

**COMPUTER LABORATORY APPLICATIONS MANAGEMENT SYSTEM
(CLAMS) FOR RAMON MAGSAYSAY TECHNOLOGICAL
UNIVERSITY - MASINLOC CAMPUS**

**A Thesis
Presented to
The Faculty of the College of Communication and Information Technology
Ramon Magsaysay Technological University
Masinloc, Zambales**

**In Partial Fulfilment
of the Requirement for the Degree
Bachelor of Science in Information Technology**

**by:
Angelica E. Cabanban
Anthony M. Ebido
John Paul Z. Echon
Reymar R. Elejorde
Royce M. Aquino**

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APPROVAL SHEET




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COLLEGE OF COMMUNICATION AND INFORMATION TECHNOLOGY

A research study presented to the faculty of the College of Communication in Information Technology in partial fulfillment of the requirement for the degree Bachelor of Science in Information Technology:


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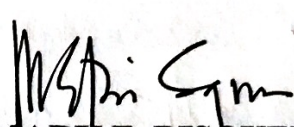
Has been prepared and submitted by
Who are hereby recommended for oral examination on February 23, 2018


NERISSA L. JAVIER, MSCS
Adviser

Approved by the Committee of Oral Examiners:


MELOJEAN C. MARAVE, MSIT
Chairman

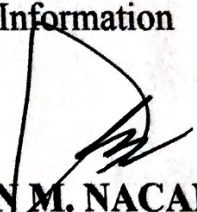

GEOFFREY SEPILLO, Ed. D.
Member


ENGR. MARK E. BISQUERRA
Member

Accepted as requirement for the Degree of Bachelor of Science in Information Technology

3-19-18

Date Signed


NELSON M. NACANA, Ed.D.
Campus Director

ABSTRACT

This study dealt with the development of the Computer Laboratory Applications Management System or CLAMS for Ramon Magsaysay Technological University Masinloc Campus which was evaluated by the I.T. experts and our Client.

Specifically, the study answered the following questions: (1.) what is the Level of System quality of the CLAMS as perceived by the IT experts using the ISO 25010:2011 software quality characteristics in terms of Functional Suitability, Performance Efficiency, Compatibility, Usability, Reliability, Security, Maintainability and Portability? (2.) What is the Level of Acceptability of CLAMS as perceived by the target clients in terms of Content, Accuracy, Ease of Use, Timeliness and Security? (3.) What is the cost benefit analysis of the economic feasibility of CLAMS?

Guided by these questions, the proponents developed the system according to the software quality metrics from the ISO/ IEC 25010:2011 and based on their client. They used questionnaires, beta versions, and interviews in order to yield the best version of the system. Weighted mean is the statistical tool that was used.

The Agile methodology was the software engineering method that was used, its framework include: (1.) Concept; (2.) Inception; (3.) Construction; (4.) Transition (Release); (5.) Production; and (6.) Retirement.

The significant findings of the study were: (1.) IT Experts' evaluation of the Computer Laboratory Applications Management System for Ramon Magsaysay Technological University Masinloc Campus in terms of: Functional Suitability (4.30),

Performance Efficiency (4.30), Compatibility (4.63), Usability (4.22), Reliability (4.28), Security (4.16), Maintainability (4.30), and Portability (4.50), the overall evaluation of the system by the IT experts was perceived as "Excellent" with a grand mean of 4.34. (2.) The level of acceptability of the respondents regarding the CLAMS in terms of: Content (3.89), Accuracy (3.72), Ease of Use (3.83), Timeliness (4.02) and security (3.99). The overall level of acceptability of the respondents regarding CLAMS was perceived as "Acceptable" with a Grand mean of 3.89. (3.) The implementation of the CLAMS for RMTU Masinloc Campus would be cost beneficial because it would save them Php. 90,000.00 or 75 percent of the total cost of hiring an additional staff as computer laboratory custodian that would administer the maintenance of the computer laboratory, because without CLAMS, the computer laboratory would suffer from viruses infections among the computer units, therefore resulting to more maintenance being needed and that would be more costly. With CLAMS, the students would not be able to meddle with the computer units therefore reducing the risk of viruses and malfunctions, resulting to lower maintenance frequency and costs. The proponents offered the following recommendations: (1.) The Computer Laboratory Applications Management System (CLAMS) should be implemented in the Computer Laboratory of Ramon Magsaysay Technological University Masinloc campus in order to reduce maintenance costs and to improve the management of the said laboratory. (2.) Conduct Orientations and training sessions for the end-users in order for them to fully understand the capabilities of the CLAMS and fully utilize its functions. (3.) Constantly maintain the system in order to prevent malfunctions and to detect bugs and errors. (4.) Continuous research and improvements should be done in order for the system to cope up with the rapid development of Information technology.