THE STUDY OF USERS' SATISFACTION OF GRADES-CHECKING SYSTEM BASED ON CURRICULUM ACADEMIC SERVICE DIVISION SUAN SUNANDHA RAJABHAT UNIVERSITY

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Abstract— The purpose of The Study of Users' Satisfaction of Grades-Checking System Based on Curriculum was 1) to study the satisfaction level among system users 2) to study the problems and obstacles occurred during using the system, and to find the solution. The study was conducted by collecting the data from before-and-after program using questionnaires. Sample groups of participants in this study were the soon-to-be graduates from bachelor degree who completed their study since 2014, selected by Quota Sampling method. 50% of graduates from each faculty were collected. Altogether, there were 1,207 participants completing the questionnaires. All data and statistics were analyzed by percentage, mean and standard deviation. The result from the study showed that most of the users were students who wanted to check their grades before graduation request. The service was available in form of online database (http://reg.ssru.ac.th/rg/). From the result, users' satisfaction reached the standard level. All 4 categories (Content and Information, Format and layout, Instruction and accessibility and Overall Picture) were scored in high satisfaction level. Extra material and manual booklet was clear and informative. From collecting the data, users' satisfaction level had the mean of 4.31, and SD of 0.55, which indicated the highest score of satisfaction. From the score, we can see that the system is still credible. However, it needs to be constantly improved to benefit the students.

Keywords— Satisfaction, Curriculum, Grades-Checking, Service Receiver.

I. INTRODUCTION

Education is the essential tool in human development. It is involved in the process of developing human to be part of the prospered society, to have the academic skill, right attitude and respectful behavior. Education in university level aims to prepare the students for those purposes. At the moment, Thailand opens up for more options of study so education can be reached by everybody in the society. There are 3 types of education methods; formal, non-formal and informal system. Students can transfer the knowledge and grades from one system to another freely based on the new Education Act.

At Suan Sunandha Rajabhat University, we set up the requirement of new students to at least have finished Matthayom 6 (grade 12) or any equivalent level (vocational levels, diploma). This new requirement has opened more chances for young people to continue their study in Bachelor Degree. For new applicants who have diploma or degree from other institutes, they can continue studying at Suan Sunandha by transferring previous grades to our system. This new policy has increased the number of new students at our university. Grades transfer is one of the missions at the academic service division. We have developed the computer system of grades transfer in 2014. Before 2014, students had to fill in the paper form, submit the form and pay the fee. For the new system, students can simply go to http://reg.ssru.ac.th/rg/. Then they input data, wait for the calculation and print the form to pay for the fee at the One-Stop Service counter at President Division. This computer system has been developed to provide the fast service for our students. The previous satisfaction survey for this system was conducted recently and showed satisfying result. The "grades transfer" system received mean of 4.02 and (85%) and SD= 0.92, which is the high score. This means the grade transfer system works really well. However, after transferring grades, students have to set up their study plan to get along with the curriculum, which is another challenge.

Academic service division has taken IT to provide convenient service for our current students in terms of grades checking after the final test based on the study plan we have for them. However, for new students who have their grades transfer rejected have set up a new study plan for themselves. According to the program that has pre-requisite courses, it is very difficult for this group of new students with grade transfer rejected to follow up with all the required courses. Before having the new system, students who supposedly finished all the courses had to submit the graduation request form to the division. After submitting the form, students would be given the form to check all required subjects completion. The common problem from this matter was that some students could not graduate due to not completing all required subjects. This problem was basically caused by the lack of information of pre-requisite courses for those 'credit-transferred' students. This problem mostly caused the delay of graduation. Students had to take the extra courses for another semester, and had to postpone their career opportunity and job offers from potential employers.

Academic Division Service has witnessed this problem, and would like to help our students to overcome this situation. So we have developed a computer program to help students checking the

primary study plan. This system helps by categorizing all courses from former institutes to be in the groups of the courses in the curriculum. By this, students can see which courses they have already studied, which ones they have to take, and how to put all courses from previous institutes to be part of the study plan. This program is expected to benefit students to graduate on time, and be satisfied with the study plan.

II. RESEARCH CONCEPT

2.1. Grade checking based on the curriculum

C. Chuaratanapong said that curriculum is the plan for teachers to set up courses and provide experiences that students should have to develop themselves. [1]

S. Hiranyakarn and team said that curriculum means courses set up by schools or institutes for their students. [2]

2.2. Theories of satisfaction and the meaning

C. Dejchinda mentioned that satisfaction is the feeling or attitude of an individual person toward a particular thing, situation or factor. Satisfaction happens when one's need is responded or met at one point. The feeling of satisfaction can increase or decrease depending on the response to the need. [3]

W. Chaihad defined the meaning of people's satisfaction toward public service as the satisfied feeling of people toward public service in these categories [4]

- The equal service to everybody
- The fast service
- The continuous service
- The progressive service

2.3. Theories about providing service

P. Sangbangpla stated that the quality of service is the way to provide what clients need and make it as the priority to bring satisfaction to the clients. The service process must have good management, process, good technique and professionalism. [5]

P. Pitattanapikakul mentioned that service quality is the process of providing activities to meet the customers' expectation (or beyond the expectation). The activities of service should be run at the touch point where customers are, starting from the first moment that customers step in until they finish. This whole time is called "Moment of Truth", which is the most important time to impress the customers. [6]

2.4. Related Literature

A. Phomthong conducted the research on the satisfaction level of related persons concerning the environment management in basic education level in Chacheoengsao district 2. The research result showed that the satisfaction level in the group in all 4 categories (Academic, Community Relation, Management and Physical) were in the highest level, with the statistical significance of 0.05. [7]

III. RESEARCH SCOPE

3.1. Area: This study focused only on the students who use the grade-checking system based on the curriculum

3.2. Content: This study of satisfaction consisted of 4 contents

- satisfaction in information and content
- satisfaction in format and layout
- satisfaction in instruction and accessibility
- satisfaction in overall picture

3.3. Timing: This study was conducted between January - May 2015

IV. METHODOLOGY

4.1. Concept

The process is one that will help organizations understand the steps that caused the knowledge management process. Or for the development of knowledge that takes place within the organization consists of seven steps "Fig. 1"

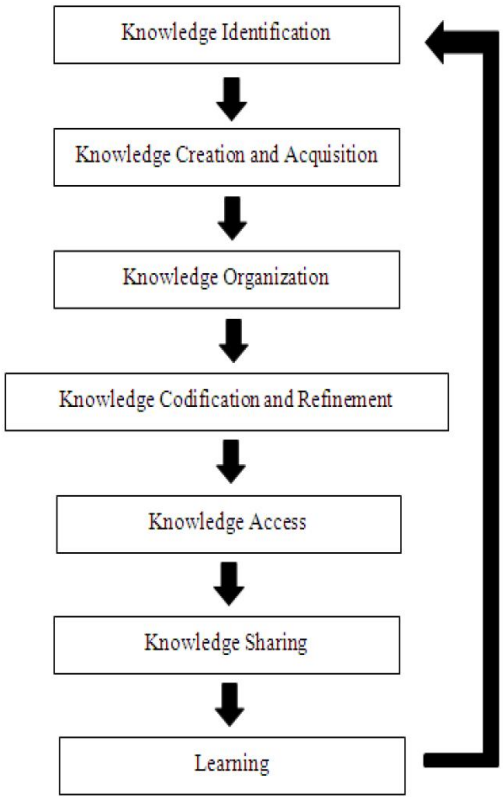


Figure 1. The knowledge management process [8]

4.2. Population and samples

Population and sample group in this study were 2,412 bachelor-degree students who expected to graduate in 2nd semester of 2014. The students were from 5 faculties and 3 colleges.

Table1: The number of students who expected to graduate in 2nd semester of 2014 from Suan Sunandha Rajabhat University

Faculty / College	Number of students
Industrial Technology	196
Humanities and social sciences	728
Management	992
Science and Technology	118
Fine and applied arts	108
Nurse and health	116
Applied health science	109
Innovation and management	45
Total	**2,412**

Sample group in this study was selected by quota sampling method, which was 50% of students from the above groups. Altogether there were 1,206 students in the sample group.

4.3. Research tools

Research tool to collect data in this study was the before-and-after satisfaction survey. They questionnaires were devided into 3 parts

Part 1: General information of the sample group. The questions were closed- ended and in the form of check-list

- Gender
- Age
- Status

Part 2: Satisfaction survey. This part consisted of 3 categories (information, content and instruction) and ended by the overall picture of the program.

- There were 5 questions in each category.
- The answered were the 5-level Likert scale. 5 means strongly agree and 1 means strongly disagree

Part 3: Open-end questions, mainly asking for comments and suggestions

4.4. Data Collecting

1. Using the satisfaction survey questionnaires

2. Students completed the questionnaires after they requested for the graduation form. Then the questionnaires were by the education support center. Data from 1,207 questionnaires were analyzed by the SPSS for Windows.

4.5. Dana analysis

The research team checked the questionnaires' completion. Then the team used data from the questionnaires to be analyzed by computer program to find the mean, percentage and SD before presenting the result.

V. RESULTS

The data from 1,206 satisfaction survey questionnaires were analyzed and presented on the tables below.

Table2: The Information and content this table is the comparison of the users' satisfaction level before and after using the system in terms of information and content

Topics	Before Using the System			After using the System		
	Mean	S.D	Score	Mean	S.D	Score
1. The information on the system is accurate and complete.	3.67	0.83	High	4.39	0.67	Highest
2. The information is effective	3.61	0.82	High	4.35	0.68	Highest
3. The information can be divided and set up in group based on curriculum	3.66	0.84	High	4.38	0.68	Highest
Total	3.65	0.70	High	4.38	0.59	Highest

From table 2, satisfaction level of users were in the high level (as most student clicked 'agree') on the BEFORE part the result sowed that = 3.65 and S.D. = 0.70. However, on the AFTER part, the overall was in the highest level (as most students clicked 'strongly agree). = 4.38 and S.D. = 0.59. Each question was arranged by descending of mean value (on the BEFORE part) we will see that accurate information ranked the top with = 3.67 and S.D. = 0.83. Following by The information can be divided and set up in group based on curriculum = 3.66 and S.D. = 0.84, and the information is effective = 3.61 and S.D. = 0.82. After using the system, the scored increased to the highest rank. The information on the system is accurate and complete got = 4.39 and S.D. = 0.67. The information can be divided and set up in group based on curriculum received = 4.38 and S.D. = 0.68, and the effectiveness of information got = 4.35 and S.D. = 0.68.

Table3: Format and layout of the system This table is the comparison of the users' satisfaction level before and after using the system in terms of format and layout

Topics	Before using the system			After using the system		
	Mean	S.D	Score	Mean	S.D	Score
1. The format and layout is easy to understand and use	3.57	0.82	High	4.33	0.67	Highest
2. The format and layout is appropriate.	3.62	0.83	High	4.37	0.65	Highest
Total	3.60	0.77	High	4.35	0.60	Highest

From table 3, we discovered that the satisfaction level of the users in "before using the system" was in 'high' level with = 3.60 and S.D. = 0.77. After using the system the score was increased to the highest level with the overall = 4.35 and S.D. = 0.60. The score of each topic in 'before' part in descending order was the format and layout is easy to understand and use with = 3.62 and S.D. = 0.83 followed by the format and layout is appropriate with = 3.57) and S.D. = 0.82. In the 'after' part, the score increased. The descending order was the format and layout is appropriate with = 4.37 and S.D. = 0.65 while The layout is easy got = 4.37and S.D. = 0.65

Table4: Instruction This table is the comparison of the users' satisfaction level before and after using the system in terms of instruction and the accessibility of the system.

Topics	Before using the system			After using the system		
	Mean	S.D	Score	Mean	S.D	Score
1. Users can quickly access to the information	3.40	0.93	High	4.13	0.80	Highest
2. System is easy to access	3.48	0.89	High	4.22	0.75	Highest
3. Manual and instruction are clear and useful.	3.53	0.88	High	4.27	0.72	Highest
Total	3.47	0.80	High	4.21	0.66	Highest

Table 4 showed the satisfaction score in comparison of Before and After using the system. Before using, the score was in high level with = 3.47 and S.D. = 0.80. After using, the score was raised to highest level of satisfaction with = 4.21 and S.D. = 0.66. Considering in each topics, the descending order of 'before 'was Manual and instruction are clear and useful (= 3.53 and S.D. = 0.88), followed by System is easy to access (= 3.48 and S.D. = 0.89) and Users can quickly access to the information (= 3.40 and S.D. = 0.93). 'After' using the system, each topic got better score. Manual and instruction are clear and useful got the most score (= 4.27 and S.D. = 0.72). System is easy to access got the high score as well (= 4.22 and S.D. = 0.75). The last topic 'users can quickly access to the system" ranked the last one (= 4.13 and S.D. = 0.80).

Table5: The summary of satisfaction survey score

Categories	Before using the system			After using the system		
	Mean	S.D	High	Mean	S.D	Score
1. Information and Content	3.65	0.73	High	4.38	0.59	Highest
2. Format and Layout	3.60	0.77	High	4.35	0.60	Highest
3. Instruction and accessibility	3.47	0.80	High	4.21	0.66	Highest
4. Overall	3.53	0.89	High	4.30	0.71	Highest
Total	3.56	0.70	High	4.31	0.55	Highest

From the table 5 from "Before" using system, we discovered that the level of satisfaction was in high level. The total score was = 3.56 and S.D. = 0.70. After using the system, the satisfaction level rose to the highest level with = 4.31 and S.D. = 0.55. Considering each category by descending order of the total score in 'before', information and content category got = 3.65and S.D. = 0.73. The format and layout got = 3.60 and S.D. = 0.70. The overall picture got = 3.53 and S.D. = 0.89. The last category was the instruction and accessibility with = 3.47 and S.D. = 0.80. All categories got the score in high level. In the 'After' part, information and content got = 4.38 and S.D. = 0.0.59. The format and layout got = 4.35 and S.D. = 0.60. Overall picture got = 4.30 and S.D. = 0.71 while the instruction and accessibility got = 4.21and S.D. = 0.66. All categories received the satisfaction score in highest level.

DISCUSSION

1. Participants who answered the questions on questionnaires were all students. Since the grade-checking based on curriculum system is created for students, it is expected to help students in self-learning and self -training from the start till the graduation. This system can solve the primary problems and is more convenient for students to access.
2. The satisfaction level of the system users increased after they tried the system. It shows that students value this system as a tool to help them with the grades and lesson plan to help them graduate in time.
3. Considering the satisfaction level of users toward the system in category, in 'instruction and accessibility' for both before and after received the same level of high while the other categories (information and format layout), the satisfaction level increased. However, the fast accessibility didn't receive different score. It must be caused by the delay on the server since the grade-checking based on curriculum has to be accessed through the same portal. Once all students and teachers use the website at the

same time, it caused the slow speed. As a result, some system users could not access to the system in time. Students had raised this issue to the IT department already.

CONCLUSIONS

1. General information: From 1,206 participants, who answered the questionnaires, 31.18 % were male and 68.82% were female. The age range was 20-30 years old (95.69%), 31-40 years old (3.32%) 41-50 years old (0.58%) and more than 51 years old (0.41%). All of them were students.
2. 2. The students' satisfaction to the grade checking system from "Before" using system, we discovered that the level of satisfaction was in high level. The total score was = 3.56 and S.D. = 0.70. After using the system, the satisfaction level rose to the highest level with = 4.31 and S.D. = 0.55. Considering each category by descending order of the total score in 'before', information and content category got = 3.65and S.D. = 0.73. The format and layout got = 3.60 and S.D. = 0.70. The overall picture got = 3.53 and S.D. = 0.89. The last category was the instruction and accessibility with = 3.47 and S.D. = 0.80. All categories got the score in high level. In the 'After' part, information and content got = 4.38 and S.D. = 0.0.59. The format and layout got = 4.35 and S.D. = 0.60. Overall picture got = 4.30 and S.D. = 0.71 while the instruction and accessibility got = 4.21and S.D. = 0.66. All categories received the satisfaction score in highest level.

Considering in each category, we discover that:

Information and content: satisfaction level of users were in the high level (as most student clicked 'agree') on the BEFORE part the result sowed that = 3.65 and S.D. = 0.70. However, on the AFTER part, the overall was in the highest level (as most students clicked 'strongly agree). = 4.38 and S.D. = 0.59. Each question was arranged by descending of mean value (on the BEFORE part) we will see that accurate information ranked the top with = 3.67 and S.D. = 0.83. Following by The information can be divided and set up in group based on curriculum = 3.66 and S.D. = 0.84, and the information is effective = 3.61 and S.D. = 0.82. After using the system, the scored increased to the highest rank. The information on the system is accurate and complete got = 4.39 and S.D. = 0.67. The information can be divided and set up in group based on curriculum received = 4.38 and S.D. = 0.68, and the effectiveness of information got = 4.35 and S.D. = 0.68.

Format and we discovered that the satisfaction level of the users in "before using the system" was in 'high' level with = 3.60 and S.D. = 0.77. After using the system the score was increased to the highest level with the overall = 4.35 and S.D. = 0.60. The score of each topic in 'before' part in descending order was the format and layout is easy to understand and use with = 3.62 and S.D. = 0.83 followed by the format and layout is appropriate with = 3.57) and S.D. = 0.82. In the 'after' part, the score increased. The descending order was the format and layout is appropriate with = 4.37 and S.D. = 0.65 while The layout is easy got = 4.37and S.D. = 0.65

Instruction and accessibility: the satisfaction score in comparison of Before and After using the system. Before using, the score was in high level with = 3.47 and S.D. = 0.80. After using, the score was raised to highest level of satisfaction with = 4.21 and S.D. = 0.66. Considering in each topics, the descending order of 'before 'was Manual and instruction are clear and useful (= 3.53 and S.D. = 0.88), followed by System is easy to access (= 3.48 and S.D. = 0.89) and Users can quickly access to the information (= 3.40 and S.D. = 0.93). 'After' using the system, each topic got better score. Manual and instruction are clear and useful got the most score (= 4.27 and S.D. = 0.72). System is easy to access got the high score as well (= 4.22 and S.D. = 0.75). The last topic 'users can quickly access to the system" ranked the last one (= 4.13 and S.D. = 0.80).

SUGGESTIONS

Future group of researchers who want to do the similar study topic may try this with the different group of participants, changing from students to college staff, and expand the participants group to all level of students, not only the nearly-graduate group to test the system's accessibility speed.

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