Petra Christian University Student Executive Board (BEM) Project Management System

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ABSTRACT

Petra Christian University Student Executive Board (BEM) needs an administrative and project management system that can help managing the activities.   This Board was having a problem of coordination on managing the activities they have. The tight schedule of each member of the executive staffs who comes from different departments has created this problem.

To answer the above problem, an administrative and project management system is developed to help PCU BEM managing each of their activities. The scope of the system covers access privileges, job divisions and task assignments, proposal creation and budgeting arrangements of the implementation of each activity. The application is developed as a web-based system using Macromedia Dreamweaver MX 2004, PHP and Javascript programming language and MySQL database system.

The system testing concludes that the application is able to support the performances of the BEM executive staff members in managing their activities. The detailed job divisions let the implementation process of each activity be easily viewed by each executive staff member..

Keywords

Administrative system, Student Executive Board, Project Management

1. INTRODUCTION

Petra Christian University (PCU) Student Executive Board (BEM) is an executive board responsible for managing the extra-curiculer activities of PCU students. It is in charge of channeling the PCU students' aspirations. PCU BEM consists of participating students from various departments at PCU. The activities of the Board consist of coordinating, planning and conducting long term and short term activities for students. One of the long term activities is related to extra-curicular Student Activity Unit (UKM) activities. UKM activities involve all PCU students who want to participate in the activities on their own interests. Meanwhile an example of short term activities, among them, is Petra Chess Competition conducted once a year (as stated on the policy of BEM).

In conducting a student activity, BEM needs an approval from Vice Rector III, the university administrator responsible for students activities. A request letter and an activity proposal have to be written and signed by the head of BEM to obtain the approval from Vice Rector III. After the implementation of each activity is completed, a report as a form of responsibility is also necessary to be submitted. The creating or request letters, proposals and reports of responsibility are used to be conducted manually by BEM. During the above processes, discussions among the executive staff members of BEM related to the preparation and implentation of activities conducted are needed. However, amongst their tight intra-curricularr class activities, each of the executive staff members of BEM has different schedules. This problem of different schedules creates a problem in setting the right time to meet and discuss the activities.

Meanwhile the emerging internet technology has the benefits of providing easy accesses to information resources from all over the world. The internet technology is also a promising solution for taking care on the problem of time limitation faced by PCU BEM. Thus BEM needs an application to manage the implementation of BEM activities smoothly as planned including involving people related to the implemented activities. The web-based application is expected to help the BEM executive staff members to implement, monitor and evaluate the activities anytime and from anywhere. This web-based application is also expected to help managing the administrative functions at BEM such as retrieving incoming and out-coming letters, proposals and reports archived in the system..

2. DASAR TEORI

2.1 Project

According to Marion E. Haynes (1993, p.3.), "project management focuses on a project. Project is an effort having a start and end point and is conducted to reach the goal having been set up related to budgeting, scheduling and quality achievement objectives"

According to Schwalbe (2006, p.7), "each project is limited by scope, time and cost. These aspects are often used in project management as three main limitations". To complete a project successfully, a project manager has to consider:

Scope: what kind of tasks conducted as parts of the project? What products, services or results are desired by customers (sponsors) in a project?

Time: how long will it take to complete a project?

Cost: how much is the cost needed to complete a project?

2.2 Project Management

Marion E. Haynes (1993, p.3) said that project management united and optimized the required resources to complete a project successfully. The resources included competencies, talents and team work efforts, facilities, tools and equipments, information, system, techniques and money.

Project management concept as a discipline was developed to be used in managing US spacecraft programs at the beginning year of 1960. This effort was further developed fast at government, military and industry.

Every project moves through a predictable life-cycle consisting of four phases in implementing the project. In managing each phase, various competencies are needed. Those phases of life-cycle of a project are:

Setting up and defining the project

Planning the project

Implementation of the plan

Completing and evaluating the project

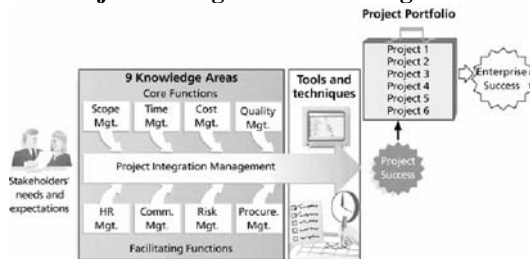## 2.3 Project Management Knowledge Area

Figure 1. Project Management Framework (Schwalbe, 2006)

According to Schwalbe (2006), "Project management knowledge area describes the key competencies that have to be developed". Figure 1 shows 9 (nine) key knowledge areas from a project management. Four key knowledge areas, scope, time, cost and quality management, are considered as the essential keys as they play important roles to meet the goal of a project.

Besides those four knowledge areas, there are also other four knowledge areas facilitating a project management. They are human resources, communication, risk management and procurement management. Those knowledge areas are the process necessary to go through to meet the goal of a project.

The Project integration management is the ninth knowledge area. It is a function to influence and be influenced by the other knowledge areas.

3. SYSTEM ANALYSIS

PCU BEM's main activities are to implement long term activities such as UKM activities and short term activities for students. The activities cover processes such as letter creating, proposal and report creating. Those processes used to be conducted manually using Microsoft Word and Microsoft Excell. It took quite some times to retrieve those letters, proposals and reports as they were documented as hardcopies.

The proposals, prepared by the Board, are meant as the initial preparation at the planning stage of implementing activities for the students. The approved proposals will lead to other preparations to implement the activities, which will also be followed by an evaluation stage covering the report writing on activity as well as on budget realization as a form of responsibility.

PCU BEM has been progressing lately. It needs an administrative and project management system to aid the staff in managing the information needed to plan, implement and evaluate the activities held. To develop a new system, an analysis of the current system is needed as a foundation to design a new system to meet the needs of PCU BEM.

PCU BEM has had a website with limited features and information around profiles of BEM and UKM. A revised edition of the website is developed not only covering new interfaces, features such as profiles or news only but also added by features on administrative and project management system to help planning, implementing and evaluating activities held by the board.

4. SYSTEM DESIGN

Figure 2 and Figure 3 are the new developed system to process the activities. During the planning stage, a proposal creating activities is conducted electronically by the implementation committee member responsible for this task. The proposal is also checked against the initial plan and commented by the BEM executive staff members using the system

The proposal will not be printed without any approval from BEM. The approved proposal is printed and submitted to the university administrator (University Vice President III) for approval before submitted to sponsors or related parties, such as speakers etc.

During the implementation stage, some processes such as defining task assignments for each member of the implementation committee are conducted electronically. In this stage, the progress of each task can be monitored anytime, anywhere.

During the evaluation stage, the report writing is also conducted and submitted electronically to BEM using this system. During the report creating stage, each task is evaluated and discussed electronically in details by the members of the implementation committee before being approved by BEM. The approved activity and budget realization report are submitted to the university administrator and sponsors in hardcopies.

The new system is designed to manage the activities easier than the old system. This new system helps monitoring the progress of each activity conducted as well as in writing letters, proposals and reports in one web page. The data is also automatically stored in a database ready to be retrieved anytime needed.
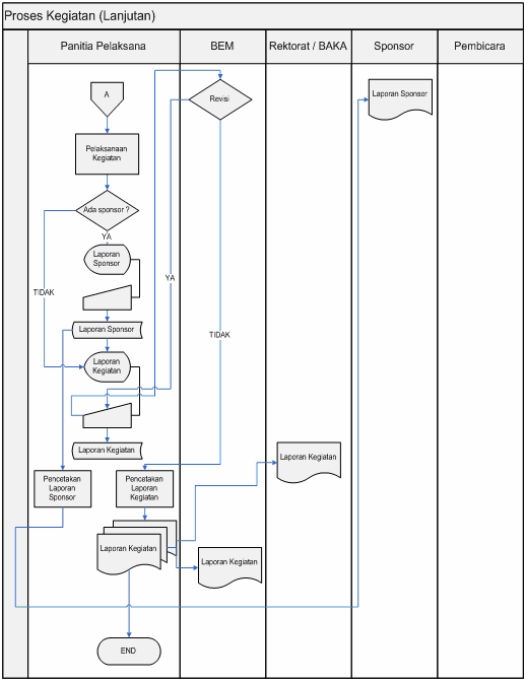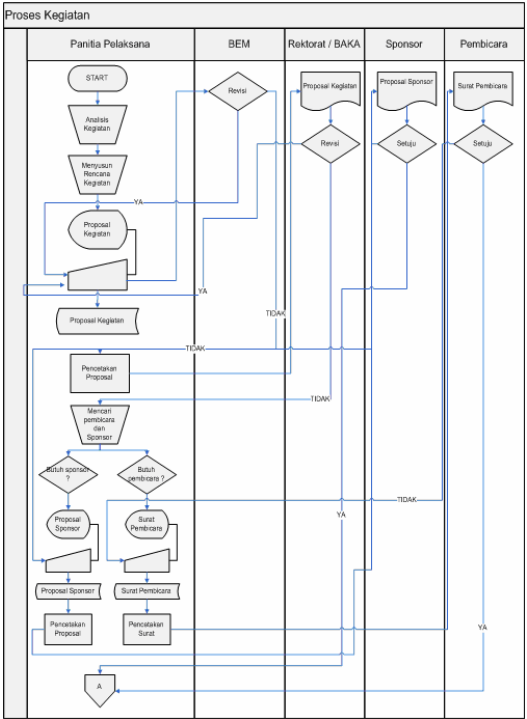

Figure 3. UKM activity System / Other New BEM activity

Figure 2. UKM Activity System/ Other New BEM Activity

(continuation)

5. RESULTS AND SYSTEM TESTING

The system testing was conducted using a case study as follows. UKM on Voluntary Corp was going to implement an activity on Blood donor I, on May 5 2008. The preparation activities were started on April 15 2008.

During the planning stage, a committee was formed by UKM on Voluntary Corp. The members of the committee were chosen from the members of the Voluntary Corp or non members. Thirteen students were chosen to be responsible for the implementation of this activity.

After the implementation committee was formed, each member involved started to prepare what were needed in implementing the activity. Each member was assigned tasks related to the position he/she had been appointed. Every task consists of three stages: planning (pre-implementation); realization (implementation), evaluation (post-implementation). Those tasks were determined on the committee meetings.

Based on the above case study, the steps needed were as follows:

1. A member of BEM executive staff did the data entry on the activities planned to be implemented.

2. A member of BEM executive staff did the data entry on the coordinator of the implementation committee

3. The coordinator of the implementation committee did the data entry of the members of the implementation committee

4. The secretary of the implementation committee did the data entry of the task assignments of each member of the implementation committee.

5. The proposal creating is conducted by the coordinator of the implementation committee

6. The letter creating is conducted by the secretary of the implementation committee

7. The budget plan is written by the treasurer of the implementation committee

8. Each member of the implementation committee wrote down the date as he/she completed the tasks. He/she also wrote the report related to his/her assignment.

9. The treasurer created the budget realization report from the data he/she provided

Figure 4 below showed the form for add ing a new activity on Blood donors I. This activity was planned to be implemented on May 5th 2009, while the process was started on April 15th 2009. Thio Evi Yulia (42407201) was appointed as the person responsible for this activity.

Figure 4. Inputting New Activity

After the new activity was formed, the secretary of BEM registered the coordinator of the activity. The coordinator formed an implementation committee as shown in Figure 5.

Figure 5. Inputting members of Implementation Committee

After the implementation committee was formed by the coordinator. The coordinator began to write a proposal for this activity by accessing the menu on creating Proposal. A proposal had to be created for each activity. Figure 6 showed the process of creating a proposal.

The proposal was written directly using the template provided. The Proposal Menu could only be accessed by the coordinator and secretary of the implementation committee. The proposal consisted of background, objectives, and other things determined by BEM.

Figure 5. Inputting Proposal Page

As the proposal was created, it could also be viewed by other persons under the positions for the activity on Blood Donor I., such as the Coordinator and Secretary of UKM on Voluntary Corp, The Head of the Department on Community Service up to the Head of BEM. Each proposal has a budget plan. The budget plan was created under the Budget menu and could only be accessed by the committee treasurer by login to the system using the access privilege assigned. The inputting process of the budget plan could be viewed on Figure 6.

Figure 6. Budget Planning Page

The submitted proposal would be approved by the secretary of Voluntary Corps of UKM as seen on Figure 7. Spaces for comments were provided. Alter approval, the proposal would be submitted to the Voluntary Corps of UKM and The Head of BEM to be signed and approved, ready to be implemented.

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Figure 7. Proposal Writing Page

Alter being approved by the Head of BEM; the Secretary of the implementation committee assigned the tasks assignments and schedules as seen on Figure 8.
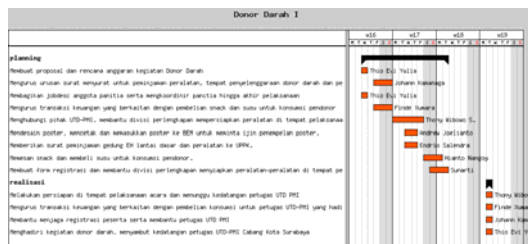

Figure 8. Gantt Chart – Job Division

Each member of the committee entered the performance progress having been achieved. Meanwhile the budget realization could only be written by the committee treasurer.

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No	Questions	Numbers of Respondent				
		1	2	3	4	5
1	How interesting is the user interface of the web-based application designed for BEM ?	0	0	0	2	3
2	Does the features of the web-based application for BEM support the performance of BEM executive staff members and implementation committee	0	0	1	2	3
3	Is the web-based application for BEM easy to use?	0	0	1	3	1
4	Does the web-based application for BEM match the current business process of BEM ?	0	1	0	3	1
5	Can the web application of BEM be well implemented?	0	0	0	4	1

6. CONCLUSIONS

The administrative and project management system is expected to help BEM in creating letter requests, proposals and reports of responsibility more easily and better coordinated

This system allows each executive staff member of BEM and the implementation committee to have different access privileges. This feature helps BEM to better manage and document all activities as well as develop better senses of responsibility for each party involved.

Based on the results of the questionnaires distributed to BEM executive staff members, it is concluded that the overall performance of application has been quite satisfactory.

7. REFERENCES

[1] Schwalbe, Kathy., Ph.D., PMP. 2006. Information technology project management. (4th Edition). Canada : Thomson Course Technology

[2] Haynes, Marion E. 1993. Manajemen proyek. Jakarta : Binarupa Aksara.

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