

**APPLICATION OF COGNITIVE ERGONOMICS IN THE DEVELOPMENT
OF INDANG ONLINE TOURIST NAVIGATION**

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ABSTRACT

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Tourism has become an important sector that has an impact in the development of the country's economy. With the use of new technologies especially the Internet, it has gone a long way in influencing growth and development in the tourism sector in many ways. Integrating this Internet into the tourism industry can show and promote tourist destinations. With different kinds of tourist attractions, Indang, Cavite has a huge potential to develop its tourism industry. Even though Indang is a developing town in Cavite, it has no available tourism website for them to promote their own tourist attractions. In order to provide an Indang online tourist navigation, this study aimed to:

- 1) determine the current process done by the tourist in finding specific destination in Indang, Cavite;
- 2) determine the problems encountered by the user from the current situation in planning and locating tourist destination in Indang, Cavite;
- 3) design and develop an Indang online tourist navigation considering the gathered problem and ergonomic criteria;
- 4) determine the ergonomic quality of the online tourist navigation in terms of ergonomic criteria;
- 5) test and evaluated the usability of the developed navigation system of Indang, Cavite; and
- 6) determine the possible recommendations to further improve the online tourist navigation of Indang, Cavite.

Developmental research was used in the study and Define, Measure, Analyze, Design and Verify (DMADV) method was followed as its research methodology. The

primary sources of data were the municipalities/cities tourism and museum offices staff in Cavite, and the other possible users of the online tourist navigation website. Purposive sampling technique was used to determine the number of participants in the study. The total participants for the evaluation of the website were 70 tourism staff in Cavite.

Based on the results of the study, majority of the respondents were using the conventional way in planning a trips and were usually performing eight steps that were currently done by the tourists, specifically: (1) desire for travel, (2) explore options, (3) select vacation, (4) mode of transportation, (5) travel to location, (6) experience vacation, (7) travel home, and (8) remember experience. The problems encountered during these steps were information management issues, communication problem, time-consuming and exhausting.

After identifying the current process and the problems encountered by the tourist, the researchers designed and developed the online tourist navigation website using the gathered problems and the ergonomic criteria. In terms of the ergonomic quality and usability of the website, it yields a level of excellence from the respondents, and achieved the effectiveness, and efficiency of the website. This also gives a satisfaction level to the users.

For further improvement of the Indang online tourist navigation, the researchers recommend to: (1) associate with different tourist destinations in Indang, Cavite; (2) consider converting the system into a mobile application; (3) add the whole map of Indang with map legends showing the different destinations which were categorized in its business type; and (4) focus on the design for workload of the website for good user experience.

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