# GUIDELINES FOR THE DEVELOPMENT OF THE SYSTEM TO CHANGE THE GRADE "I" (INCOMPLETE) OF THE UNDERGRADUATE STUDENTS THROUGH ONLINE SYSTEM, SUAN SUNANDHA RAJABHAT UNIVERSITY

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# **ABSTRACT**

The knowledge sharing on the online system development for changing of grade "I" for students in Undergraduate Programs, Suan Sunandha Rajabhat University was conducted by a KM group of the Academic Services Division. The objectives of this knowledge sharing practice were to: 1) develop/improve work performance of personnel of Suan Sunandha Rajabhat University; 2) provide guidelines to enhance the online system for changing of grade "I"; and 3) transform a routine work on the development of the online free enrollment system into a research. The group members held a series of meeting with the purpose to share and exchange knowledge and experiences with each other to develop an online system for changing grade "I". The group also invited an expert in the field to give suggestions on the developed system. The KM group was formed by a cooperation of academic supporting staff whose duties involved changing grade "I" for undergraduate students. The group members consisted of staff members from 9 organizations within the university including: 1) the Academic Services Division; 2) the Faculty of Management Science; 3) College of Innovations and Management; 4) College of Logistics and Supply Chain; 5) Nakhon Pathom Education center; 6) the Faculty of Fine and Applied Arts; 7) the Faculty of Humanities and Social Sciences; 8) the Office of General Education and Innovative Electronic Learning; and 9) the International College.

The results of the knowledge sharing practice showed that the old system used by the faculties/colleges/education centers to change grade "I" for students was not sufficiently efficient. Based on the old system, the supporting staff had to gather all the request form for changing of grade "I" from lecturers and presented them in the meeting of the faculty/college/education center to gain an approval. After that, they had to prepare a memo requesting to change grade "I" for students and submit it to the Registrar's Office to process the requests. The steps in this old system sometimes caused a delay in changing of grade "I". Upon realizing this problem, the group members conducted the knowledge sharing practice and developed the online system for changing of grade "I" which allowed staff members of the faculties/colleges/education center to be able to confirm the change of grade "I". Along with the implementation of the online system, other practices were also needed including: 1) scheduling a time period for changing of grade "I" for each semester and announcing this on the university academic calendar 2) lecturers of each course should be persons who changed grade "I" via the online system and submitted a report of changing of grade "I" to the faculties/colleges/education center to ask for an approval; 3) the Registrar's Office proceeded the request on the system.

**Keywords**: Online System for Changing of Grade "I", Undergraduate Level, Suan Sunandha Rajabhat University

# INTRODUCTION

The KM groups under the supervision of the Academic Services Division consists of 7 communities of practices or sub-groups including: 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 sub-group called "the Academic Results" was formed by a cooperation of academic supporting staff whose duties involved changing grade "I" for undergraduate students. The group members consisted of staff members from 9 organizations within the university including: 1) the Academic Services Division; 2) the Faculty of Management Science; 3) College of Innovations and Management; 4) College of Logistics and Supply Chain; 5) Nakhon Pathom Education center; 6) the Faculty of Fine and Applied Arts; 7) the Faculty of Humanities and Social Sciences; 8) the Office of General Education and Innovative Electronic Learning; and 9) the International College.

The group members extracted knowledge from exchanging their experiences and expertise until they were able to develop a body of knowledge on how to enhance the efficiency of the system for changing of grade "I" using the online system the results of the knowledge sharing practice showed that the old system used by the faculties/colleges/education centers to change grade "I" for students was not sufficiently efficient. Based on the old system, students met with lecturers to complete their works of the course that they received grade "I", then the lecturers filled in the request form to change grade "I" for the students and submitted to the faculties/colleges/education centers. After that, supporting staff of the faculties/colleges/education centers gathered all the request form for changing of grade "I" and presented them in the meeting of the faculty/college/education center to gain an approval. After that, they had to prepare a memo requesting to change grade "I" for students and submit it to the Vice President for the Academic Affairs. Once the memo had been approved by the Vice President for the Academic Affairs, the faculties/colleges/education center had to submit all the request forms to the Registrar's Office to process the requests. Students could check whether their grades had been changed at reg.ssru.ac.th. The steps in this old system sometimes caused a delay in changing of grade "I", especially when there were many students who received grade "I". As the process might take a long time, some students were unable to enroll course in the next semester during the time period specified by the university.

Upon realizing this problem, the group members conducted the knowledge sharing practice and developed the online system for changing of grade "I" which helped reduce the time of proceeding the request. The group took advantage of information system to help them improve their work performance on this issue. This practice responded to the university policy that aims to encourage every internal organization to utilize IT to enhance their work performance and the quality of service for students as well as to improve teaching and learning activities. The development of the online system made the routine work on proceeding the request of grade "I" changing faster and more convenient. It also eliminated unnecessary steps such as submission of requests, reduced quantity of documents used for proceeding the requests, reduced time of working for the staff in the Registrar's Office, and reduced time for students to check their grades.

# **OBJECTIVES**

- 1) Develop/improve work performance of personnel of Suan Sunandha Rajabhat University
- 2) Provide guidelines to enhance the online system for changing of grade "I"
- 3) Transform a routine work on the development of the online free enrollment system into a research.

#### RESEARCH CONCEPT

The group members conducted the knowledge sharing on this topic based on the following concepts.

Wasi (2005) states that the term "management" may provide a negative sense in Thai society because it contains a meaning of using an authority to manage or control something. However, the term "knowledge management" has a specific meaning. Specifically, it refers to a management practice that aims to discover knowledge and expertise which belong to a certain person. It aims to extract such knowledge/expertise and share it to others by making it easy to understand or function, transform it to be beneficial for a specific group of people, and use it according to situation. It also involves creating new knowledge or innovation by integrating different kinds of knowledge. The knowledge management practice enables people to learn on a new issue together and exchange knowledge among each other. It leads to the building of collective wisdom that can help solve a problem [1].

Iamsiriwong (2005) states that the identification of all steps used in the system development can help the system analysts work more efficiently as they can control both time to work and budget used for the project. This is similar to a decision used to solve problems based on scientific approach [2].

Kerdpong (2012) states that measurement refers to a process used to provide number or a symbol that has a meaning to describe characteristics or quality of a certain thing or thing that is measured. Measurement needs an efficient tool to find out the number or quantity of thing that is measured. For example, measurement of the height of a child is a practice that transforms the characteristic of a child (height) into a number or the score in Math is a way to transform the quality of a student (ability or skills in Math) into a number by using a test. As for evaluation, it refers to a process that follows the measurement. It involves analysis of the data,

making a decision, and concluding value or meaning of an aspect that has been measured based on certain criteria to determine whether that aspect is good or bad, or passes or fails. We can see that measurement is related to evaluation in terms that measurement provide a number or quantity that describes characteristics or quality of a certain thing/aspect, then this number/quantity will be evaluated which is a process of analyzing such number/quantity to make a decision about that thing/aspect [3].

# **Related Research**

Nuanmeesri (2012)states that the application for admission of students in undergraduate programs has an important role in the university management because this task directly affects the efficiency of the education management and budget planning. Upon realizing this, she conducted a research aiming to develop a system to forecast the student admission. The researcher designed models for forecasting the student admission. Three models were tested by using classification with Decision Tree technique and K-fold cross-validation. The other three models were randomly classified based on percentage, and one model was established and tested separately. The total of seven forecasting models was tested. The research results showed that the model that was established and test separately had higher efficiency value than other models. It had an accuracy value of 94%, the precision value of 94.30%, the recall value of 94%, and the F-measure of 93.70%. This meant that this model could provide accurate and precise forecast of student admission. The researcher, then, used the Decision Tree technique to develop a system for forecasting student admission by using internet network. This system was assessed for its efficiency by mean and standard deviation from two respondents including four experts and 40 personnel. The results showed that the average efficiency assessment result from the experts was 4.17 whereas that from a group of personnel was 4.34. The research concluded that the efficiency of the forecasting system of student admission using internet network was good and could be used to forecast student admission effectively [4].

#### METHODOLOGY

After sharing and exchanging knowledge between the group members on how to develop an efficient system for changing of grade "I", the group members added two main actions in the system: 1) lecturers entered new grade in the system; and 2) the academic supporting staff of the faculties/colleges/education centers confirmed the changing of the grade "I" into the new grade. These two actions utilized technology to facilitate the actions. Along with the implementation of the online system, other practices were also needed including: 1) scheduling a time period for changing of grade "I" for each semester and announcing this on the university academic calendar; 2) allowing the academic supporting staff of the faculties/colleges/education centers to prepare a report of grade "I" for lecturers (in the old system, the Registrar's Office did this); 3) lecturers of each course changed grade "I" via the online system and submitted a report of changing of grade "I" to the faculties/colleges/education center to ask for an approval; 4) the Registrar's Office proceeded the request on the system and process the data on the students' GPA based on the new grade; 5) preparing a manual for using the online system for changing of grade "I" and publishing it on social media such as E-office, Website, Line, Facebook, Figure 1, 2 and 3.

Figure 1

Meetings: the group member held a series of meeting to share and exchange knowledge.



# Figure 2

Studying and searching for knowledge from external sources: the group members search for knowledge on this issue from other universities' website, both public and private universities by focusing on the process and system used for changing of grade "I", then they share this knowledge by telling to other members.



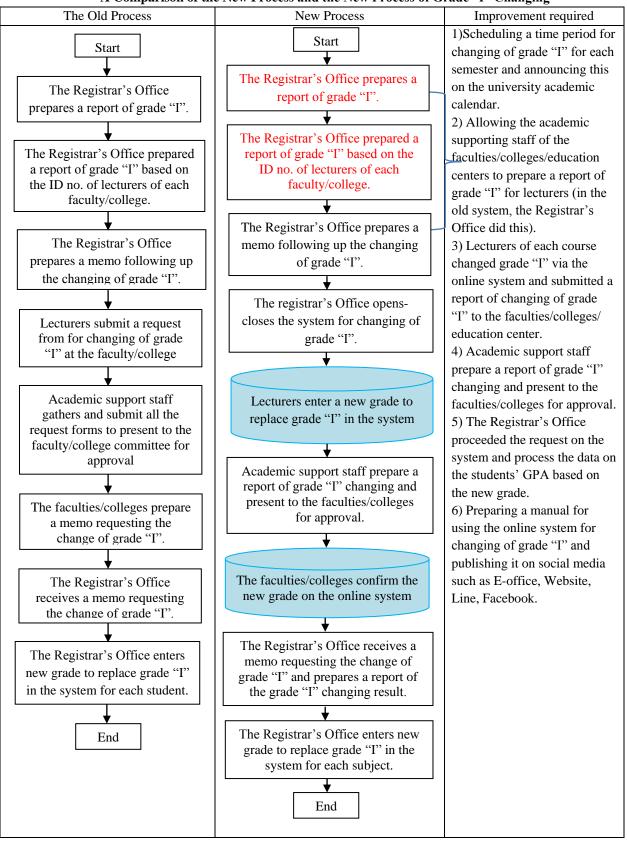
**Figure 3** Interviewing experts on this issue.



# **RESULT**

The knowledge sharing on the development of the online system for changing of grade "I" led the group members to identify problems and obstacles of the old system/practice used for changing of grade "I". Through the old system, students had to submit their work to complete the tasks required by the course. Then, the lecturers had to complete a request form to change grade "I" for the students and submit it to the academic service section of the faculties/colleges/education centers to proceed the request. The problems found from this old system included a wrong request form being used, missing of a lecturer's signature, and inaccuracy of scores/grade. These problems caused a delay of proceeding the request for students and in some cases affected students' graduation. The knowledge found from this knowledge sharing practice is beneficial for the management of the Registrar's Office. The utilization of technology to help a routine work can make the process of grade "I" changing faster and more convenient. It also eliminated unnecessary steps such as submission of requests, reduced quantity of documents used for proceeding the requests, reduced time of working for the staff in the Registrar's Office, and reduced time for students to check their grades. Above all, it can help users of the system to access the information more easily.

# A Comparison of the New Process and the New Process of Grade "I" Changing



# CONCLUSION ON THE KNOWLEDGE SHARING

# Outcomes of the Implementation of the New Procedures/Work Process into Practice

The online system for changing of grade "I" developed by the group members utilizes technology to make the routine work more convenient and faster. It helps eliminates unnecessary practices such as filling in the request forms, submitting these forms to the Registrar' Office, and entering a new grade into the system for each student. These practices take a lot of time and cause a delay in proceeding the request for changing of grade "I". The new system enables the system users including lecturers, and academic supporting staff of the faculties/colleges and academic services division to proceed the request for changing for grade "I" faster. The new system also links each practice efficiently and accurately. The lecturers are able to change grade "I" via an online system and do not need to submit the request forms in person. The academic supporting staff can prepare a report on the result of grade "I" changing request for lecturers and students by using an online system. The system also allows the academic supporting staff of each faculty/college/education center to prepare the report to present to the faculty committee in a same format. Moreover, the system also enables the Registrar's Office to proceed on the request and calculate the GPA for the students based on the new grade faster.

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