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Younghwa Lee University of Colorado at Boulder

Kenneth Kozar University of Colorado at Boulder

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DEVELOPING A THEORY OF WEBSITE USABILITY: AN EXPLORATORY STUDY TO IDENTIFY CONSTRUCTS AND NOMOLOGICAL NETWORKS

Younghwa Lee and Kenneth A. Kozar

Leeds School of Business University of Colorado at Boulder Boulder, CO U.S.A. leey@colorado.edu Kenneth.kozar@colorado.edu

Extended Abstract¹

Developing a usable website is pivotal for e-business success, yet previous studies have reported that current websites contain numerous usability problems. There are many reasons for poorly designed websites, but this research focuses on the lack of a good theory of website usability, a theory that explains and predicts the effects of website usability on online customer perceptions.

To propose a good theory of website usability, this exploratory study first investigated website usability constructs by integrating the findings of previous studies and the results of interviews with website usability experts. Instruments to measure the constructs were developed and empirically validated. Then nomological networks between website usability constructs and online customer perceptions, focused on purchase intention and purchase, were examined. Three field studies including two questionnaire surveys and a causal mapping analysis were conducted.

This study identified 10 website usability factors with strong psychometric properties through conducting a confirmatory factor analysis. Factors include consistency, navigability, supportability, learnability, simplicity, interactivity, telepresence, content relevance, credibility, and readability. Based on these constructs, this study found nomological networks that explain a large amount of variance of purchase intention and purchase through performing a causal mapping analysis and a path analysis (see Figure 1).

This research could aid researchers and practitioners of website usability by providing useful knowledge for usable website design. From a theoretical perspective, this study proposed and validated the nomological networks which could be used to develop alternative theoretical models of website usability or enhance the current theoretical models to provide a better understanding of the website usability phenomenon. From a practitioner perspective, using the identified instruments and nomological networks, management of e-business companies can evaluate the usability level of their own website and at the same time, compare the usability level of a company's website with that of competitors to establish industrial standards. By gauging website usability levels and comparing with competitors' sites, e-business companies can make strategic decisions on how to improve current websites.

¹Keywords: Website usability, theory of website usability, online customer perception, causal mapping, structural equation modeling

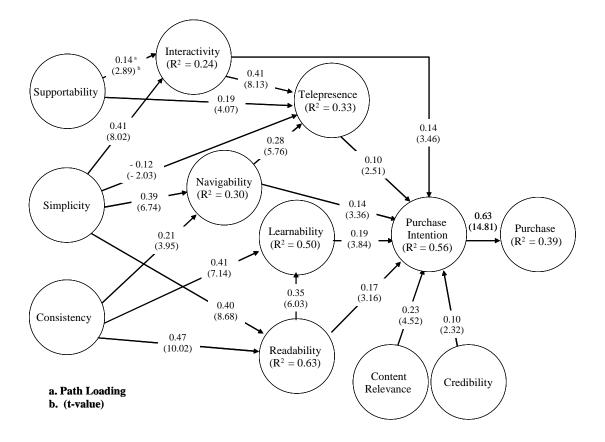


Figure 1. Empirical Finding of Nomological Networks of a Theory of Website Usability