

THE DEVELOPMENT OF THE FREE ENROLLMENT SYSTEM, UNDERGRADUATE OF SUAN SUNANDHA RAJABHAT UNIVERSITY

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ABSTRACT

The knowledge sharing on the topic of the development of online free enrollment system was conducted by the KM group of the Academic Services Division/sub-group: Course Enrollment of Suan Sunandha Rajabhat University. It aimed to: 1) develop and improve a work procedure/work practices of personnel of Suan Sunandha Rajabhat University; 2) develop an online free enrollment system for the university; and 3) transform a routine work on the development of the online free enrollment system into a research. The knowledge sharing on this topic was conducted via a series of group meetings in which the members of group actively shared their work experiences, problems, techniques on student enrollment with each other. The group members also exchanged their knowledge with personnel from the faculties/colleges/educational centers. Moreover, they also searched information from various secondary sources and established a knowledge management action plan to guide their practices. They analyzed the knowledge gained from the knowledge sharing activities and transformed them into a new body of knowledge. The members of the KM group consisted of academic supporting staff from 8 internal organizations: 1) the Academic Services Division; 2) the Faculty of Science and Technology; 3) the Faculty of Humanities and Social Sciences Faculty; 4) the Faculty of Fine and Applied Arts; 5) the Faculty of Management Science; 6) the Faculty of Education; 7) the Demonstration School of Suan Sunandha Rajabhat University; and the Nakhon Pathom Education Center. The members worked together to develop the online free enrollment system. Experts in the field of course enrollment were invited to check and comment the efficiency of system. They also gave suggestions to improve the system.

The results of the knowledge sharing indicated that the previous system which students had to enroll courses according to the study plans set by the faculties/colleges had a limitation in that students were not allowed to enroll in courses based on their willingness and real interest. This may affect the students' CGPA and some students may be eventually retired. Therefore, the members of the KM group agreed that this university enrollment system needed to be changed into the new system which allowed students to enroll in any courses based on their own interest. This new system was known as the "Free Enrollment". Based on this system, the Registrar's Office would open and close the system according to the university academic calendar. Students would be able to enroll in/add-drop courses by themselves at reg.ssru.ac.th. However, if students would like to make a request on late course enrollment/adding-dropping, they had to contact their faculty/college/education center to proceed their request, and they also needed to download a bill payment and pay for a tuition fee at any banks/counter services. The newly developed system would allow the students to make their own decision on the study plan according to their interest. It also helped reduce the workload and working hours of related staff as well as reduced the document storage area in the office.

Keywords: System Development, Free Enrollment System, Suan Sunandha Rajabhat University

INTRODUCTION

The KM groups under the supervision of the Academic Services Division consists of 7 sub-groups: 1) Curriculum and teaching; 2) New Student Admission; 3) Course Enrollment; 4) Internship; 5) Academic Results; 6) Graduation Status Check; and 7) One stop service of the Office of General Education and Innovative Electronic Learning. The Course Enrollment sub-group was formed by a cooperation of supporting staff members who are in charge of course enrollment from 8 internal organizations including: 1) the Academic Services Division; 2) the Faculty of Science and Technology; 3) the Faculty of Humanities and Social Sciences Faculty; 4) the Faculty of Fine and Applied Arts; 5) the Faculty of Management Science; 6) the Faculty of Education; 7) the Demonstration School of Suan Sunandha Rajabhat University; and the Nakhon Pathom Education Center. It operated based on the guidelines provided by the university. Specifically, it held a series of meeting for knowledge sharing,

knowledge extraction, and knowledge application into practice. The group focused their knowledge sharing on the development of the online free enrolment system. This was to respond to the 15-years strategic plan (B.C. 2017-2032) SSRU2013 of Suan Sunandha Rajabhat University and the future direction for the university development that emphasized on encouraging students to manage their own life [1]. This new system was developed to replace the old system which students had to enroll in courses set by the faculties/colleges and were unable to select courses of their own interest. Through this old system, students would not learn how to manage their own life. On the contrary, the new system will allow students to enroll in any courses freely and have an opportunity to manage their study plan in order to graduate within the time period specified by the university.

After sharing experiences and knowledge with each other, the members of the group found that the old system had a limitation in terms that students were unable to select courses to study based on their interest and condition. In the old system, the Registrar's Office was responsible to enroll for students according to study plans determined by the faculties/colleges. Then students could check their enrollment information at reg.ssrु.ac.th. In a case that they would like to add or drop any course, they had to make a request at their faculty/college/education center and download a bill payment and pay a tuition fee at any bank/counter service. This old system could cause some students to be retired from the university because they had to study in a course that might be too difficult which affected their CGPA. Therefore, the group members agreed to develop a new system. They began with analyzing steps in course enrollment and develop a new system that allowed students to enroll in any courses freely. The knowledge sharing among group members becomes a body of knowledge on the development of the online free enrollment system which responds to the university policy that aims to encourage students to manage their study plan. It also enhances the quality of service of the university, especially in terms of teaching and learning management which can maximize the benefits for service receivers. The new system allows students to plan their study based on their interest and condition. It also helps reduce the workload and working hours of related staff as well as reduce the document storage area in the office.

OBJECTIVES

1. To develop and improve a work procedure/work practices of personnel of Suan Sunandha Rajabhat University
2. To develop an online free enrollment system for the university; and
3. To transform a routine work on the development of the online free enrollment system into a research.

RESEARCH CONCEPT

The knowledge sharing on the development of the online free enrollment system for the undergraduate programs of Suan Sunandha Rajabhat University was conducted based on a review of related literature, concepts, theories, and related research as follows:

Geographic Information Division (2015) states that the organization knowledge management refers to gathering knowledge existing within the organization and develop them to be a system. Such knowledge may be in a form of explicit or tacit knowledge. A system of knowledge can be accessible by all people in the organization so that they can learn and develop themselves from such knowledge and can work more efficiently. This will lead the organization to achieve its goal. There are two types of knowledge including:

1. Tacit knowledge refers to knowledge gained from experiences, gift or instinct of each person that makes him/her to understand certain things. This type of knowledge cannot easily be transferred in a form of words or in writing. The examples of tacit knowledge are working skills, handicrafts, and analytical thinking. This type of knowledge is also known as intangible knowledge.

2. Explicit knowledge refers to knowledge that can be gathered via a variety of ways such as recording in a writing form, developing theories, and preparing handbooks. This type of knowledge can also be called tangible knowledge.

A process of knowledge management in an organization consists of 7 steps which are:

1. Identification of need for knowledge: this step involves considering vision, mission, and goals of the organization and trying to find out what knowledge the organization still needs to know, who acquire such knowledge, and what forms it is in.

2. Creation of and searching for knowledge: the actions in step 1 show that the organization still needs some form of knowledge that will lead it to be able to work more efficiently. Therefore, it has to search for such

knowledge by creating a new body of knowledge, searching for knowledge from external sources, maintaining existing knowledge, and modifying unnecessary knowledge.

3. Knowledge organization: once the organization has sufficiently gained required knowledge, it has to systematically organize such knowledge into groups of knowledge and put each group in a certain form such as in a form of a document, a book, or a VCD etc.

4. Knowledge codification and refinement: in this step, the organization has to review and refine the organized knowledge to ensure that it is still up-to-date. For example, improving the form of the document in which the knowledge is kept, reviewing language use to explain the knowledge, and improving the content of the knowledge to ensure that it is complete.

5. Knowledge access: in this step, the organization has to encourage people who need to use such knowledge to be able to gain access to the knowledge easily. For example, using information technology, web board, and bill boards to publish the knowledge.

6. Knowledge sharing: this action can be done by many ways. In a case of explicit knowledge, the organization can share the knowledge by preparing documents, developing a database, or using IT. As for tacit knowledge, the organization can share by establishing a cross functional team or arranging a platform for knowledge sharing.

7. Learning: In this action, personnel in the organization have to use the knowledge or knowledge management process to help them work more efficiently. The organization can do this by determining a policy or encouraging personnel to think that learning is a part of their job. For example, utilizing concepts, knowledge, expertise, experiences, practices, or innovation gained from trainings, study visits in a foreign country, and best practices from knowledge sharing to improve their own performance and the overall performance of the organization. Such actions can lead the organization to be a learning organization. Such actions can be displayed as “learning from creation of a body of knowledge” --> “application of knowledge” --> “having new knowledge and experiences”. This cycle can proceed like this [2].

Free enrollment

Rungsrisawat (2017: 2) points out that students can make a decision on their study plan by selecting courses, timetable, and lecturers and they can graduate within a required time period [3].

The System Development

Smith (1993: 81-85) proposes the principles for system development which include:

1. System analysis: analyzing components of the system to find out how they work, to what extent they are appropriate, which components should be cut or added in order to make the system work appropriately.

2. System design: redesigning the system based on the new set of components of the system that has been analyzed so that the new system can work more efficiently.

3. System Measurement: checking the efficiency of the new system to see that it can truly work appropriately [4].

Related research

Uiphanit et al, (2010) studied on the development of an online management system for an online electronic academic journal management: a case of Suan Sunandha Research Journal. This research aimed to develop an online management system for Suan Sunandha Research Journal. The research sample consisted of 4 experts and users of the online system including 3 staff members of the editorial board of the journal, 5 authors, 68 students, and 29 general users of the website who regularly read the articles of the journal and completed the satisfaction survey. Data were collected with the use of a questionnaire. The research findings showed that: The opinion of the experts and the users of the online system on the efficiency of the online management system was high whereas the opinion of the general users of the website was very high. Besides, the general users' satisfaction on the online system was rated very high. Therefore, it can be concluded that a developed online management system for the journal could be truly used, especially for Suan Sunandha Research Journal. **Suggestions** 1) Future research should aim to develop the system into a free software 2) This system should be developed in a way that it can automatically be installed and improved [5].

METHODOLOGY

1. The group members exchanged and shared their knowledge by telling their experiences on students' course enrollment. The topics included problems and how to solve the problems, results occurred to themselves

and students, feeling on problem-solving, and what they have learnt from solving the problem, and how to gain knowledge related to students' course enrollment from other public and private universities. Then, the members worked together to analyze and find out the ways to develop an online free enrollment. They agreed that some steps for the course enrollment should be deleted to be consistent with the university policy and be able to support teaching and learning management activities. The work process of the group included:

1.1 Inform students to meet with their advisors at their faculty/college/education center during the time period specified in the university academic calendar. This action aimed to prepare students for the online free enrollment.

1.2 Develop an online free enrollment system for students to enroll in/add-drop courses by themselves at reg.ssr.u.ac.th based on the university academic calendar.

1.3 Name the system so that students can recognize it.

1.4 Advise students to use the system from the first semester of their study so that they could understand how to use the system and avoid mistakes in the following semesters.

1.5 Advise new students to meet with their advisors to discuss about the courses to be enrolled and the curriculum structure of their program so that they could manage their study plan and were able to graduate within the required time period.

1.6 Set the time period for students to enroll according to their year of study. Students studying in higher years should be allowed to enroll before students in lower years so that they could graduate within a required time period.

1.7 Late enrollment and adding and dropping by students should be completed during the first two weeks of the semester, Figure 1.

Figure 1

The group members held a series of meetings to share their knowledge on the development of the online free enrollment



2. The group members met with an expert to gain advice and suggestions on the development of the online free enrollment system. The invited expert was Associate Professor Dr. Sajeewan Darbavasu. The suggestions from the expert were as follows:

2.1 Adding goals and outputs of the action plan

2.2 Identifying steps of the working process to be consistent with those stated in a manual for enrollment, both the previous and new process

2.3 Inform students on the implementation of the new system and how to use it. Analyze the knowledge on the development and implementation of the new system and develop it as a new body of knowledge.

2.4 Extracting knowledge from the development and implementation of the new system into practice,

Figure 2.

Figure 2

The group members held a meeting to review and refine the knowledge gained on the development of the online free enrollment system with an expert.



RESULT

A summary of results of knowledge sharing is concluded in the table below.

Previous process	New process	Things to be improved
		<ol style="list-style-type: none"> 1. Students meet with their advisors to prepare for the enrollment at the faculties/colleges/education center 2. The Registrar's Office opens and close the enrollment system for students during the time period specified in the university academic calendar. 3. Students enroll/add-drop subjects for students at reg.ssrु.ac.th during the time period specified in the academic calendar. 4. Students make a late course enrollment/adding-dropping at the faculties/colleges/education center during the time period specified in the academic calendar (A fine of 200 Baht must be paid)

CONCLUSION ON KNOWLEDGE SHARING

Based on the knowledge sharing on the development of the online free enrollment system and knowledge gathering on this issue, the group members can conclude that:

Advantages of the system

For the Registrar's Office: the new system helped reduce working hours on creating study plans for students and working on students' late enrollment requests.

For staff of faculties/colleges/education centers: the new system helped reduced work hours of proceeding on students' late enrollment requests. They could also develop their understanding on the curriculum structure of each program. This was because when students had a problem on enrollment and asked for an advice from them, they had to learn and understand the structure of that program before giving an advice to students.

For students: they could manage their study plan on their own. This means that they could select courses to be enrolled in each semester freely. Through this action, students' CGPA were likely to be higher and consequently reduce a possibility for them to be retired because they could enroll in easy courses when their CGPA was low.

Guidelines for the development of the online free enrollment

1. The last step of the enrollment procedures should be changed from students clicking "Confirm" the enrollment to be that once students selecting courses to be enrolled, the system will automatically save the information.

2. The information on the education center where the course is offered should be displayed on the system, along with the name of the subject.

3. Staff of the faculties/colleges/education centers can input the information on number of seats offered in each group by themselves because these staff members know the size of each room and how many students each room can be accommodated. They also know the suitable size of each class.

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