

**WEB-BASED CONSUMERS INFORMATION SYSTEM OF ZAMBALES  
ELECTRIC COOPERATIVE INC. (ZAMECO I)**

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

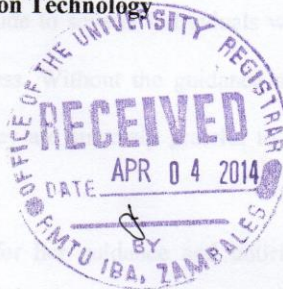
In Partial Fulfillment  
of the Requirements for the Degree,  
Bachelor of Science in Information Technology

by

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Marlon P. Fernandez  
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Republic of the Philippines  
**RAMON MAGSAYSAY TECHNOLOGICAL UNIVERSITY**  
College of Communication and Information Technology  
Iba, Zambales




The study hereto attached entitled

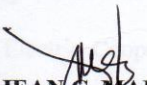
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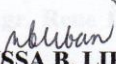
has been prepared and submitted by **RONAN JAY M. ELFALAN, MARLON P. FERNANDEZ** and **BERNADETH D. LAUREANO**, who are hereby recommended for oral examination on March 12, 2014.

  
**MENCHIE A. DELA CRUZ, MSIT**  
Thesis Adviser

Approved by the Committee of Oral Examiners:

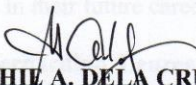
  
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Accepted and approved as requirement for the degree of **BACHELOR OF SCIENCE  
IN INFORMATION TECHNOLOGY.**

March 2014

  
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## **ABSTRACT**

**Title:** **WEB-BASED CONSUMERS INFORMATION SYSTEM OF ZAMBALES ELECTRIC COOPERATIVE INC. 1**

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**College:** **COLLEGE OF COMMUNICATION AND INFORMATION TECHNOLOGY**

**Institution:** **RAMON MAGSAYSAY TECHNOLOGICAL UNIVERSITY**

**Degree:** **BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY**

**Year:** **2013-2014**

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In today's digital era, fast paced trends in Information Technology (IT) allow businesses to utilize web-based applications such as Consumer Information Systems (CIS). These applications improved the traditional-transaction processing systems. Thus, most establishments switch to web-based system because of its efficiency to acquire process, store and retrieve information from the Internet.

Zambales Electric Cooperative Inc. I (ZAMECO I) is still using old software-based system and paper-based information systems. Administrators and staffs find it tedious in searching and preparing reports for consumer's information and also laborious



due to repetition of processes done in filling and updating of records. The Web-based Consumers' Information System would be a new way of online record management and billing transaction processing that would achieve efficiency and convenience on processing consumers' information. It would be a great help to the administrative personnel, to staffs and most especially to consumers in updating, retrieving and generating important data.

The main purpose of the study was to design and develop web-based consumers' information system of Zambales Electric Cooperative Inc. I (ZAMECO I). In order to achieve the general objective, the following specific objectives of the study were identified: (1) To identify the information requirements in the existing software-based consumer information system of ZAMECO I. (2) To determine the problems encountered in the existing software-based information system. (3) To identify the information requirements needed for the proposed web-based application. (4) To determine appropriate security and control measures needed for web-based consumer information system. (5) To determine the benefits of the web-based information system as perceived by: a.) Administrators b.) Staffs c.) Consumers.

The research sought answers on the following questions: (1) The problems encountered by the ZAMECO I office in terms of accuracy, security, speed of processing, user-friendliness of the existing software-based system. (2) The respondents' perceptions on the level of efficiency of the existing system of ZAMECO I in terms of accuracy, security, speed of processing, user-friendliness. (3) The respondents' perceptions on the level of effectiveness of the proposed system in terms of accuracy, security, speed of



processing, user-friendliness. (4) The significant difference between the Existing System and the Proposed System in terms of the cited criteria.

The findings of the study are as follows: (1) The respondents perceived of the existing ZAMECO 1 software-based system in terms of identified criteria as Moderately Efficient with a grand mean of 3.40. (2) The respondents' perceived the proposed Web-Based Consumers' Information System of Zambales Electric Cooperative Inc. 1 (ZAMECO 1) in terms of identified criteria as Efficient with a grand mean of 4.46. (3) Therefore, the respondents' perceived that the proposed Web-Based Consumers' Information System of Zambales Electric Cooperative Inc. 1 (ZAMECO 1) is much better than the existing software-based system of ZAMECO 1.

In view of the findings and conclusions, the researchers' offer the following recommendations. (1) The proposed Web-Based Consumers' Information System of ZAMECO 1 should be implemented in ZAMECO 1 branches for the convenience of administrators and consumers. It also provides easy access of information for consumers from the cooperative. (2) Due to its numerous advantages, the proposed web-based system is worth an investment. (3) The researchers' recommend orientation for the staffs and consumers of ZAMECO 1 for a better understanding and management on the operation and usage of the proposed system. (4) The web-based proposed system is strongly recommended for ZAMECO 1 branches to minimize manual operations such as membership application, electric billing and posting of public announcements. (5) A continuous and modernized study regarding consumers' information system should be done, so that the cooperative will cope with fast-paced trends of technology and information systems.