Application Development of Question Answer and Corrective Action Request Using SharePoint Server at BINUS University (2011)

Yosef Bernardus Wirian, Indra, Rendy Hananta Kurniawan, Ryan Saputra

***Abstract*— The purpose of writing this research is to make the application QA and CAR that can be integrated with Exchange Server, improve coordination QMC with the bureau / unit in question, and in accordance with the existing workflow. The method used is the waterfall methodology consisting of requirements specification phase, analysis, design, development, implementation, and evaluation. The information gathering stage encompasses observation, interviews, and library research. While at the design stage, design is done by using the notation of Unified Modeling Language (UML). The results of this research are QA and CAR applications that can be integrated with Exchange Server** (1) **on the Sharepoint Server** (2) **in accordance with the existing workflow. The conclusions of this study is to made an application QA and CAR on the SharePoint Server to solve the problems of existing applications on Lotus Notes, where new applications can be integrated with Exchange Server and can collaborate on documents properly.**

Keywords : *SharePoint server, Workflow, Question Answer and Corrective Action Request service, Binus University*

I. INTRODUCTION

BINUS University is an institution engaged in education that is recognized by society. BINUS University has a variety of bureaus that handle operational activities of BINUS University. QMC Bureau is a bureau in charge of monitoring the quality assurance of a university. In performing its duties, the QMC provides Question Answer (QA) and Corrective Action Request (CAR) services.

QA contains suggestions, ideas, and problems which users complained about BINUS University services and bureau's response to user suggestions, ideas or problems. BINUS University use QA to monitor the extent of their service quality so that BINUS University can do introspection and improve their quality. CAR contains responses and follow-up of the existing problems in QA, where the response to these issues will be addressed, reviewed, and verified by QMC and related bureaus.

BINUS University has provided QA and CAR services and automated them using Lotus Notes platform since a long time ago. In this internship, we migrate BINUS University's system especially QA and CAR services from Lotus Notes platform to SharePoint platform. We also add some features so QA and CAR applications work better.

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Indra is a student of BINUS University period 2007-2011 with Information Technology major (e-mail: spirit_1ndr4@yahoo.com).

Rendy H. K. is a student of BINUS University period 2007-2011 with Information Technology major (e-mail: rendyhananta@yahoo.com).

Ryan S. is a student of BINUS University period 2007-2011 with Information Technology major (e-mail: ryan_saputra1189@yahoo.co.id).

II. METHODS

Analysis

System analysis was carried out through four stages; 1. Survey of the current system; 2. Analysis of survey findings 3. Identification of information needs and 4. Identification of system requirements.

Design

Design method used in the paper was Structurized Design Method through 1. Workflow Diagram; 2. Use case Diagram; 3. Document Flow Diagram.

A. Workflow Diagram

Workflow Diagram for Question Answer Subsystem can be seen in Figure 2.1 and Corrective Action Request can be seen in Figure 2.2.

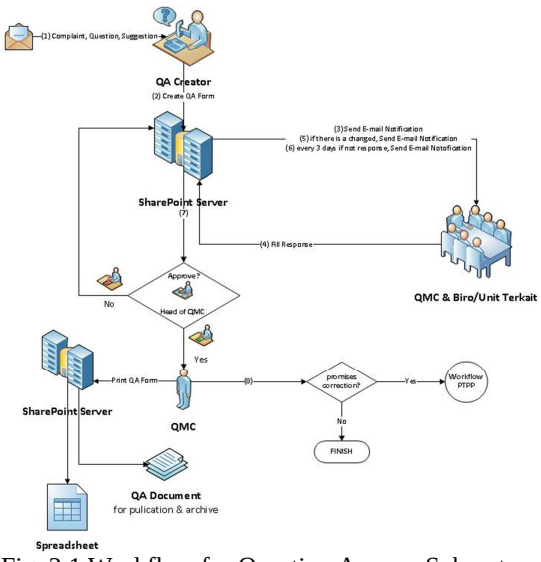


Fig. 2.1 Workflow for Question Answer Subsystem

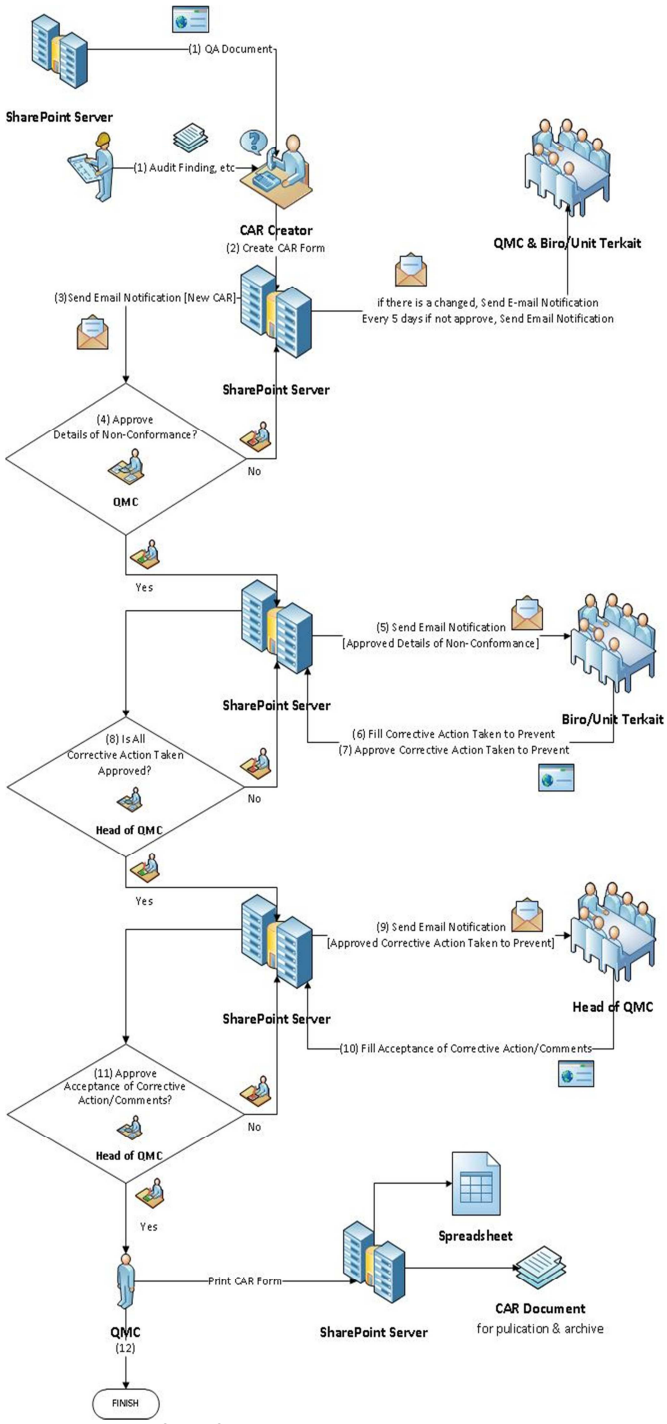


Fig. 2.2 Workflow for Corrective Action Request Subsystem

B. Use Case

Use-case describes the system functions from the perspective of external users and in a manner and terminology that they understand (3). Use case for Question Answer Subsystem can be seen in Figure 2.3 and Corrective Action Request can be seen in Figure 2.4.

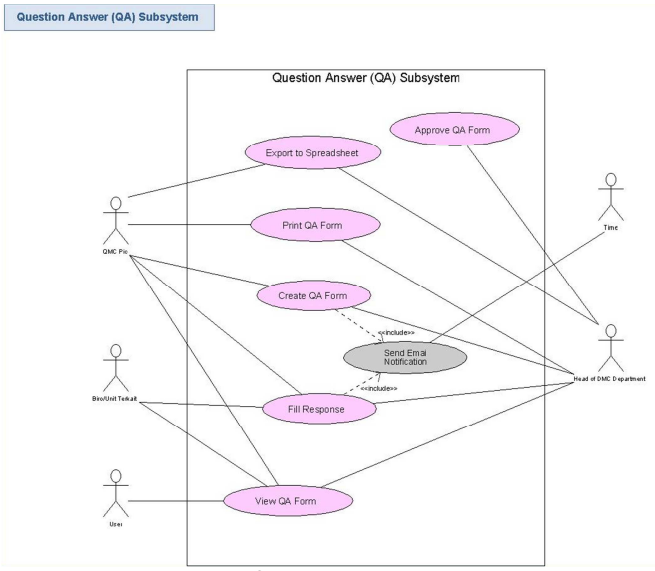


Fig. 2.3 Use Case for Question Answer Subsystem

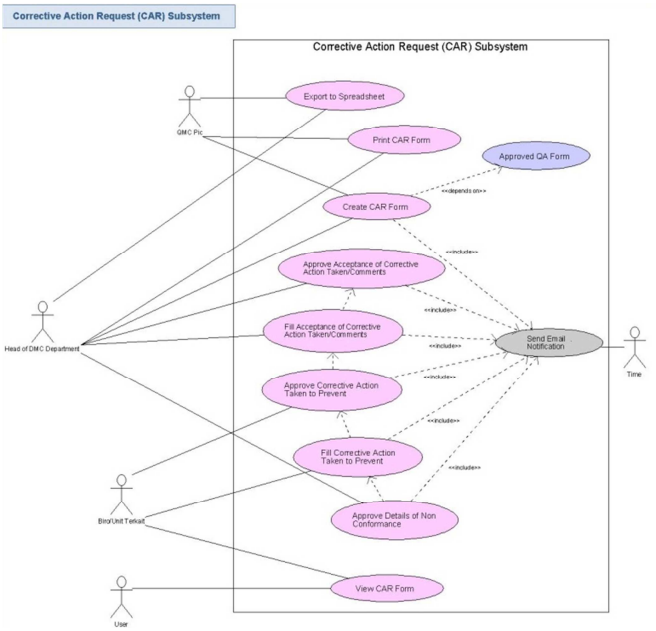


Fig. 2.4 Use Case for Corrective Action Request Subsystem

C. Document Flow Diagram

A Document Flow Diagram is used to display the flow of document through a system and a task or processing performed by the system. Document Flow Diagram for Question Answer Subsystem can be seen in Figure 2.5 and Corrective Action Request can be seen in Figure 2.6

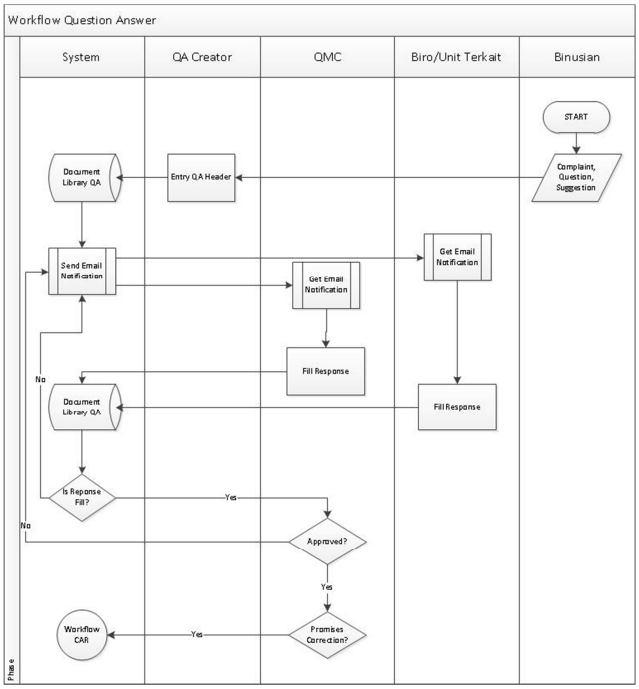
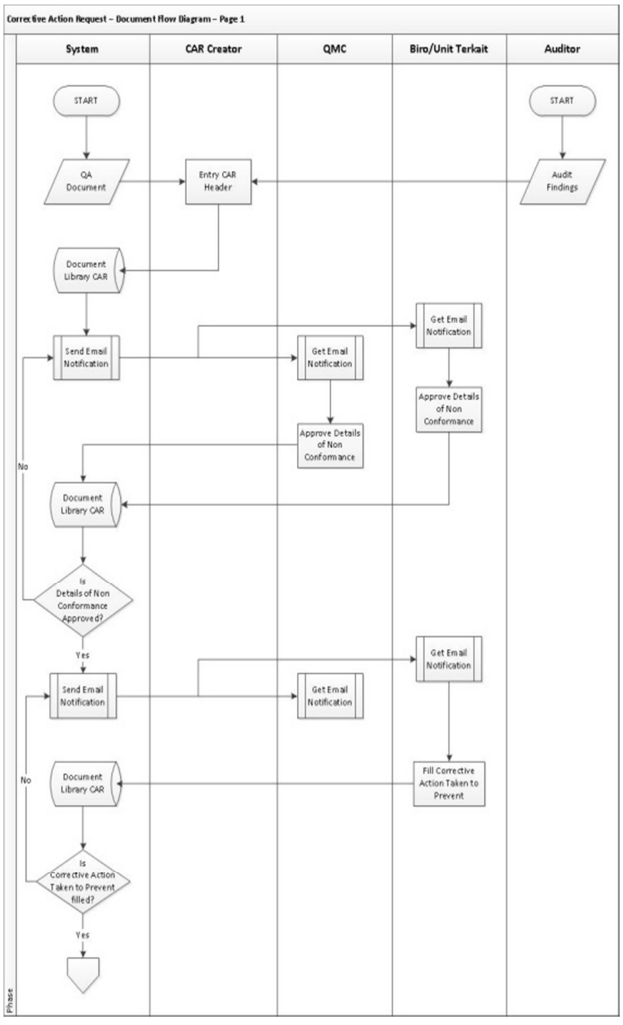


Fig. 2.5 Document Flow Diagram for Question Answer Subsystem



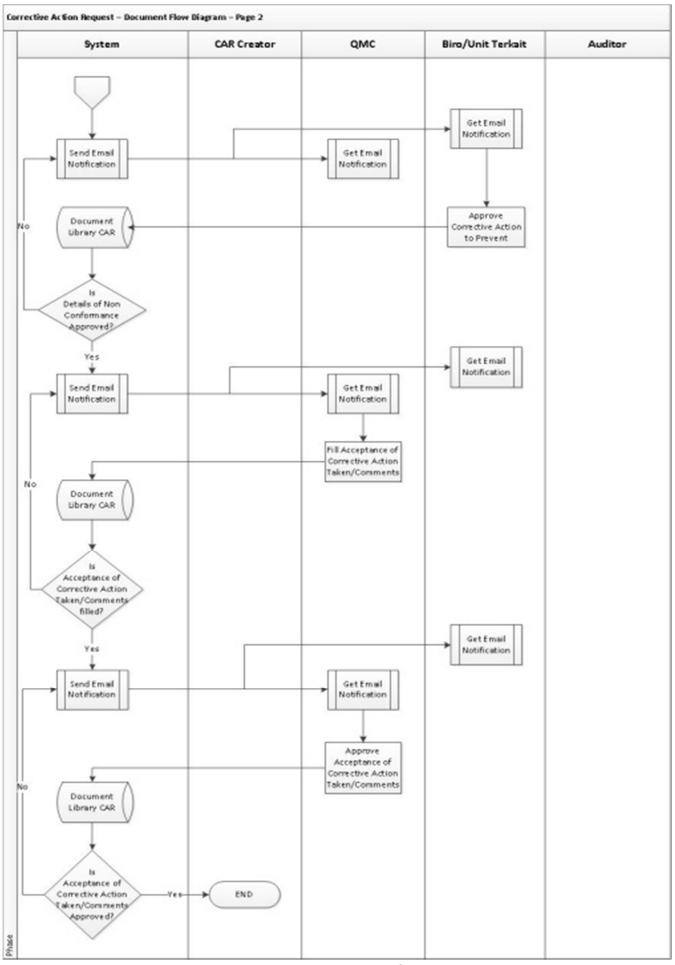


Fig. 2.6 Document Flow Diagram for Corrective Action Request Subsystem

Coding

Developing QA and CAR system application used the following tools Windows Server 2003 (4), Microsoft SharePoint Server 2007, Microsoft SharePoint Designer 2007, Microsoft Visual Studio 2008, Microsoft InfoPath 2007, Microsoft Access 2007 (5) that is supported by the language C # and VB.

Implementation

QA and CAR system application on its implementation requires hardware, software, networking systems, and human resources to run properly and according to destination.

In this case the installation was divided into five sections, installation of Web Server (.NET Framework 3.5 (6), Microsoft Visual Studio 2008), installation of database server (SQL Server 2005), Active Director Server installation, installation of mail server (Exchange Server), and installation client.

III. RESULTS

This research has resulted QA and CAR applications using SharePoint platform where this platform could be integrated with Exchange Server. Unlike previous applications, application QA and CAR had several features that had been automated, such as letters numbering feature, email notification and email reminder features. QA and CAR system applications had been modified so QA and CAR system applications suit with user's needs then users could run the QA and CAR services with optimal performance.

IV. CONCLUSIONS AND RECOMMENDATIONS

QA and CAR applications using SharePoint platform can be integrated with Exchange Server. QA and CAR applications can be coordinated because they can collaborate documents. QA and CAR applications have been matching with QA and CAR services workflow.

QA and CAR applications using SharePoint platform need file attachment feature so QMC can attach problem's evidences and action's evidences. QA and CAR applications need improve maximum bureaus so the user can use many bureaus as much as their will.

V. ACKNOWLEDGEMENT

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Thanks to staff of QMC BINUS University for providing information used for developing this project.

VI. REFERENCES

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