# DEVELOPMENT OF A PRACTICAL/INDUSTRIAL TRAINING AUTOMATED SYSTEM (PITAS) IN THE MANAGEMENT OF INFORMATION



# RESEARCH MANAGEMENT INSTITUTE (RMI) UNIVERSITI TEKNOLOGI MARA 40450 SHAH ALAM, SELANGOR MALAYSIA

BY:

SITI NURSARJANA BINTI MALIM AZLINA BINTI BUJANG MOHAMMAD ZAMRI BIN ABD RAHIM

**JANUARY 2013** 

## **Contents**

1.	Lett	ter of Report Submission	iii
2.	Lett	ter of Offer (Research Grant)	iv
3.	Ack	knowledgements	v
4.	Rep	port	1
	4.1	Proposed Executive Summary	1
	4.2	Enhanced Executive Summary	2
	4.3	Introduction	3
	4.4	Brief Literature Review	5
	4.5	Methodology	7
4	4.6	Results and Discussion	11
4	4.7	Conclusion and Recommendation	23
4	4.8	References/Bibliography	26
5.	Res	search Outcomes	27
6	Apr	pendix	28

### 2. Letter of Offer (Research Grant)

Universiti Teknologi MARA Sarawak

Kampus Kota Samarahan Jolon Meronek 94300 Koto Somorohon No. Tel : 082-677200 No. Foks : 082-677300



Tarikh

: 6 April, 2009

ı

Surat Kami

: 600-RMU/SSP/DANA 5/3 (4/2008)

Siti Nursarjana binti Malim

Ketua Projek

Fakulti Teknologi Maklumat dan Sains Kuantitatif/ Sains Komputer

UiTM Sarawak

Azlina binti Bujang

Ahli Projek

Fakulti Teknologi Maklumat dan Sains Kuantitatif/ Sains Komputer

**UiTM Sarawak** 

Mohd Zamri Abdul Rahim

Ahli Projek

Fakulti Teknologi Maklumat dan Sains Kuantitatif/ Sains Komputer

UiTM Sarawak

Tuan/ Puan,

TAJUK PROJEK PENYELIDIKAN DANA KECEMERLANGAN KATEGORI C 'DEVELOPMENT OF A PRACTICAL' INDUSTRIAL TRAINING AUTOMATED SYSTEM (PITAS) IN THE MANAGEMENT OF INFORMATION'

Dengan hormatnya perkara di atas adalah dirujuk.

Sukacita dimaklumkan bahawa Jawatankuasa Teknikal RMU Sarawak telah meluluskan cadangan penyelidikan yang telah dikemukakan oleh tuan/puan bertajut di atas dengan syarat-syarat seperti berikut:

- Tempoh projek penyelidikan ini ialah 1 tahun, iaitu bermula 15 April 2009 hingga 14 Mac 2010.
- Kos yang diluluskan ialah sebanyak RM5,000 sahaja. Tuan/puan diminta ii. mengemukakan proposal beserta bajet yang baru mengikut kos yang diluluskan sebelum tuan/puan memulakan projek penyelidikan tuan/puan.
- Pembelian peralatan computer adalah tidak diluluskan.
- Semua pembelian bahan/ peralatan adalah diminta agar tuan/puan mematuhi procedure perbendaharaan di mana pembelian melebihi RM500.00 hendaklah mengemukakan sebutharga dan boring analisa harga.
- Pihak tuan/puan dikehendaki mengemukakan laporan prestasi secara ringkas pada bulan June 2009 dan Disember 2009 sepanjang penyelidikan tuan/puan berjalan.
- Tuan/puan perlu menandatangi Borang Perjanjian Penyelidikan dengan kadar segera vi. kerana penggunaan geran hanya dibenarkan setelah perjanjian ditandatangani. Borang Perjanjian Penyelidikan boleh diperolehi di laman web RMI.
- vii. Laporan Akhir perlu dihantar sebaik projek disiapkan dan format menulis laporan akhir boleh diperolehi di laman web RMI.

Sekian dimaklumkan. Terima kasih

Yang benar.

PROF. MADYA DR. JAMIL HAJI HAMALI

Pengarah Kampus UiTM Sarawak

Prof. Dr. Azni Zain Ahmed s.k.

Penolong Naib Canselor (Penyelidikan)

Prof. Madya Dr. Rosita Hj. Suhaimi Timbalan Pengarah Penyelidikan & Jaringan Industri, UiTM Sarawak

Penolong Bendahari

UiTM Sarawak.

#### 4.2 Enhanced Executive Summary

The aim of this research is to discuss the students' perceptions towards the implementation of automated system to help the organization to manage records and documents. The number of students who registers for practical/industrial training has increased every semester, therefore the amount of data to be recorded has also increased. In the search of systematic and cost effective ways of managing the information, there is a need to overcome the problem of filling the system manually. In consequence, this study would examine whether the development of automation system has significantly made the data management more efficient and effective (data collection, data storage and data retrieval). From the evaluation, students' perceptions towards its implementation were analysed where 200 questionnaires were distributed among students of various programmes in Universiti Teknologi MARA Sarawak. The returned questionnaires were then analyzed using SPSS (Version 17). From the findings, it can be concluded that the implementation of such application could really contribute to the improvement of the information resources of the practical/industrial attachment students. This further ensures that the connection between the practical training coordinator and the students is uninterrupted. Apart from that, a good industrial relationship (between the management and organisation) can also be established. The research outcome indicated positive perceptions and responses from the students regarding the development of the application. Thus, the implementation of the proposed system should be considered to be used continuously as an automated information delivery tool.

Keywords: practical; Training, Information, Automated

#### 4.3 Introduction

#### Information System

Computer-based Information Systems (ISs) are tools for the recording, storing, processing and dissemination of information designed to support groups of people acting together purposefully (Checkland and Holwell, 1999). An Information System includes a variety of computational and software technologies including simulation models, decision support systems and tailored applications and can be found utilized for a variety of purposes including data management, communication, supporting decision making at different scales and scenario exploration. As students are going for practical training every semester, there is a need to implement IS in managing students records.

During the practical training, all students will be able to test, implement and apply all their knowledge and theories in real working environment. This training is necessary to prepare and enhance students' skills. Besides that, students can also gain experience and knowledge. Prior to graduation, students need to acquire working experience in an Information Technology environment. Therefore, this training will expose them to the challenging working environment outside UiTM.

#### **Problem Statement**

An Information System is suitable to be used as platform to improve the process of managing loads of information. Many students have registered for the course code CSC398 Practical Training every semester. The total number of students taking the code keeps increasing semester by semester, therefore the amount of data to be recorded has also increased.

At present, students' information are collected manually using hardcopy forms. A lot of files are used to keep the forms. Information system on practical training by students under the course code CSC398 often uses manual process. The manual process involves compiling hardcopy forms and will be kept in files. Therefore, the Practical Training Coordinator has to search for students' record from the file. The process is tedious and time consuming. In addition, due to the increasing number of student intake each semester, a lot of space is also required to store these files. Therefore, this system (Practical/Industrial Training Automated System) should be able to manage practical/industrial training information, mainly CS110 (Computer Science) students.