

EXTENSION AND TRAINING INFORMATION MANAGEMENT SYSTEM

MA. MAGDALENA S. ETRATA

SHERWIN B. CAMANSAG

DANICA C. MONTERO

KATE C. CUELLO

ILOCOS SUR POLYTECHNIC STATE COLLEGE

COLLEGE OF COMPUTING STUDIES

STA. MARIA, ILOCOS SUR

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

(WEB DEVELOPMENT)

JUNE 2019



TABLE OF CONTENTS

PRELIMINARIES	PAGE
Title Page	i
Approval Sheet	ii
Acknowledgment	iii
Dedication	v
Executive Summary/Abstract	ix
Table of Contents	xi
List of Tables	xiii
List of Figures	xiv
 CHAPTER I: Introduction	
Project Context	1
Purpose and Description	4
Objectives of the Project	5
Scope and Limitation	6
 CHAPTER II: Review of Literature	
 CHAPTER III: Methodology	
Software Development Model	10
Project Design	12
Project Plan	13
Data Gathering Procedures	15



Data Gathering Instrument	16
---------------------------	----

CHAPTER IV: Results and Discussion

Organizational Background	18
The Current System	19
Problems/Opportunities for Improvement in the System	20
Requirement Documentation	21
Development and Testing	25
Description of the Prototype	35
Implementation Plan	51

CHAPTER V: Summary, Conclusion, and Recommendation

Summary	52
Conclusion	54
Recommendation	55

BIBLIOGRAPHY 56**APPENDICES**

Letters/Communications	58
Interview Transcript	63
Evaluation Tool/Test Document	66
Ex-tra User Guide	69
Curriculum Vitae	70

**LIST OF TABLES**

TABLE		PAGE
1	Gantt Chart	13
2	Project Team Assignment	14
3	Statistical Ratings for Positive and Negative Items	17
4	Unit Testing	26
5	Usability of the System Along Attractiveness	29
6	Usability of the System Along Controllability	30
7	Usability of the System Along Efficiency	31
8	Usability of the System Along Helpfulness	32
9	Usability of the System Along Learnability	33
10	Summary of the Usability of the System	34
11	Implementation Plan	51



LIST OF FIGURES

FIGURE		PAGE
1	Modified Waterfall Model	11
2	Flow Chart Diagram	21
3	Use Case Diagram	23
4	Entity Relationship Diagram	24
5	Sign-in Form for User	35
6	Sign-in Form for Admin	36
7	Sign Up Form for User	37
8	Homepage or Dashboard	38
9	Activity Calendar	39
10	List of Extension Programs for User	40
11	List of Extension Programs for Admin	41
12	List of Training Programs for User	42
13	List of Training Programs for Admin	43
14	Sort Button for Numbers	44
15	Upload Extension and Training Programs for Admin	45
16	Extension and Training Documents for User	46
17	Extension and Training Document for Admin	47
18	Upload Document for Admin	48
19	User List	49
20	Edit of Users' Profile	50



Chapter I

INTRODUCTION

Project Context

The importance of technology in our daily lives is undeniable due to the fact that nowadays, life is harder without the use of technology. Basically, it has a major goal of making tasks easier and convenient to execute as well as solving many mankind's problem. As technology continues to advance and direct even more easiness in our lives, there is a need to stress how advantageous it has been to our lives. Technology is very essential at work, home and even in school premises that may help to bring tools that ease a creation, use and exchange of information. In fact, we are embedded by the product of today's technology.

The use of technology has made our life comfortable. Automation is innovation, relying on computerized systems is an advantage in any schools. The system provides ease of use and accurate transaction which results to efficient process of any form that varies with the features of the system.

Extension and training is a learning or teaching method connecting meaningful community service with academic learning, personal growth, and civic responsibility. As a method of educational and informational delivery, it emphasizes the clients and students learn and develop through active participation in thoughtfully organized experiences that meet actual



community needs and that are coordinated in on-going collaboration with the school or institution and the community. It is a set of techniques and tools that can strengthen community relationships and connection. It blends service and learning goals in such a way that both occur at the same time and are enriched and supported by one another (Journal of Extension, n.d.).

Moreover, extension and training programs are designed to provide students and clients with opportunities to use newly acquired skills and knowledge in real life situations in their own communities and to enhance what is taught in school by extending learning beyond the classroom and into the community and thus augmenting or fostering the development of caring for others. Extension is an informal educational process directed toward the rural population. It has the potential to be one of those rare education models that enable participants to be winners. It focuses on activism and local control in a structured sense, combining but also because of its structured mission of reflecting, sharing, and working toward an understanding of materials or information and the processes of change or alternation that occur in the community. It is also concerned not just with physical and economic achievements but also with the development of the rural people themselves. It is a process of working with rural people in order to improve the productivity of their livelihoods and also developing their abilities to manage their own future development.



We all know that as years goes by, the number of transactions among schools and organizations has grown due to the demand of the trainings and extension that has been handled by the management. The staff should improve the method of managing their records of trainings through innovation with the use of the technology. Recording the trainings and extensions of an organization made more efficient with the help of the technology. Especially, when the activities are carried out on a large scale and has many to be recorded. These information technology certainly helps to reduce the hassle of managing and recording the activities or transaction of each parties. We can't deny the fact that doing the manual method of recording and managing the rosters of the activities have the possibilities to encounter problems that may cause of losing the documents and papers and need a lot of effort to do the work. Most training managers in a certain organization can't run the simplest report on employees and trainees due for training because they can't be sure if the employee or a trainee completed a course because the record keeping is so scattered. HR sometimes cannot locate a particular document that should be on the file.

For these reasons, the researchers conducted and developed the system that can keep the records of an organization's trainings. In this study, the researchers hope to minimize the paper works and manual record keeping of the employees. The main problems of the Director for Extension of Ilocos Sur Polytechnic State College are as follows: 1.) misplaced the old



compilation of documents of the training and extension programs within the past years; 2.) lack of staff that manage the records; and 3.) the documents are not safe and secured (Elena U. Ato, Director for the Extension, personal interview, February 7, 2019).

Purpose and Description

This research focused on managing and compiling the past trainings and extensions that have been conducted in the Ilocos Sur Polytechnic State College. The proposed system can help maintain, preserve and generate information, and it can also minimize the accuracy of time in scanning the documents.

The result of this study deemed important to the following:

The Head of Extension Programs. Lesser time and effort in searching for the past trainings and extension programs conducted in the school. The Head of Extension Programs will become updated with the number of conducted trainings and extension programs within a certain year through the help of the system.

The Focal Person for Extension Programs. The system will help them manage, generate, and compile all of the past trainings and extension programs conducted in Ilocos Sur Polytechnic State College for documentation purposes.



The future researchers. The output of this study will point other avenues of research; its weaknesses and shortcomings that may lead other students to come up with other solution and deeper understanding.

Objectives of the Project

The fundamental objective of the Extension and Training Information Management System is to develop a web based system that would make recording and viewing the documentation of training easier and more efficient.

Specifically, it aimed to achieve the following:

1. To determine the existing Extension and Training Information Management System in Ilocos Sur Polytechnic State College.
2. To design and develop the system that will help the trainor and administration to quickly search and record for a training and extension program that has been done in the school.
3. To test the functionality and usability of the developed Extension and Training Information Management System in Ilocos Sur Polytechnic State College.



Scope and Limitation

The Extension and Training Information Management System is a web-based system that allows the user to view and the admin to insert, update, and delete the documents about the training and extension programs – the guest speakers, the date and time, type of trainings, total expenses of the training, and the number of the participants – that has been conducted in Ilocos Sur Polytechnic State College, it can also export the table to Excel and print the report based on the format that the director for extension and training used in making the manual report of the report papers that he or she is submitting to the higher position.

The system doesn't have a list of modules and the ability to reserve for a slot in a certain training or course and schedule a certain activity. This system does not have a feature that a user can have an online training.



Chapter II

REVIEW OF LITERATURE

Review of Literature

A Training Management System (TMS) is a system used by training providers and learning professionals to organize training delivery, training curriculums, schedules, student records and communication (Administrate, n.d.). It is focused on the training sessions' organization and is built for training administrators. Its core is its back-office capabilities, and it is centered on the organization's processes. Most TMS today incorporate some end-user portals as well, the people who use a TMS on a day-to-day basis are key stakeholders such as training managers, HR professionals, corporate university directors, etc. The types of training delivered include e-learning, online, computer-based, classroom, or simulator learning environments.

According to Barata, Cain and Routledge, (2001:11) "a record is defined as a document regardless of form or medium created, received, maintained and used by an organization (public or private) or an individual in pursuance of legal obligations or in the transaction of business, of which it forms a part or provides evidence." In other words, a record can be said to be information, regardless of media or characteristics, created or received by an organization that is kept as evidence of its operation and has value requiring its retention for a specific period of time. Records not only provide information on which



to base decisions but tell a story of what goes on in an organization thus providing evidence for accountability purposes. Organizations need to develop records management frameworks and systems designed to ensure that records are managed appropriately. This commences with the creation and subsequent capture of records in recordkeeping systems, through to their maintenance and use, and ultimately their destruction (Australian National Audit Office, 2012). Failure to do so will render it difficult to utilize records efficiently. Records management involves the systematic control of an organization's record from their creation or receipt, through their processing, distribution, organization, storage and retrieval to their ultimate disposition (Read and Ginn, 2007). A good record management program will result in the control over the creation and growth of records. Despite decades of using non-paper storage media, paper records continue escalate. An effective records management program limits the generation of records or copies not required to operate the business and ensure there is a system of destroying useless records or retiring inactive records thus stabilizing the growth of records in all formats. Recordkeeping require money for filing equipment, space in offices, and staffing to maintain an organized filing system or to search for lost record when there is no organized and effective system. Implementing a records management program provides an opportunity to affect some cost savings in space and equipment, and to utilize staff more productively. Efficiency implies able to achieve intended objectives on time with little effort. Time spent searching or missing or a



misfiled record is non-productive and costly. A well designed record keeping systems will enhance information retrieval with corresponding improvements in office efficiency and productivity. A properly designed and operated filing system with an effective index can facilitate retrieval and delivery of information to users as quickly as they need it.



BIBLIOGRAPHY

Online Resources

Australian National Audit Office (2012). Records Management in the Australian Public Service. Retrieved on February 23, 2019 from <http://www.anao.com>.

Barata, K., Cain, P. and Routledge, D. (2001). Principle and Practices in Managing Financial Records: A Reference Model and Assessment Tool. Retrieved on February 23, 2019 from [http://www.ifac.org.](http://www.ifac.org/)/

Developer of WAMMI. (n.d.). Retrieved on April 15, 2019 from [www.wammi.com/founders.html](http://www.wammi.com-founders.html)

ER Diagram Tutorial (n.d.). Retrieved on April 15, 2019 from <https://www.lucidchart.com/pages/er-diagrams>

Extension is Not Just Service, but Service Learning is important to Extension. Journal of Extension. Retrieved on February 4, 2019 from <https://www.joe.org/joe/1998october/comm1.php>

Modified Waterfall Model (n.d.). Retrieved on April 15, 2019 from <https://techspirited.com/modified-waterfall-model>

Rayo, L. (2015). Modified Waterfall Model. Retrieved on February 23, 2019 from <https://prezi.com/m/ne8i4-bsjeyf/modified-waterfall-model>



RDE – Ilocos Sur Polytechnic State College (1998). Retrieved on April 21, 2019 from ispsc.edu.ph/file-manager/files/Downloads/ISPSC%20RDE%20Manual.pdf

Read, J. and Ginn, L. (2007). Records Management. 8th ed. Ohio: Thomson South-Western. Retrieved on February 23, 2019.

What is a Training Management System (n.d.). Retrieved on February 4, 2019 from www.getadministrate.com/blog/training-management-system/

Unpublished Materials

Barnachea, K.M., Pocsidio, W., Visperas, E., & Dato, R. (2017). Online Event Planner With-Email Notification for ISPSC Main Campus.

Interview

Mrs. Elena U. Ato, Director for the Extension. Personal Interview. February 7, 2019