. This measuring tool can also be used by other researchers who have problems related to human resource management.*

**Keywords:** human resource management, COBIT 5, domain, APO07, XYZ institution.

## 1. PENDAHULUAN

Pada era serba digital ini teknologi informasi berkembang pesat. Penerapan teknologi bahkan sudah menjadi tuntutan yang harus dipenuhi dalam suatu organisasi atau perusahaan agar tujuan yang sudah mereka rencanakan tidak mengalami kendala[1]. Adanya teknologi, terutama teknologi informasi menyebabkan aktivitas yang semula dilakukan secara konvensional menjadi serba digital di era ini[2].

Teknologi informasi mempengaruhi perusahaan di segala segmen, salah satunya terkait manajemen SDM. Manajemen SDM dirancang untuk menyediakan personel yang sesuai dengan porsi dan tempat di dalam sebuah organisasi ketika organisasi tersebut membutuhkannya[3]. Manajemen sumber daya manusia dapat berdampak negatif untuk pencapaian tujuan organisasi dan bisa juga berpengaruh pada kepuasan karyawan[4].

Pengelolaan sumber daya manusia ini juga dipraktikkan di lembaga XYZ. Sebagian proses telah berjalan baik pada lembaga ini, terutama yang berkaitan dengan evaluasi performa kinerja pegawainya. Sejumlah dokumen yang berhubungan dengan manajemen SDM telah terdokumentasikan. Lembaga XYZ sebenarnya telah memiliki standar untuk mengelola sumber daya manusia akan tetapi hanya sekedar mengandalkan ingatan dari pegawai intinya. Maka dari itu, proses audit perlu dilakukan untuk memaksimalkan pengelolaan SDM.

Dari permasalahan ini, digunakanlah framework COBIT 5 yang merupakan kerangka kerja dalam melakukan audit pada tata kelola dan manajemen teknologi informasi perusahaan[5]. Kemudian, dipilih juga domain APO07 yang berkaitan dengan manajemen SDM. APO07 (Manage Human Resources) berguna untuk memastikan penempatan, hak keputusan, dan keterampilan dari SDM milik organisasi dapat berjalan dengan optimal[6].

Tujuan dari penelitian ini adalah merancang alat ukur tingkat kapabilitas manajemen sumber daya manusia. Data yang didapat akan diolah serta dianalisis menggunakan pedoman dari COBIT 5, khususnya dari Process Assessment Model (PAM) yang merupakan model untuk menilai kapabilitas suatu proses[7]. Hasil dari penelitian ini adalah rancangan untuk mengukur tingkat kapabilitas manajemen sumber daya manusia yang dapat digunakan pada studi kasus lembaga XYZ ataupun organisasi lainnya.

## 2. METODOLOGI

### 2.1 Studi Literatur

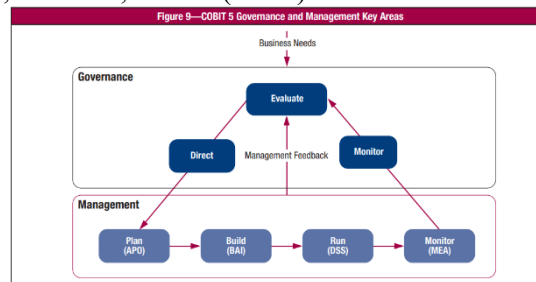
COBIT (*Control Objectives for Information and Related Technology*), adalah sebuah kerangka kerja tata Kelola TI yang meluncurkan oleh ITGI (*IT Governance Institute*) dan juga merupakan besutan dari ISACA (*Information Systems Audit and Control Association*). Tujuan utama dari COBIT adalah untuk menetapkan kebijaksanaan dengan jelas serta menjadi latihan yang bagus untuk *IT Governance* dan organisasi secara universal untuk membantu manajemen senior agar dapat memahami dan mengatasi terjadinya kemungkinan hal buruk yang berhubungan dengan TI[8]. COBIT ini juga telah banyak digunakan di perusahaan untuk mengukur kapabilitas mereka di berbagai hal.

Pada penelitian ini menggunakan COBIT 5 sebagai acuan sekaligus alat ukur untuk mengukur tingkat kapabilitas dalam perusahaan XYZ. Untuk pengukuran tingkat kinerja COBIT 5 memiliki PAM (*Process Assesment Model*) yang merupakan pedoman dalam menentukan tingkat kapabilitas. COBIT 5 sebagai alat ukur juga memiliki orientasi pada prinsip.

Pada COBIT 5 terbagi menjadi dua, yaitu Tata Kelola dan proses manajemen IT yang dibagi menjadi dua proses utama[9]:

1. Pada proses tata kelola terdapat EDM (Evaluate, Direct, Monitor)
2. Pada proses manajemen terdapat 4 domain, yaitu:
  - a) Align, Plan, Organise (APO)
  - b) Build, Acquire, Implement (BAI)
  - c) Deliver, Service, Support (DSS)

d) Monitor, Evaluate, Assess (MEA)



Gambar. 1 COBIT 5 Governance and Management Key Areas[10]

Dari pedoman COBIT 5 terdapat panduan untuk penentuan domain serta proses yang akan digunakan untuk pengukuran tingkat kapabilitas sesuai dengan permasalahan yang terjadi pada organisasi, guna mencapai tujuan yang strategis bagi organisasi. Studi kasus penelitian ini berfokus pada manajemen sumber daya manusia pada lembaga XYZ.

## 2.2 Pengumpulan Data

Metode kualitatif menjadi pilihan untuk pengumpulan data pada penelitian ini, dimana pengumpulan data dilakukan dengan observasi, wawancara, serta dokumentasi informasi guna mendukung penelitian. Tujuan penelitian ini yang menjadi utama yaitu mengacu pada modul yang dari ISACA yang berjudul Process Assessment Model (PAM), COBIT 5 Framework, dan COBIT 5 Enabling Process.

## 2.3 Analisis

Domain yang telah ditentukan berguna sebagai acuan untuk merancang alat ukur pada tingkat kapabilitas dalam bentuk instrumen pertanyaan yang digunakan untuk wawancara. Instrumen pertanyaan beserta tingkat kapabilitas disusun sesuai metode *Process Assessment Model* (PAM).

## 3. HASIL DAN PEMBAHASAN

Penelitian ini berfokus pada tujuan perusahaan mengenai manajemen sumber daya manusia. Dimana berdasarkan IT-Related Goals pada COBIT 5 sesuai dengan ITRG16 yaitu *Competent and motivated business and IT Personnel*. Pada ITRG16 terdapat beberapa domain yang sesuai dengan manajemen sumber daya manusia. Akan tetapi, peneliti berfokus pada domain APO07 yaitu *Manage Human Resources*.

Setelah menentukan domain yang dipilih, tahap selanjutnya yaitu menyusun kertas kerja yang berguna dalam pengukuran tingkat kapabilitas yang dirancang dengan software Microsoft Excel tahun 2019. Dengan bantuan software ini dapat memudahkan dalam perhitungan persentase yang dihasilkan setelah dilakukan penilaian. Kolom yang akan digunakan sebagai bahan pertimbangan untuk menghasilkan nilai, antara lain:

1. *Capability Level*
2. *Attributes*
3. *Criteria(optional)*
4. *Generic Practices*
5. *Generic Work Products*
6. *Questions*
7. *Document*
8. *Results (0/1)*

Berdasarkan kolom yang telah disebutkan diatas, berikut akan ditampilkan rancangan kertas kerja yang dijadikan sebagai alat ukur untuk domain APO07 *Manage Human Resources* pada Gambar. 2 dan Gambar. 3.

Capability Level	Attributes	Criteria	Generic Practices	Generic Work Products	Questions	Documents	Results (0/1)
Level 0 - Incomplete	a non-implemented process or a process that fails, even partially, to achieve its outcomes.	does not include any type of indicators					
Level 1 - Performed	PA 1.1 Process Performance	The process achieves its defined outcomes.	GP 1.1.1 Achieve the process outcomes. There is evidence that the intent of the best practice is being performed.	WP1. Staffing requirement (inclusion) WP2. Competency and career development plan WP3. Personnel sourcing plan WP4. List of key personnel WP5. Skills and competencies matrix WP6. Skills development plan WP7. Review reports WP8. Personnel goals WP9. Performance evaluations WP10. Improvement plan WP11. Inventory of business and IT human resources WP12. Recruiting checklist analysis WP13. Resource utilization records WP14. Contract staff policies WP15. Contract agreements WP16. Contract agreement reviews			
			GP 2.1.1 Identify the objectives for the performance of the process. The performance objectives, scoped together with assumptions and constraints, are defined and communicated.	GW 1.0 Process documentation should outline the process scope. GW 2.0 Process plan should provide details of the process performance objectives.			
			GP 2.1.2 Plan and monitor the performance of the process to fulfil the identified objectives. Basic measures of process performance linked to business objectives are established and monitored. They include key milestones, required activities, estimates and schedules.	GW 2.0 Process plan should provide details of the process performance objectives. GW 3.0 Process performance records should provide details of the outcomes.			
			GP 2.1.3 Adjust the performance of the process. Actions to take when planned performance is not achieved. Action includes identification of process performance issues and adjustment of plans and schedules as appropriate.	GW 4.0 Quality record should provide details of action taken when performance is not achieved.			
Level 2 - Managed	PA 2.1 Performance Management	4. Responsibilities and authorities for performing the process are defined, assigned and communicated.	GP 2.1.4 Define responsibilities and authorities for performing the key activities of the process are defined, assigned and communicated. The need for process performance expertise, knowledge and skills is defined.	GW 1.0 Process documentation should provide details of the process owner and who is responsible, accountable, controlled and/or informed (RACI). GW 2.0 Process plan should include details of the process communication plan as well as process performance expertise, skills requirement.			
			GP 2.1.5 Identify and make available resources to perform the process according to plan. Resources and information necessary for performing the key activities of the process are identified, made available, allocated and used.	GW 2.0 Process plan should provide details of the process training plan and process resourcing plan.			
			GP 2.1.6 Manage the interfaces between involved parties. The individuals and groups involved with the process are identified, responsibilities are defined and effective communication mechanisms are in place.	GW 1.0 Process documentation should provide details of the individuals and groups involved (suppliers, customers and RACI). GW 2.0 Process plan should provide details of the process communication plan.			
			GP 2.1.7 Interfaces between the involved parties are managed to ensure effective communication and clear assignment of responsibility.	GW 1.0 Process documentation should provide details of the individuals and groups involved (suppliers, customers and RACI). GW 2.0 Process plan should provide details of the process communication plan.			
Level 2 - Managed	PA 2.2 Work Product Management	a. Requirements for the work products of the process are defined. b. Requirements for documentation and control of the work products are defined. c. Work products are appropriately identified, documented and controlled. 4. Work products are reviewed in accordance with planned arrangements and adjusted as necessary to meet requirements.	GP 2.2.1 Define the requirements for the work products, including content structure and quality criteria.	GW 3.0 Quality plan should provide details of quality criteria and work product content and structure.			
			GP 2.2.2 Define the requirements for documentation and control of the work products. This should include identification of dependencies, approvals and traceability of requirements.	GW 1.0 Process documentation should provide details of controls (control matrix). GW 3.0 Quality plan should provide details of work product, quality criteria, documentation requirements and change control.			
			GP 2.2.3 Identify, document and control the work products. Work products are subject to change control, versioning and configuration.	GW 3.0 Quality plan should provide details of work product, quality criteria, documentation requirements and change control.			
			GP 2.2.4 Review and adjust work products to meet the defined requirements. Work products are subject to review against requirements in accordance with planned arrangements and any issues arising are resolved.	GW 4.0 Quality records should provide an audit trail of reviews undertaken.			
Level 2 - Managed	PA 3.1 Process Definition	a. A standard process, including appropriate guiding guidelines, is defined that describes the fundamental elements that must be incorporated into a defined process. b. The sequence and interaction of the standard process with other processes are determined. c. Required competencies and roles for performing a process are identified as part of the standard process. 4. Required infrastructure and work environment for performing a process are identified as part of the standard process. e. Suitable methods for monitoring the effectiveness and suitability of the process are determined.	GP 3.1.1 Define the standard process that will support the deployment of the defined process. A standard process is defined that identifies the fundamental process elements and provides guidance and procedures to support implementation and guidance on how it can be tailored when needed.	GW 3.0 Policies and standards should provide details of the organizational objectives for the process, minimum standards of performance, standard procedures, and reporting and monitoring requirements. The evidenced requirement at this level is not just that policies and standards exist, but that they are applied across the organization.			
			GP 3.1.2 Determine the sequence and interaction between processes so that they work as an integrated system of processes. The standard process sequence and interaction with other processes are determined and maintained when a process is implemented in different parts of the organization.	GW 3.0 Policies and standards should provide a process mapping with details of standard processes and reported sequence and interaction. The evidenced requirement at this level is not just that policies and standards exist, but that they are applied across the organization.			
			GP 3.1.3 Identify the roles and competencies for performing the standard process.	GW 3.0 Policies and standards should provide details of roles and competencies for performing. The evidenced requirement at this level is not just that policies and standards exist, but that they are applied across the organization.			
			GP 3.1.4 Identify the required infrastructure and work environment for performing the standard process. The infrastructure (facilities, tools, methods, etc.) and work environment for performing the standard process are identified.	GW 3.0 Policies and standards should identify minimum required infrastructure and work environment for performing the process. The evidenced requirement at this level is not just that policies and standards exist, but that they are applied across the organization.			
Level 2 - Managed	PA 3.1 Process Definition	e. Suitable methods for monitoring the effectiveness and suitability of the process are determined.	GP 3.1.5 Determine suitable methods to monitor the effectiveness and suitability of the process, including recording that appropriate criteria and data needed to monitor the effectiveness and suitability of the process are defined, and establishing the need to conduct internal audit and management review.	GW 3.0 Policies and standards should provide details of the organizational objectives for process, minimum standards of performance, standard procedures, and reporting and monitoring requirements. The evidenced requirement at this level is not just that policies and standards exist, but that they are applied across the organization. GW 4.0 Quality records and GW 5.0 Process performance records should provide evidence of reviews undertaken.			

Gambar. 2 Kertas Kerja Domain APO07 Level 0-3

45	Level 3 - Established	a. A defined process is deployed based on an appropriately selected and/or tailored standard process.	GP 3.2.1 Deploy a defined process that underlies the context. When the same process is used within different areas of the organization, it is based on a standard process, tailored as appropriate, with conformance to the requirements of the defined process verified.	GWP 5.0 Policies and standards should define the standards to be followed across all implementations of the process. The evidential requirement at this level is not just that policies and standards exist, but that they are applied across the organization.		
		b. Required roles, responsibilities and authorities for performing the defined process are assigned and communicated.	GP 3.2.2 Assign and communicate roles, responsibilities and authorities for performing the defined process. When the same process is used within different areas of the organization, the authorities and roles for performing the activities of process are assigned and communicated.	GWP 5.0 Policies and standards should provide details, responsibilities and authorities for performing the activities of process. The evidential requirement at this level is not just that policies and standards exist, but that they are applied across the organization.		
		c. Personnel performing the defined process are competent on the basis of appropriate education, training and experience.	GP 3.2.3 Ensure necessary competencies for performing the defined process. When the same process is used within different areas of the organization, the appropriate competencies for assigned personnel are identified and suitable training is available for those deploying the defined process.	GWP 1.0 Process documentation should provide details of competencies and training requirements. GWP 2.0 Process plan should include details of the process communication plan, training plan and resourcing plan for each instance of the process.		
		d. Required resources and information necessary for performing the defined process are made available, allocated and used.	GP 3.2.4 Provide resources and information to support the performance of the defined process. When the same process is used within different areas of the organization, the required human resources and information to perform the process are made available, allocated and used.	GWP 2.0 Process plan should include details of the resourcing plan for each instance of the process.		
		e. Required infrastructure and work environment for performing the defined process are made available, managed and maintained.	GP 3.2.5 Provide adequate process infrastructure to support the performance of the defined process. When the same process is used within different areas of the organization, the required organizational support, infrastructure and work environment are made available, allocated and used.	GWP 2.0 Process plan should include details of the process infrastructure and work environment for each instance of the process.		
		f. Appropriate data are collected and analyzed as a basis for understanding the behaviour of the process to demonstrate its suitability and effectiveness, and to evaluate where continuous improvement of the process can be made.	GP 3.2.6 Collect and analyse data about performance of the process to demonstrate its suitability and effectiveness. Data required to monitor the effectiveness and suitability of the process across the organization are defined, collected and analysed as a basis for continued improvement.	GWP 4.0 Quality records and GWP 5.0 Process performance records should provide evidence of reviews undertaken tools for each instance of the process.		

Gambar. 3 Kertas Kerja Domain APO07 Level 0-3 (lanj.)

Berdasarkan kertas kerja pada Gambar. 2 dan Gambar. 3 yang telah disusun sesuai dengan buku COBIT 5 PAM, terdapat beberapa *work products* yang sesuai dengan domain. Dimana perhitungan terkait *work products* akan ditunjukkan pada Gambar. 4.

1 WORK PRODUCT APO07			
2	3	4	5
6	7	8	9
10	11	12	13
14	WP1. Staffing requirement evaluations		
15	WP2. Competency and career development plans		
16	WP3. Personnel sourcing plans		
17	WP4. List of key personnel		
18	WP5. Skills and competencies matrix		
19	WP6. Skills development plans		
20	WP7. Review reports		
21	WP8. Personnel goals		
22	WP9. Performance evaluations		
23	WP10. Improvement plans		
24	WP11. Inventory of business and IT human resources		
25	WP12. Resourcing shortfall analyses		
26	WP13. Resource utilisation records		
27	WP14. Contract staff policies		
28	WP15. Contract agreements		
29	WP16. Contract agreement reviews		

Gambar. 4 Kertas Kerja *Work Products* APO07[11]

Pada Gambar. 4 terdapat kolom “Terpenuhi” dimana akan diisi dengan angka 1 sebagai indikator penilaian jika dokumen terpenuhi dan angka 0 jika dokumen tidak terpenuhi sesuai dengan *work products* pada lembaga XYZ. Dimana nantinya akan memengaruhi kriteria pada setiap tingkatan level kapabilitas. Di setiap tingkatan nantinya akan dilakukan perhitungan antara jumlah pertanyaan yang terpenuhi dengan *work products*. Pertanyaan disusun setelah dilakukan observasi lebih lanjut pada lembaga XYZ yang disesuaikan dengan tiap *base practice* pada domain APO07. Berikut akan ditampilkan formula mengenai perhitungan tiap level kapabilitas pada Gambar. 5.

Best Practices APO07	Pertanyaan		Work Products		Nilai yang dicapai
	Jumlah	Terpenuhi	Jumlah	Terpenuhi	
APO07.01 Maintain adequate and appropriate staffing					$=(((C24/B24)*C34)+((E24/D24)*C34))/2$
APO07.02 Identify IT key personnel					
APO07.03 Maintain the skills and competencies					
APO07.04 Evaluate employee job performance					
APO07.05 Plan and track the usage of IT and business human resources					
APO07.06 Manage contract staff					
					<b>Total</b>

Gambar. 5 Kertas Kerja Perhitungan Level Kapabilitas APO07

Formula yang digunakan pada kolom “Nilai yang dicapai” merupakan hasil persentase penjumlahan antara kolom “Pertanyaan” yang terpenuhi dengan kolom “*Work Product*” yang terpenuhi kemudian dikalikan dengan nilai masing – masing *base practice*. Jika nilai persentase telah didapatkan, maka tahap selanjutnya yaitu menghitung *rating scale* pada level kapabilitas.

Dimana *rating scale* pada COBIT 5 dikategorikan menjadi 4 macam, diantaranya yaitu pada Gambar. 6 di bawah berikut:

Rating	%Achieved
<i>N (Not achieved)</i>	0 to 15% achievement
<i>P (Partially achieved)</i>	>15% to 50% achievement
<i>L (Largely achieved)</i>	>50% to 85% achievement
<i>F (Fully achieved)</i>	>85% to 100% achievement

Gambar. 6 Rating Scale

\*Berdasarkan Figure 6 COBIT 5 PAM

Dari keempat kategori rating scale, nantinya lembaga XYZ akan diukur terkait tingkat kapabilitas level F (Fully Achieved). Jika memenuhi level F maka diperbolehkan lanjut ke level berikutnya. Akan tetapi, jika tidak memenuhi atau level N, maka tingkat kapabilitas pada lembaga XYZ hanya sampai pada hasil nilai persentase terakhir. Kriteria yang digunakan sebagai standar untuk menentukan tingkat kapabilitas yaitu berdasarkan perhitungan yang dihasilkan pada Gambar. 5. Hasil persentase total nilai pada perhitungan Gambar. 5 akan menunjukkan level kapabilitas pada lembaga XYZ yang dirangkum dan digunakan sebagai laporan. Format penentuan tingkat kapabilitas akan ditunjukkan pada kertas kerja rangkuman sesuai Gambar. 6.

APO07	Level 0		Level 1		Level 2		Level 3		Level 4		Level 5	
			PA 1.1	PA 2.1	PA 2.2	PA 3.1	PA 3.2	PA 4.1	PA 4.2	PA 5.1	PA 5.2	
Rating												
Nilai Tingkat Kapabilitas												

Gambar. 7 Kertas Kerja Rangkuman Tingkat Kapabilitas APO07

Berdasarkan Gambar. 6 nantinya akan terlihat hasil akhir tingkat kapabilitas pada lembaga XYZ. Dari hasil tersebut akan memunculkan rekomendasi sebagai saran perbaikan serta peningkatan kinerja pada lembaga XYZ kedepan di sisi manajemen sumber daya manusia.

#### 4. KESIMPULAN DAN SARAN

Dengan berdasar pada temuan dan analisis permasalahan yang telah dilakukan, terdapat beberapa rekomendasi yang harus dilakukan oleh lembaga XYZ yaitu melakukan dokumentasi evaluasi kinerja pegawai secara rutin dan tersistematis, menyusun dokumen terkait manajemen sumber daya manusia secara rapi sehingga tahap berikutnya dapat dilakukan sebuah pengukuran dengan menggunakan COBIT 5 sesuai dengan domain APO07 Manage Human Resources menggunakan alat ukur yang telah dirancang. Besar harapan dengan adanya penelitian ini dapat membantu lembaga XYZ dalam mengevaluasi dan meningkatkan kinerja organisasi agar tujuan bisnis TI pada organisasi tersebut dapat berjalan dengan optimal.

##### 4.1 Ucapan Terima Kasih

Terima kasih diberikan kepada kakak tingkat dan pihak-pihak lain yang telah membimbing dan berdiskusi dengan penulis terkait proses Audit Sistem Informasi sehingga penulis dapat menyelesaikan penelitian ini dengan baik.

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