Performance Efficiency Enhancement Using School Web-Based Management System

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Abstract

The study delved on the performance efficiency enhancement of the big schools in Pangasinan I using School Web-Based Management System. The study determined the perceptions of the teachers and personnel on the level of availability, adequacy, and effectiveness of the computer facilities; level of readiness of various computer operations; performance efficiency of the personnel in producing form 137; performance efficiency of the big schools using school web-based management system; level of usability and acceptability. The descriptive developmental method of research was used in this study. Findings showed that the computer facilities of these schools are available, adequate, and effective; teachers and personnel are ready in various computer operations; performance efficiency of the personnel is very much efficient; and the School Web-Based Management System is usable and acceptable.

Keywords: efficiency; information system; management information system; performance

Introduction

In these contemporary times of modernized society, coping mechanisms and innovative ways of doing things is a must. Thus, to meet the demand of quality and excellence in every field of specialization, particularly in technological innovation, radical changes are inevitable toward performance management of transformational society.

The desire to change stems not only from the demands of the improved quality of life, but also from the pressing need to be active participants in the fast-changing world as a staple and as ration in the 21st century (Rajaraman, 2012). It is necessary that administrators should take less conservative role and explore the technological advances of computers. The increase in the use of computer technology in today's management has an effort to the future benefits in all areas of society (Williams & Sawyer, 2013).

The advent of Information and Communication Technology in education has become one of the emerging concerns in educational institutions today. It is a

vital tool to boost the accessibility to learning opportunities. Under appropriate conditions, ICT can have a monumental influence on the development of learning opportunities as it enhances the teaching pedagogy by modifying typical delivery systems, enhancing the quality of learning achievements, assisting lifelong learning and improving institutional management (Albay, 2013).

This kind of change requires integrating traditional management system into the future of digital technologies. Among the challenges that managers face as they approach the digital age is to know significantly how to use effectively the Management Information System (Laudon & Laudon, 2014).

Sarras (2011) explained that Management Information System (MIS) is an integral system of man and machine works for quick access of information which facilitates the decision making and managerial function in the organization dubbed as Information and Decision System and Computer-Based Information System.

The Department of Education (DepEd) developed another system called Learning Resource Management and Development System (LRDMS) and Learner Information System (LIS) to improve the efficiency, effectiveness, and equitability of educational management in the Philippines. As a result, information systems in DepEd are synchronized to regional, division, and school level (Learners' Information System, 2012).

Schools in the Division of Pangasinan I, especially the big schools, still use the conventional way of keeping records such as the use of Form 137 and Form 138 despite the fast-paced technological information seemingly demands paperless transactions.

The use of technology for management of resources, particularly in schools, is vividly fruitful for managerial functions. As a matter of fact, Dr. Alfredo Galano, ICT Coordinator of Mangatarem National High School, said that the use of SWBMS would be a big help for easier and compatible data handling - especially with students' records that are bulky. Likewise, Mr. Marvin Manuel, personnel of Calasiao Comprehensive National High School, testified that SWBMS would carry out data and information anywhere with simple internet connection for structured student's track records.

Moreover, it may be noted that the management of resources and workflow such as documentation is faster as compared to the previous systems of CCNHS Citizens Charter 5 working days in the issuance of forms and services.

Thus, the management of resources and performance of routine work will be quicker. Likewise, access to resources will be easier to carry out. This has been emphasized by Ms. Lyn Rosal, personnel of CCNHS. She said that the advancement of technology must keep the pace of modern day of management and administrative trends as modern day school.

Thus, the researcher was motivated to test the performance efficiency of the big schools using School Web-Based Management System (SWBMS) in securing and accessing information using technology in its most systematic way.

Framework Of The Study

The present study focuses on the emerging development of performance efficiency of School Web-based Management System. It anchors deeply on the concept of Management and Technological theories informed by views drawn from Efficiency Theory, concept of Total Quality Management, Socio-Technical Systems Theory, Cognitive Fit Theory, Technology Acceptance Model, Unified Theory of Acceptance and Use of Technology, Task Technology fit and – all of which contributes to the conduct of this research.

Efficiency Theory is used by economists in different contexts to support this study. Allocative (price) efficiency tells whether or not a good or service is provided. Technical (production) efficiency is concerned whether or not a firm or decision making unit (DMU) produces the same observed output at the least possible cost (Galban, 2010). Moreover, accessible efficiency refers to the number of electronic materials in providing services to the customers. When the allocative, technical, and accessible efficiency of an institution is combined, productive or total performance efficiency is achieved (Archer, 2010).

Total Quality Management (TQM) becomes prevailing culture of the institution. The cornerstone of TQM is customer - focus which seeks to integrate all organizational functions to focus on meeting customer needs and organizational objectives. On the other hand, benchmarking is another approach which refers to the process of analyzing work and service techniques against the best practices and to determine changes that will result in higher - quality outcomes.

Meanwhile, socio-technical theory implies two fundamental perceptions: (1) a social and (2) technical system. Socio-Technical Theory describes the complex relationships between society, function, and technology. It helps regulate how these relationships can be used for convenience (Cooper, Gencturk & Lindley, 1996).

Vessey (1991) introduced Cognitive Fit Theory to explain the inconsistent results of successive studies in the area of information presentation using graphs and tables. Moreover, the main point of this theory is information acquisition and information assessment errands and absolutely made up the information presentation (Zhang & Galleta, 2006). Hence, School Web-based Management System uses the best presentation to show the information of the database of the system.

On the other hand, Technology Acceptance Model recognizes practicality and ease of use to determine an individual's intention to use the system. This is a long process done by the programmer to satisfy the need of the users. Utilization of the School Web-based Management System is required to test the performance to maintain the quality assurance of the system and the service.

Meanwhile, Unified Theory of Acceptance and Use of Technology (UTAUT) was formulated by Venkatesh to accept the information technology by the user in unified view. In addition, this theory is used to identify whether the

information system is accepted in the practice of the administrators or personnel. Questionnaires administered serve its purpose if the agency is ready to employ the system. On the other hand, this study will use the system as an instrument to assess the performance efficiency of the big schools (Schepers & Wetzels, 2007).

The Task Technology Fit theory advocates that an enhanced fit between technology functionalities, task requirements, and individual activities will lead to better performance (Davis, Bagozzi, & Warshaw, 1989).

Putting everything into perspective, the theoretical framework shows how School Web-Based Management System was developed using Management concept and Technological theories relevant to the study. Furthermore, enhancing a system through feedbacks will be used to assess the performance of the user.

Figure 1 represents the schematic diagram of the conceptual framework of the study using the Input-Process-Output Model of the study. In line with the input, availability and adequacy of the ICT facilities in the selected big schools in Pangasinan I. Likewise, included as an input are the level of preparedness of the personnel in the various computer operations in using the School Web-Based Management System. Meanwhile, the process is the utilization of the School Web-Based Management System for a month to familiarize the system and finally to measure the performance efficiency of the big schools in using the School Web-Based Management System.

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