

APPLICATION OF COGNITIVE ERGONOMICS IN THE DEVELOPMENT OF
WEB-BASED SYSTEM FOR SUPPLY AND PROPERTY OFFICE
AT CAVITE STATE UNIVERSITY - MAIN CAMPUS

THESIS

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ABSTRACT

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The study was conducted from August 2018 to April 2019 in the Supply and Property Office (SPO) of Cavite State University-Main Campus, Indang Cavite along with the units affiliated to SPO. It was conducted to: (1) determine the process of submitting the documentary requirements in Supply and Property Office; (2) determine problem in the process of documentary requirements in Supply and Property Office; (3) design and develop a web-based system in view of the problems identified considering ergonomic criteria; (4) test and evaluate the identified ergonomic usability of the developed web-based system in Cavite State University-Main Campus; and (5) provide possible recommendations that can improve the process in Supply and Property Office's documentary requirements procedure.

Define, Measure, Analyze, Design and Verify (DMADV) was used as the research methodology of the study as it was a developmental research. The primary source of the data for the study was the Cavite State University-Main Campus Supply and Property Office staff and its units. The secondary sources of data were the journals, articles and studies related to the topic.

The result of the study shown that majority of the respondents were affected by the cognitive limitations, time constraints, management issue, and external factor which

contributes to the delay in submitting documentary requirements in the Supply and Property Office of Cavite State University-Main Campus, Indang, Cavite.

After identifying the current process and the problems encountered in submitting the documentary requirements, the researchers designed and developed a web-based system for Supply and Property Office at Cavite State University-Main Campus using the gathered problems and the ergonomic criteria. The ergonomic quality and usability of the system yielded a level of excellence from the respondents, and achieved the effectiveness and efficiency of the system. This also gave a satisfaction level to the users.

To further improve the study, the system can: (1) be converted to a more mobile friendly site; (2) have an access to cloud storage for more flexible interaction of Supply and Property Office to different campuses of Cavite State University; (3) increase security features of the system; and (4) have additional features in the system.

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INTRODUCTION

Supply and Property Office (SPO) of the Cavite State University-Main Campus is the overall in charge in the acquisition of supplies, materials, new properties and equipment. The units or the colleges that makes an order in the supply office needs to submit a document or order form to achieve their desired goods or services. Based on the Internal Quality Audit (IQA) conducted by Cavite State University (CvSU) Management System Team to SPO, it was found out that the SPO's main problem is the unit's delay of submission of documentary requirement which subsequently affects the supply and property office work function and higher management's job performance assessment to the SPO.

The University of the Philippines Los Baños (2018) has a supply and property management office which has a broad scope of work that administers and manages the