The Development Management Information System for Coordination Cooperative Education : Case Study of Program Photography and Cinematography Technology

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บทคัดย่อ—การวิจัยมีวัตถุประสงค์ 1) เพื่อพัฒนาระบบสารสนเทศ เพื่อการบริหารจัดการ การประสานงานสหกิจศึกษาสาขาวิชา2) เพื่อประเมินประสิทธิภาพระบบสารสนเทศเพื่อการบริหารจัดการ การประสานงานสหกิจศึกษาสาขาวิชา สำหรับกลุ่มประชากร เป็นผู้เกี่ยวข้องกับระบบงานสหกิจศึกษา สังกัดมหาวิทยาลัยเทคโนโลยีราชมงคลกรุงเทพ   คือ 1) นักศึกษาสหกิจศึกษา 2) อาจารย์ที่ปรึกษาสหกิจศึกษา 3)อาจารย์ประสานงานสหกิจศึกษา 4) พนักงานที่ปรึกษาสหกิจศึกษา 5)เจ้าหน้าที่สหกิจศึกษา กลุ่มตัวอย่างใช้วิธีคัดเลือกแบบเจาะจง (Purposive Sampling)

การพัฒนาระบบสารสนเทศนี้   ดำเนินงานโดยใช้วงจรพัฒนาระบบสารสนเทศ (Systems Development Life Cycle : SDLC) ออกแบบระบบภายใต้ระบบ Window XP ใช้โปรแกรม PHP ในการเขียนเว็บแอพลิเคชัน และใช้โปรแกรม MySQL เพื่อจัดการฐานข้อมูล   เครื่องมือที่ใช้ คือ แบบประเมิน มีค่าความเชื่อมั่นเท่ากับ .73 สำหรับผลประเมินระบบสารสนเทศเพื่อการบริหารจัดการ การประสานงานสหกิจศึกษาสาขาวิชา ที่พัฒนาขึ้น มีดังนี้ 1) ผลประเมินจากผู้ประสานงานสหกิจศึกษา สาขาวิชา มีค่าเฉลี่ยเท่ากับ 4.70 2) ผลประเมินจากอาจารย์ที่ปรึกษาสหกิจศึกษา มีค่าเฉลี่ยเท่ากับ 4.71 3) ผลประเมินจากพนักงานที่ปรึกษาสหกิจศึกษา มีค่าเฉลี่ยเท่ากับ 4.68 1) ผลประเมินจากนักศึกษาสหกิจศึกษา มีค่าเฉลี่ยเท่ากับ 4.71 สรุปผลประเมินระบบจากทุกกลุ่ม อยู่ในระดับมากที่สุด

คำสำคัญ: ระบบสารสนเทศเพื่อการบริหารจัดการ   สหกิจศึกษา การประสานงานสหกิจศึกษา

Abstract— The purposes of this   research were : 1) development Management Information System for coordination cooperative education which Program Photography and Cinematography Technology 2) evaluation Management Information System for coordination cooperative education with stakeholders of Cooperative Education   who worked   at   Program Photography and Cinematography Technology.

The sample group was obtained by purposive sampling from stakeholders of cooperative education at Rajamangala University of Technology   Krungthep. The System Development Life Cycle (SDLC) methodology was used. The development was using Windows XP operating system, Using PHP Script language to collected data using MySQL. The instrument for research was a rating-scaled questionnaires which divided into 5 levels and had reliability value at .73. The result of evaluation of Management Information System for coordination cooperative education programs from opinion's stakeholder who worked with coordination cooperative Education as followed : 1) evaluation of the opinion's coordination cooperative education have mean value = 4.70, 2) evaluation of the opinion's advisors cooperative education have mean value = 4.71, 3) evaluation of the opinion's supervisors cooperative education have mean value = 4.68   and evaluation of the opinion's students cooperative education have mean value = 4.71 , all of the stakeholders have opinions at very good level.

Keywords: Management Information System, Cooperative Education, Coordination of Cooperative Education

I.   INTRODUCTION

The Rajamangala University of Technology Krungthep was intended to encourage a cooperative education course. The office of cooperative education   was administered an overview and coordinator cooperative education program to manage each their own program.

The study to storage document management system for coordinate cooperative education found that use the manual to storage document management system then

cause problems of coordination with stakeholders etc; retrieval,versioning,indexing. So that, there was necessary to development the management information system for supporting to coordination cooperative education.

The study of other researches [1] [2] [3] [4] [5] [6] found that the information management system was to developed for supporting to managing overall of cooperative education but not supporting to managing for coordinate cooperative education. Then, in the first step of this research was to study the requirement of the coordination cooperative education programs who worked at The Rajamangala University of Technology Krungthep in 2015, and published that result in "The Study of Requirements Management Information System For Coordination Cooperative Education" [7] .The result from previous research used for determining the function of the analyzed and designed to Management Information System for coordination cooperative education programs for the second step in this research and to implemented with a case study which Program Photography and Cinematography Technology.

The purposes of this research were : 1) development Management Information System for coordination cooperative education which Program Photography and Cinematography Technology and 2) evaluation Management Information System for coordination cooperative education with stakeholders of Cooperative Education who worked at Program Photography and Cinematography Technology.

II. LITERATURE REVIEWS

Other researches from the study are listed below .

Research Project Title (2009), "Cooperative Education and Hatyai University Graduate Potential Development", author is Yuwanda Faifan**.** [1] The Samples for this research were 315 cooperative education advisors and entrepreneurs conducted through simple random sampling. The research revealed the followings: 1) The teacher advisors' opinions about the organization of cooperative education were at the high level while the supervisors; performances were at the moderate level, 2) The entrepreneurs' opinions about the organization of cooperative education at the moderate level, 3) The students' opinions about the organization of cooperative education at the high level.

Independent Study Title (2009), "Information System for The Co-operative Education Project of Rajamangala University of Technology Lanna Tak", author is Thongchai Yomlumpu.[2] The system consists of five sub-systems: registration, data updating, recruitment and notification, operating assessment, and report. The system is tested by 41 co-operative student records of Rajamangala University of Technology Lanna, Tak. The result shows that the system operation met the objective. In addition, the system evaluation uses the questionnaire

with three groups of 35 samples: three system administrators, 28 students and four workplace staffs. The results of the system evaluation in system usage, system security and user interfaces were good.

Research Project Title (2010), "Management of Cooperative education system case study Faculty of Management and Tourism Burapha University",author is Sukanya Pramongkit. [3] The project was present an Management of Cooperative Education System which based on cooperative education process of Faculty of Management and Tourism Burapha University. The objective is to make the communication between the student, staff,teacher and excutive more effective and consequently to achieve considerable time and resource savings. The development starts from the first time when student apply to the project. And all the process of selected students to participate the project and recorded data of apprenticeship throughout summary report of cooperative education process. The result show that the system is convenience the operation of cooperative education and reduces the workload of staff.

Research Project Title (2011), "Information System for Co-op Education at Ubon Ratchathani Rajabhat University",author is Ormjit Kutikarn**.** [4] The developed information system for Co-op education at Ubon Ratchathani Rajabhat University was found to be able to function as indicated in the framework. The work places were able to record the student performance and to take job application through the system. The students were able to apply online through this system to participate in the Co-op education program. Supervisors were able to schedule their supervising time and check the schedule through the system. The officials were able to update the report as they wish. The results of the efficiency evaluation by experts revealed that the system had the efficiency at a high level (3.68), and the evaluation by the users showed the system efficiency at a high level as well at the average mean of 3.65.

Independent Study Title (2012) "Information System Development for the Cooperative Education of the Faculty of Humanities, Chiang Mai University",author is Yaninee Somsing.[5] The system consists of 9 sections such as user management system, the data management, the qualified student, the information management, certificate of the company, the letter automatically, the monitoring and recording student performance, and the evaluation and report management. As the results of this study, the system can work well with the needs of users and help the work able to process sequentially and decrease the computation time of working. The satisfaction of system evaluation with 24 users shows that the average satisfaction is 4.12, which is in the range 3.50 to 4.49. The level of user satisfaction is at high level.

Research Project Title (2013),"Management Information System for Co-operative Education Career Development Center",author is Phanuwat

Sonthiwungtuk.[6] The evaluation of the system by three information technology specialists is the most appropriate. Most users are satisfied. The system is able to respond to all requirements of the users and comfortably to summarize the researches of Management Information System for Co-operative Education Career Development Center. The Executive will get the accurate information and able to analyze the decisions, then planning the management of the Co-operative Education Career Development Center as well.

So that , from the study about the result of research reveals that management cooperative education found that the Management Information System to development for convenience the operation of cooperative education in overview but do not develop the Management Information System for who worked coordinator cooperative education same this research.

III. RESEARCH METHODOLOGY

The sample group was obtained by purposive sampling from stakeholders of cooperative education at Rajamangala University of Technology Krungthep. The System Development Life Cycle (SDLC) methodology was used. The development was using Windows XP operating system, Using PHP Script language to collected data using MySQL. The instrument for research was a rating-scaled questionnaires which divided into 5 levels and had reliability value at .73.

The steps for development the Management Information System follow as:

Step 1 : to determine the function of Management Information System from the requirement of the coordination cooperative education programs who worked at The Rajamangala University of Technology Krungthep in 2015.

Step 2: to analyzed and designed to Management Information System for coordination cooperative education programs

Step 3: to evaluate of Management Information System for coordination cooperative education programs by experts

Step 4: to evaluate of Management Information System for coordination cooperative education programs by stakeholders coordination cooperative education Program Photography and Cinematography Technology.

IV. RESULTS

The result of the research shows that the evaluation of the opinion's stakeholder of coordination cooperative education of Program Photography and Cinematography Technology as followed in Table1 – Table4.

Table 1 Results from the evaluation of the opinion's coordination cooperative education of Program Photography and Cinematography Technology.

List assessment	$\bar{x}$	S.D.	Meaning
Side 1 : Usability Test	4.58	0.354	Very Good
Side 2.1 : Performance Test before student cooperative education worked at the firms	4.43	0.121	Good
Side 2.2 : Performance Test between student cooperative education worked at the firms	4.50	0.412	Good
Side 2.3 : Performance Test after student cooperative education worked at the firms	4.70	0.262	Very Good
Side 3 : Functional Test	5.00	0.000	Very Good
Side 4 :Security Test	5.00	0.000	Very Good
Average	**4.70**	**0.192**	**Very Good**

Table 2 Results from the evaluation of the opinion's advisors cooperative education of Program Photography and Cinematography Technology.

List assessment	$\bar{x}$	S.D.	Meaning
Side 1 : Usability Test	4.67	0.000	Very Good
Side 2.1 : Performance Test before student cooperative education worked at the firms	4.48	0.206	Good
Side 2.2 : Performance Test between student cooperative education worked at the firms	4.51	0.320	Very Good
Side 2.3 : Performance Test after student cooperative education worked at the firms	4.59	0.314	Very Good
Side 3 : Functional Test	5.00	0.000	Very Good
Side 4 :Security Test	5.00	0.000	Very Good
Average	**4.71**	**0.140**	**Very Good**

Table 3 Results from the evaluation of the opinion's supervisors cooperative education of Program Photography and Cinematography Technology.

List assessment	$\bar{x}$	S.D.	Meaning
Side 1 : Usability Test	4.58	0.236	Very Good
Side 2.1 : Performance Test before student cooperative education worked at the firms	4.42	0.149	Good
Side 2.2 : Performance Test between student cooperative education worked at the firms	4.58	0.354	Very Good
Side 2.3 : Performance Test after student cooperative education worked at the firms	4.50	0.354	Good
Side 3 : Functional Test	5.00	0.000	Very Good
Side 4 :Security Test	5.00	0.000	Very Good
Average	**4.68**	**0.182**	**Very Good**

Table 4 Results from the evaluation of the opinion's students cooperative education of Program Photography and Cinematography Technology.

List assessment	$\bar{x}$	S.D.	Meaning
Side 1 : Usability Test	4.58	0.118	Very Good
Side 2.1 : Performance Test before student cooperative education worked at the firms	4.42	0.149	Good
Side 2.2 : Performance Test between student cooperative education worked at the firms	4.62	0.326	Very Good
Side 2.3 : Performance Test after student cooperative education worked at the firms	4.63	0.53	Very Good
Side 3 : Functional Test	5.00	0.000	Very Good
Side 4 :Security Test	5.00	0.000	Very Good
Average	**4.71**	**0.187**	**Very Good**

V. CONCLUSIONS AND RECOMMENDATIONS

The conclusion of this research shows that the result of evaluation of Management Information System for supporting coordination cooperative education programs from opinion's stakeholder of coordination cooperative education of Program Photography and Cinematography Technology as followed : 1) evaluation of the opinion's coordination cooperative education have mean value = 4.70 at very good level, 2) evaluation of the opinion's advisors cooperative education have mean value = 4.71 at very good level, 3) evaluation of the opinion's supervisors cooperative education have mean value = 4.68 at very good level and evaluation of the opinion's students cooperative education have mean value = 4.71 at very good level.

The result of evaluation of Management Information System for coordination cooperative education programs from opinions all of the stakeholder who worked with coordination cooperative Education of Program Photography and Cinematography Technology have a very good level. The evaluation results from opinions of those involved in the same direction, shown that Management Information System which development in this research can be supporting the coordination cooperative education programs, a case study of Program Photography and Cinematography Technology and according to the objective of this research. So that, this research is the difference from the others researches about Management Information System is development specific for coordination cooperative education programs.

Research in order to the further will expand the Management Information System for all coordination cooperative education programs in Rajamangala University of Technology Krungthep.

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