

AN AUDIT ANALYSIS ON SERVICE INFORMATION SYSTEM AT ACADEMIC ADMINISTRATION BUREAU OF INFORMATICS AND BUSINESS INSTITUTE DARMAJAYA BANDAR LAMPUNG THROUGH COBIT 4.1

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ABSTRACT

Academic Administration Bureau is a bureau considered as standards for giving service to all students of Informatics and Business Institute Darmajaya (IBI Darmajaya). Information system at this bureau plays an important role in providing service to the students and is expected to be able to improve job performance and service quality. For the time being the implemented service information system at Academic Administration Bureau has not been much benefited and not known whether it is in accordance with the vision and mission of the institution.

To make the service offered by the academic administration bureau relevant to the business goal of the institution, it is required to know the conformity level between TI goal and Institutional goal. To obtain the conformity level between TI goal and institutional goal, it needs a measurement of conformity level between the two goals by using COBIT 4.1.

The result finding of the research is the conformity level between TI goal and institutional goal is obtained and stands at Defined level because the average of TI processes has been above the international level standard as 2.5 (Guldentops, 2000). Even though the average of TI processes has been over the international level standard,

there are still some TI processes below the international standard, so it requires recommendation to increase the conformity between TI goal and institutional goal to reach a higher level.

KEY WORDS: Maturity level, Expected, Information System, Asset Management, COBIT

1. INTRODUCTION

Background of the Problem

Like other universities in Indonesia, IBI Darmajaya is responsible for carrying out education properly in which the academic service becomes the main priority. Academic service at universities includes 3 main processes; they are *teaching, research, and internal or external service activities* (Harniyati Kusniyati, 2009).

According to management aspects, the three processes are products and services offered by the institution to the consumers. To have them more effective, it needs to analyze the previous audit processes.

Based on the explanation, it is important to do an Audit Analysis on Information System at Academic Administration Bureau of IBI Darmajaya Bandar Lampung.

Limitation of the Problem

In this research the problems includes:

- DS domain in DS1 process.
- DS DS domain in DS10 process
- DS DS domain in DS12 process

Scope of the Problems

This research involves the Service Information System Audit at the academic administration bureau by analyzing the gap and recommending an improvement toward the service audit that has been done.

Objectives of the Research

The objectives of the research to be reached ate as follows:

1. To do an analysis on service information system at academic administration bureau at IBI Darmajaya by using framework COBIT 4.1
2. To become a reference for the improvement of service quality at the academic administration bureau.

2. LITERATURE REVIEW

2.1. Objectives of Audit

The objective of information system audit is to evaluate whether the service information system control has been able to give proper assurance on time, accuracy, correctness, asset security, data integrity, effectiveness, efficiency, ,availability, compliance, and reliability.

2.2. Audit Phases

There are several phases in information system audit process. Many opinions delivered by experts on the audit process phases such as: planning, fieldwork, reporting, follow-up.

COBIT designed consists of 34 control objectives reflected on 4 domains, namely: Plan and Organize (PO), Acquire and Implement (AI), Deliver and Support (DS), and Monitor and Evaluate (ME). Those four domains can be illustrated in the below figure

which also has 34 high level objectives and 6 publications.

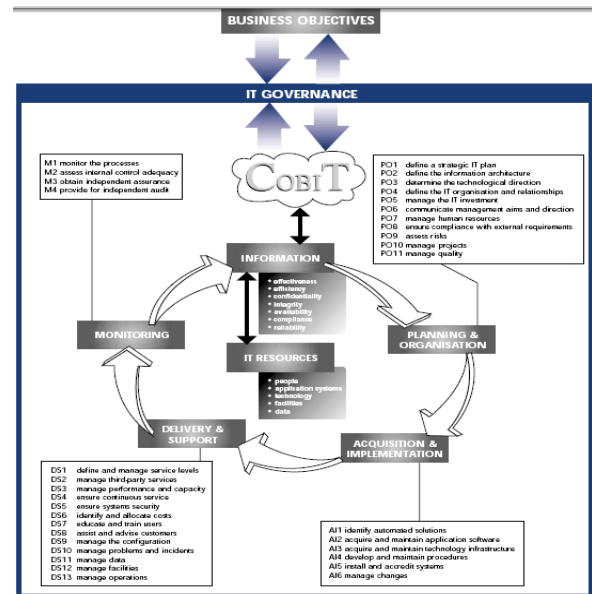


Figure 2.2. COBIT Domain Framework

3. OBJECTIVES AND USES OF THE RESEARCH

3.1. Objectives of the Research

The objective of the research is to analyze service information system at the academic administration bureau using COBIT 4.1. framework at IBI Darmajaya Bandar Lampung

3.2. Uses of the Research

1. For the management, it can be used to know the existing problems easily.
2. For the management, it can help identify what is needed by students.
3. Management and placement of assets are correct.
4. For the users or students, their needs for optimal service will be continuously filled up.
5. For the students, they will hardly get difficulties in getting services at the academic administration bureau.

4. RESEARCH METHOD

4.1. Research Design

The research design is by doing literary study on Documents of IBI Darmajaya Bandar Lampung consistent with vision and mission, objectives and strategic plans of the institution.

Scope of Information System Audit

The scope of COBIT framework starts from the interview conducted by the researcher to relevant parties, and questionnaires distributed to all sections of the management.

Objectives of the Research

By conducting an information system audit at the academic administration bureau using COBIT 4.1. framework at IBI Darmajaya Bandar Lampung it can be taken as a reference for service improvement at the bureau..

Research Contribution

The research gives positive contribution to the institution especially to the academic administration bureau. In addition, this audit done is aimed at dilakukan dengan tujuan :

- a. Helping the director monitor job performance of the academic administration bureau.
- b. Giving maximum service to the students.
- c. Helping all students services optimally.

5. EXPECTED RESULTS

DOMAIN	PROCESS	Current Maturity Level		Expected Maturity Level		User Gap	Man. Gap
		user	Mgt	user	Mgt		
DS1	define and manage service levels	3.50	4.45	4.38	4.65	0.88	0.2
DS10	Manage problems and incidents	3.44	4.41	4.30	4.66	0.86	0.25
DS12	Manage Facilities	3.66	4.60	4.48	4.70	0.82	0.1

5.2. Analysis of Management Gap

The result of current maturity level computation for the current academic administration bureau is still below the expected maturity level.

5.1. Result of Current Maturity Level Evaluation (Performance)

Current Maturity Level (Performance) and expectancy at the academic administration bureau where respondents are management category can be illustrated in the radar graph below:

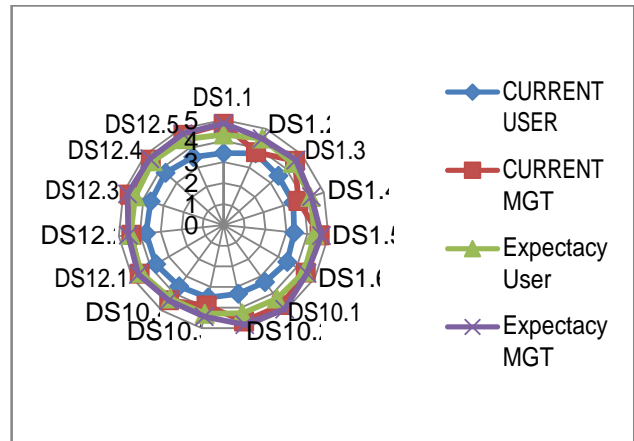


Figure 5.1. Current Maturity Level (Performance) and expectancy user & management category

In table 5.4 it can be seen the result of computation obtained from users and management at current maturity level and expectancy, so it is obvious that the gain of current maturity level reaches the gap resulted from users and management.

5.3. Analysis of User Gap

The lowest current maturity level at DS1 process is determining and managing the service levels to users at level 3.39, due to DS1.3 process i.e. service treaty, while

the highest current maturity level in DS12 process is managing facilities at level 3.57.

6. FOLLOWING PHASE PLANS

The next activities to be done are socializing audit results, completing data when needed, delivering audit results to stakeholders via announcement board, and making final report(s).

7. CONCLUSION AND SUGGESTION

7.1. Conclusion

The audit activity once done has reached satisfactory values, but it still needs developing by adding domains related to the services.

7.2. Suggestion

The management of IBI Darmajaya has to demand the academic administration bureau to do some improvement as follows:

1. IBI Darmajaya periodically has to do analysis of audit results.
2. IBI Darmajaya has to analyze KPI and KGI to obtain better results.
3. it is important to add other domains to strengthen audit results.

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