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Author:

e-mail:

MktgSci@notes.cba.ufl.edu

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Measuring the Customer Experience in Online Environments: A Structural Modeling Approach

Thomas P. Novak • Donna L. Hoffman • Yiu-Fai Yung

eLab, Owen Graduate School of Management, Vanderbilt University, Nashville, Tennessee 37203

novak@ecommerce.vanderbilt.edu • hoffman@ecommerce.vanderbilt.edu

SAS Institute, Inc., Yiu-Fai.Yung@sas.com

Abstract

Intuition and previous research suggest that creating a compelling online environment for Web consumers will have numerous positive consequences for commercial Web providers. Online executives note that creating a compelling online experience for cyber customers is critical to creating competitive advantage on the Internet. Yet, very little is known about the factors that make using the Web a compelling experience for its users, and of the key consumer behavior outcomes of this compelling experience.

Recently, the flow construct has been proposed as important for understanding consumer behavior on the World Wide Web, and as a way of defining the nature of compelling online experience. Although widely studied over the past 20 years, quantitative modeling efforts of the flow construct have been neither systematic nor comprehensive. In large parts, these efforts have been hampered by considerable confusion regarding the exact conceptual definition of flow. Lacking precise definition, it has been difficult to measure flow empirically, let alone apply the concept in practice.

Following the conceptual model of flow proposed by Hoffman and Novak (1996), we conceptualize flow on the Web as a cognitive state experienced during navigation that is determined by (1) high levels of skill and control; (2) high levels of challenge and arousal; and (3) focused attention; and (4) is enhanced by interactivity and telepresence. Consumers who achieve flow on the Web are so acutely involved in the act of online navigation that thoughts and perceptions not relevant to navigation are screened out, and the consumer focuses entirely on the interaction. Concentration on the navigation experience is so intense that there is little attention left to consider anything else, and consequently,

other events occurring in the consumer's surrounding physical environment lose significance. Self-consciousness disappears, the consumer's sense of time becomes distorted, and the state of mind arising as a result of achieving flow on the Web is extremely gratifying.

In a quantitative modeling framework, we develop a structural model based on our previous conceptual model of flow that embodies the components of what makes for a compelling online experience. We use data collected from a large-sample, Web-based consumer survey to measure these constructs, and we fit a series of structural equation models that test related prior theory. The conceptual model is largely supported, and the improved fit offered by the revised model provides additional insights into the direct and indirect influences of flow, as well as into the relationship of flow to key consumer behavior and Web usage variables.

Our formulation provides marketing scientists with operational definitions of key model constructs and establishes reliability and validity in a comprehensive measurement framework. A key insight from the paper is that the degree to which the online experience is compelling can be defined, measured, and related well to important marketing variables. Our model constructs relate in significant ways to key consumer behavior variables, including online shopping and Web use applications such as the extent to which consumers search for product information and participate in chat rooms. As such, our model may be useful both theoretically and in practice as marketers strive to decipher the secrets of commercial success in interactive online environments.

(Internet Marketing; Electronic Commerce; Online Consumer Behavior)