



Development of Contract Management SOP with it Service Providers Supplier Based on the Framework Cobit 5 and ITIL V3 Hospital Case Study Dr Ramelan Navy

Yundha Puspadini

Engineering and Information Faculty, State University of Jakarta, Indonesia

ARTICLE INFO

Article history:

Received Feb 9, 2023
Revised Mar 10, 2023
Accepted Mar 25, 2023

Keywords:

Supplier Management,
COBIT 5,
ITIL,
Standard Operating
Procedure,
Underpinning Contract,

ABSTRACT

RSAL Dr. Ramelan is a naval hospital in Surabaya. It is currently developing its Management Information Systems (MIS) with the supplier of IT (Information Technology) service providers. Problems arose when the management change interfere with MIS development. The current management wanted to change MIS supplier before the development process is completed. This can cause financial and time losses. The process of supplier selection, negotiation, contracting and fulfillment control of supplier contracts to always fit the needs of the business is conducted at the Supplier Management. This study aims to make a reference to the management of IT service provider suppliers contracts in the form of SOP (Standard Operating Procedure) which is based on the COBIT 5 framework domain APO10 Manage Supplier and ITIL V3 Supplier Management. Formulation of IT service providers supplier contract management in RSAL Dr. Ramelan SOP document is carried out in four stages. The first stage is the observation of IT services in RSAL Dr. Ramelan. The second stage is the stage of the analysis. This stage is to identify COBIT 5 Manage Supplier and ITIL V3 Supplier Management activities and mapping the activities. Having formed a new activity, adjustments are made to the Regulation of the President of the Republic of Indonesia No. 54 of 2010 concerning the Procurement of Goods and Services. In the third stage, SOP document preparation is done by decomposition of these activities to become sequential action steps. The last stage is the stage of evaluation and improvement, which begins with the verification done in RSAL Dr. Ramelan, then the improvement is done based on the results of verification. The result of this study is an IT service providers supplier contract management SOP document that has been tailored to the condition in RSAL Dr. Ramelan. From the result of the evaluation, it is known that the SOP produced was still in need for improvement in terms of grammar, role and order activity. The SOP document that has been evaluated before has been corrected and improved based on the feedback given by RSAL Dr. Ramelan.

This is an open access article under the [CC BY-NC](https://creativecommons.org/licenses/by-nc/4.0/) license.



Corresponding Author:

Yundha Puspadini,
Engineering and Information Faculty,
State University of Jakarta, Indonesia
Jl. R.Mangun Muka Raya No.11, RT.11/RW.14, Rawamangun, Kec. Pulo Gadung, Kota Jakarta Timur,
Daerah Khusus Ibukota Jakarta 13220, Indonesia.
Email: puspadini12@gmail.com

1. INTRODUCTION

Naval Hospital (RSAL) Dr. Ramelan Surabaya is a military hospital owned by the Indonesian Navy which is under the operation of the Navy Health Service. Currently RSAL Dr. Ramelan has facilities including 24-hour Emergency Room (IGD), outpatient unit with 41 polyclinics, 653 nursing beds, complete specialist and subspecialty medical services, central surgery unit, hemodialysis unit, heart health center, medical support unit, support unit general public, and radiotherapy installation units.

In 2009, RSAL Dr. Ramelan has followed full accreditation with the results of meeting hospital service standards which include 16 hospital patient services and safety.

Along with the times, RSAL Dr. Ramelan began to realize the importance of using Information Technology (IT) to support ongoing business activities. As a government hospital, of course RSAL Dr. Ramelan has an obligation to accept every patient of the Employment Social Security Administering Body (BPJS). On this basis, the previously existing hospital management information system will be gradually replaced with a new one.

The new hospital management information system has BPJS billing, admission and bridging features which includes 26 modules. In the development of a management information system which consists of three aspects, namely network, server and software, RSAL Dr. Ramelan works closely with different external suppliers starting from the initial assessment process to system installation. Problems arise when the change of management causes the development of the hospital management information system to be hampered. The new management requested that the supplier of the management information system provider be replaced with another supplier when the two modules were applied. This can cause losses both in terms of time and material. Until now, RSAL Dr. Ramelan does not yet have a Standard Operational Procedure (SOP) which discusses the process of drafting a contract with a specialized supplier in the IT sector. Therefore, RSAL Dr. Ramelan requires an SOP that can provide direction on the contract management process so that the contract management process carried out can run optimally.

In the implementation of contract management with IT suppliers, general procurement guidelines are used, namely Presidential Regulation of the Republic of Indonesia Number 54 of 2010 concerning Government Procurement of Goods/Services. This is because RSAL Dr. Ramelan does not yet have an SOP that discusses the process of drafting contracts with suppliers specifically in the IT sector, so in managing contracts with suppliers in the IT sector, especially in terms of software, it is found that things have the potential to be a risk if they are managed only based on the guidelines for the procurement of goods/services systematically. the general. One of them is that in these regulations it has not been clearly regulated regarding assistance by the supplier during the implementation of the system at the RSAL Dr. Ramelan.

Control Objectives for Information and Related Technology (COBIT) 5 is a collection of best practice documentation for IT governance that can help auditors, users and management, to bridge the gap between business risks, control requirements and IT technical issues. COBIT is useful for auditors because it is a technique that can assist in identifying IT control problems. COBIT is useful for IT users because they gain confidence in the reliability of the application system used. Meanwhile, managers benefit in making investment decisions in IT and its infrastructure, formulating IT planning strategies, determining information architecture, and making decisions on procurement. Besides that, With the reliability of the existing information system in the company, it is hoped that various business decisions can be based on the available information. The APO 10 Manage Suppliers domain in COBIT 5 manages IT related services provided by all types of suppliers to meet enterprise needs, including supplier selection, relationship management, contract management, and reviewing and monitoring supplier performance for effectiveness and compliance. The process is implemented so that suppliers provide performance as agreed, risks related to suppliers are properly assessed and handled, and relationships with suppliers are established effectively. Information Technology Infrastructure Library (ITIL) V3 is a general framework that describes best practices in IT service management. The APO 10 Manage Suppliers domain in COBIT 5 manages IT related services provided by all types of suppliers to meet enterprise needs, including supplier selection, relationship management, contract management, and reviewing and monitoring supplier performance for effectiveness and compliance. The process is implemented so that suppliers provide performance as agreed, risks related to suppliers are properly assessed and handled, and relationships with suppliers are established effectively. Information Technology Infrastructure Library (ITIL) V3 is a general framework that describes best practices in IT service management. The APO 10 Manage Suppliers domain in COBIT 5 manages IT related services provided by all types of suppliers to meet enterprise needs, including supplier selection, relationship management, contract management, and reviewing and monitoring supplier performance for effectiveness and compliance.

The process is implemented so that suppliers provide performance as agreed, risks related to suppliers are properly assessed and handled, and relationships with suppliers are established effectively. Information Technology Infrastructure Library (ITIL) V3 is a general framework that describes best practices in IT service management. and reviewing and monitoring supplier

performance for effectiveness and compliance. The process is implemented so that suppliers provide performance as agreed, risks related to suppliers are properly assessed and handled, and relationships with suppliers are established effectively. Information Technology Infrastructure Library (ITIL) V3 is a general framework that describes best practices in IT service management. and reviewing and monitoring supplier performance for effectiveness and compliance. The process is implemented so that suppliers provide performance as agreed, risks related to suppliers are properly assessed and handled, and relationships with suppliers are established effectively. Information Technology Infrastructure Library (ITIL) V3 is a general framework that describes best practices in IT service management.

2. RESEARCH METHOD

Research is an organized investigation, it can also be interpreted as a continuous search for knowledge and giving meaning to something. Research methodology can be defined as a more detailed procedure regarding the stages of conducting a research. (Nazir, 2005).

Place and Time of Research

The research was conducted at Dr. Hospital. Ramelan Jalan Gadung No.1 Surabaya. The time of the study was carried out for approximately 6 months from April 2016 to September 2016.

Research Object

The object of this thesis research is the management of UC between RSAL Dr. Ramelan with suppliers of IT service providers using the ITIL V3 guide and the COBIT 5 framework.

Research Stages

From the identification of problems at the RSAL Dr. Ramelan made a step-by-step research as shown in Fig.

- a) Observation At the observation stage, the first step is the identification of IT at the RSAL. After that, the stage of identifying the needs of the RSAL for IT suppliers is carried out.
- b) Identification of RSAL IT Services At the identification stage of IT services at RSAL, the root cause of the problem and the reasons for conducting the research are determined. The existing problems were identified by conducting interviews with the head of the IT department of the RSAL Dr. Planned and reviewed documents related to contracts with IT suppliers.
- c) Identification of Needs from RSAL for IT Suppliers. The stage of identifying the needs of RSAL Dr. The forecast for suppliers of IT service providers is also carried out by means of interviews. This stage is carried out to determine the characteristics of the company's business processes, organizational structure, data needs, support needs related to IT (Hardware, Software, IT Infrastructure, Operating Systems, HR, etc.).

Analysis At the analysis stage, there are two stages that are carried out simultaneously, namely the analysis of the RSAL guide Dr. Ramelan related to UC management and identification of COBIT 5 domain activities APO10 Manage Supplier and ITIL V3 Supplier Management. From these two stages, outputs are obtained that will be used in the next stage, the preparation of a new SOP

3. RESULTS AND DISCUSSIONS

- a. Observation At the observation stage, two stages were carried out, namely identification of IT services at RSAL and identification of RSAL needs for IT suppliers. These stages are carried out by means of interviews with related parties.
- b. Identification of RSAL IT Services In the implementation of contract management with IT suppliers, general procurement guidelines are used, namely Presidential Regulation of the Republic of Indonesia Number 54 of 2010 concerning Government Procurement of Goods/Services. This is because RSAL Dr. Ramelan does not yet have an SOP that discusses the process of drafting a contract with a specialized supplier in the IT sector. In the management of contracts with suppliers in the IT sector, especially in terms of software, it is found that there are things that have the potential to be a risk if they are managed only based on these general goods/services procurement guidelines. One of them is that in these regulations it has not been clearly regulated regarding assistance by the supplier during the implementation of the system at the RSAL Dr. Ramelan.

- c. Analysis At the analysis stage, there are two stages that are carried out simultaneously, namely the analysis of the RSAL guide Dr. Ramelan related to UC management and identification of COBIT 5 domain activities APO10 Manage Supplier and ITIL V3 Supplier Management. From these two stages, outputs are obtained that will be used in the next stage, the preparation of a new SOP.
- d. Identification of COBIT 5 and ITIL V3 Activities

From the results of the identification of COBIT 5 activities in the APO10 Manage Supplier process, six activities were obtained. From ITIL V3 the Supplier Management process, six activities were also obtained. The list of activities obtained from COBIT 5 APO 10 Manage Suppliers can be seen in table 4.1 and the complete list can be seen in Appendix 1, while the list of ITIL V3 Supplier Management activities can be seen in table 4.2 and the full details can be seen in Appendix 2.

COBIT 5 APO10 Manage Supplier activities are obtained from KMP which has been clearly written along with its objectives and activities. The COBIT framework does not mention in detail how to carry out a process or activity, but only mentions what must be done. On the other hand, in ITIL V3 the explanation of the process/activity is in the form of a narrative that explains how to do it along with useful tips in IT management, along with examples. From this explanation, six main activities are formulated in supplier management.

Table 1. COBIT 5 APO10 Aktivitas Activities

COBIT 5 APO 10 Manage Supplier	
KMP COBIT 5 APO 10	Activity Code
APO10.01 Identify suppliers and their contracts and categorize suppliers by type, significance and criticality	APO10.01-1, APO10.01-2, APO10.01-3, APO10.01-4.
APO10.02 Selecting suppliers.	APO10.02-1, APO10.02-2, APO10.02-3, APO10.02-4, APO10.02-5, APO10.02-6, APO10.02-7
APO10.03 Formalize and manage relationships with each supplier and contract.	APO10.03-1, APO10.03-2, APO10.03- 3, APO10.03-4, APO10.03-5, APO10.03-6, APO10.03-7, APO10.03- 8
APO10.04 Manage supplier risk.	APO10.04-1, APO10.04-2
APO10.05 Monitor supplier performance and compliance.	APO10.05-1, APO10.05-2, APO10.05-3, APO10.05-4, APO10.05-5, APO10.05-6

Table 2. Activities of ITIL V3 Supplier Management

ITIL V3 Supplier Management	
ITIL Supplier Management Process	Activity Code
SM01 Identification of business requirements and preparation of business cases	SM01-1, SM01-2, SM01-3, SM01-4, SM01-5
SM02 Evaluation and procurement of new contracts and suppliers	SM02-1, SM02-2, SM02-3, SM02-4, SM02-5, SM02-6, SM02-7
SM03 Development of new suppliers and contracts	SM03-1, SM03-2, SM03-3, SM03-4, SM03-5
SM04 Categorization of suppliers and contracts	SM04-1, SM04-2, SM04-3, SM04-4, SM04-5, SM04-6, SM04-7
SM05 Supplier and contract performance management	SM05-1, SM05-2, SM05-3, SM05-4, SM05-5, SM05-6
SM06 End of validity	SM06-1, SM06-2

4. CONCLUSION

Based on the results of the research that has been done, the following conclusions is preparation of contract management SOP documents with suppliers of IT service providers at RSAL Dr. Ramelan is done by compiling work steps. The literature used in compiling the SOP document for managing contracts with suppliers of IT service providers is COBIT 5 domain APO10 Manage Supplier and ITIL V3 the Supplier Management process and is adjusted to the Presidential Regulation of the Republic of Indonesia Number 54 of 2010 concerning the Procurement of Goods and Services. Preparation of contract management SOP documents with suppliers of IT service providers at RSAL Dr. Ramelan is carried out in four stages. The first stage is the observation stage. In the observation phase, the identification of IT services at RSAL Dr. Ramelan and Identification of

needs at RSAL Dr. Predictions for IT suppliers. This stage was carried out to determine the state of IT management at RSAL Dr. Ramelan. The second stage is the analysis stage. In this analysis stage, identification of COBIT5 APO10 Manage Supplier and ITIL Supplier Management activities is carried out. After the activities of COBIT5 and ITIL are identified, then these activities are mapped by determining the appropriate COBIT 5 KMP and directly related to the Supplier Management process contained in ITIL V3. The output of this process is the creation of a new process that is in accordance with COBIT 5 APO10 Manage Supplier and ITIL V3 Supplier Management. After the identification of COBIT 5 APO10 Manage Supplier and ITIL V3 Supplier Management activities was completed, the research continued with the analysis of Dr. RSAL guidelines. Ramelan. The guidelines used in RSAL Dr. Ramelan is the Presidential Regulation of the Republic of Indonesia Number 54 of 2010 concerning the Procurement of Goods and Services. The new process generated in the previous mapping activity is then mapped again with the existing processes in the Presidential Regulation of the Republic of Indonesia Number 54 of 2010 concerning the Procurement of Goods and Services. This is done so that the resulting guidelines are appropriate and do not violate these regulations. The third stage is the stage of preparing the SOP. The guiding activities generated in the previous stage are then broken down to form a sequence of work steps. In this stage, the actors who are responsible for each activity are also determined. These actors are determined based on the Presidential Regulation of the Republic of Indonesia Number 54 of 2010 concerning the Procurement of Goods and Services. The output of this stage is an SOP document that is adapted to the SOP format used at RSAL Dr. Ramelan. The last stage is the evaluation and improvement stage. At this stage, verification is carried out at RSAL Dr. Ramelan.

From the verification results, it is known that the resulting SOP needs to be improved. According to the selected actors, in some of the activities the language used was too convoluted and there were some terms that were not understood. Improvements made then include improving terms, improving sentence structure and improving word selection. For example, the business case phrase was changed to "preliminary planning" to make it easier to understand and the activity name "Supplier Development and New Contracts" was changed to "Supplier Initiation and New Contracts". The order of sentences used in explaining the work steps was also improved and the use of English terms reduced. There were actors who argued that there was a role error in the activities of identifying business needs and preparing business cases. In work step number 1, ULP should not be involved in this work step and only PPK should be involved in this activity. Improvements are made based on the results of evaluation interviews that have been carried out. After verification, the SOP is corrected according to the input obtained

REFERENCES

- Glenfis AG. (2011). ITIL® Edition 2011 - COBIT® 5 Mapping. -: Glenfis AG. Hamzah, A. (2010). Tata Kelola Teknologi Informasi. Seminar Nasional Aplikasi Teknologi Informasi, C60-C64.
- ISACA. (2012a). COBIT 5 Enabling Process. USA: ISACA.
- ISACA. (2012b). COBIT 5 Introduction. USA: ISACA.
- ISACA. (2012c). COBIT 5 Process Assessment Model (PAM) : Using COBIT 5. USA: ISACA.
- ITGI & OGC. (2008). Aligning CobiT® 4.1, ITIL® V3 and ISO/IEC 27002 for Business Benefit A Management Briefing From ITGI and OGC. IT Government Institute (ITGI), Office of Government Commerce (OGC). Kemptner, S. (2007). Checklist Underpinning Contract. Retrieved from ITIL Wiki, IT Process Maps: [http://wiki.en.itprocessmaps.com/index.php/Checklist_Underpinning_Contract_\(UC\)](http://wiki.en.itprocessmaps.com/index.php/Checklist_Underpinning_Contract_(UC))
- Laksana. (2016). Panduan Lengkap UU Pengadaan Barang dan Jasa. Yogyakarta: Laksana. Megawati, & Surendro, K. (2012). Usulan Tata Kelola Manajemen Insiden dan Masalah berdasarkan Kombinasi COBIT 4.1 dan ITIL V3. Seminar Nasional Aplikasi Teknologi Informasi (SNATI). Yogyakarta. Nazir, M. (20 OGC. (2007b). The Official Introduction to the ITIL Service Lifecycle. London: TSO. Presiden Republik Indonesia. (2010). PENJELASAN ATAS PERATURAN PRESIDEN REPUBLIK INDONESIA NOMOR 54 TAHUN 2010 TENTANG PENGADAAN BARANG DAN JASA PEMERINTAH. Presiden Republik Indonesia. (2010). PERATURAN PRESIDEN REPUBLIK INDONESIA NOMOR 54 TAHUN 2010 TENTANG PENGADAAN BARANG/JASA PEMERINTAH. Susanto, T. (2015).

Modul Training Manajemen Layanan Teknologi Informasi. Surabaya: AISINDO. Tambunan, R. M. (2013).
Pedoman Penyusunan Standard Operating Procedures (SOP). Jakarta: Maiestas Publishing. 05).
Metode Penelitian. Bogor: Ghalia Indonesia. OGC. (2007a). ITIL Service Design. London: TSO.