

DESIGN AND DEVELOPMENT OF PHILIPPINE STATISTICS AUTHORITY REQUISITION SYSTEM USING COGNITIVE ERGONOMICS

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ABSTRACT

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The use of technology is very important specially the development of computer technologies. The Philippine Statistics Authority (PSA) is responsible in carrying out the objectives and provisions of R.A. 10625. The PSA used both manual and online requisition system to process and provides documents to the applicants. In order to deal some system design issues, the ergonomic criteria was used in order to develop an improved online requisition system of Philippine statistics Authority to help the applicants to navigate the system easily, lessen their time and save money in requesting and acquiring documents from PSA.

The research design used by the researchers in this study is developmental and descriptive method. The study's source of data was the respondents which were the office, requestors of certificates in Philippine Statistics Authority-Cavite, and participants came from the different municipalities/cities in Cavite. Through the use of Slovin's formula, the researchers came up with a sample size of 400 respondents but due to availability of the respondents there were only 200 respondents. The researchers used quota sampling to determine the sample size of the research

The researchers used the DMADV methodology approach in able to define the current situation, analyze the problems, identify the technical and customer requirement of system, development of the system and evaluate the system. Also, the researchers used different industrial engineering tools to further identify and analyze the root cause of the

problems. Based on the result, the highest percentage of problems encountered in manual requisition is long queues while in online is difficulty to navigating. The researchers apply the ergonomic criteria to the system in able to design and assess the system in having a smooth interaction between the user and the system. Based on testing and evaluating of the system, different criteria got an excellent and good descriptive level. Therefore, the system was good and efficient to use.

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