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A MODEL TEST

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At the AMCIS 2001 conference G. Kearns and S. Loy (2001) proposed a model of e-commerce affinity and a related survey instrument. This model suggests that e-commerce affinity ("defined as the proclivity of consumers to engage in online purchasing." (Kearns and Loy, 2001)) has three antecedents: e-commerce experience, internet experience, and e-cash affinity. In this paper the author, a third party to the original work, conducts an empirical test of Kearns and Loy's model.

From this model Kearns and Loy (2001) posit three hypotheses:

> *H1: EC experience is positively related to EC affinity.*
> *H2: Internet experience is positively related to EC affinity.*
> *H3: E-cash affinity is positively related to EC affinity.*

The author took a sample of 72 volunteer students at a Midwestern university. Students were administered the 18 items from Kearns and Loy's instrument. In addition, demographic questions were included on gender, housing, major and class.

Tests of internal reliability were calculated and showed three constructs (E-Commerce Experience, Internet Experience and E-Commerce Affinity) were reliable (with Cronbach's alpha of .7 or higher). E-Cash affinity, however, does not work well at all and had an alpha of .0851. The author attempted to remedy this problem by trying different combination of items from the original set of five. However, no combination of items made this construct work reliably.

In order to test the 3 proposed hypotheses from Kearns and Loy's work, the author used Pearson correlation. Results for the 3 hypotheses originally suggested by Kearns and Loy (using an alpha value of .05) are that H1 is supported (r=.455) and H2 and H3 are not supported.

The author fully expected to support H1 as the literature suggests that e-commerce "experience" and "affinity" appear to be closely related concepts. The more one makes on-line purchases, the more one prefers this mode of shopping to traditional stores.

The lack of support for the second hypothesis is interesting. The students surveyed in this study are fairly sophisticated web users. When asked if they access the internet regularly, for example, they responded with an average response of 6.56 (on a 7 point scale) and very little distribution. Yet when asked if they used the Internet for shopping, responses are widely spread with some 20% of the students responding below the neutral point. This suggests that there may be a group of savvy Internet users that use the Internet for information purposes and not for purchases. Further study in this area could focus on the factors that lead some experienced Internet users to be resistant to on-line purchasing activity.

It is difficult to make sense of the third hypothesis given the lack of reliability of the e-cash construct. If further work is done in this area, the e-cash affinity concept needs to be reworked. Even the first two questions dealing with credit and debit cards and ATMs are not highly correlated. It is possible that there is no underlying concept here at all. One's use of debit cards, ATM and smart cards may be unrelated. Again, a further area of study might pursue the reasons why some consumers feel comfortable with one of these technologies and not another.

Keywords: E-commerce, e-cash, internet, affinity, experience

Reference

Kearns, G. S. and Loy, S. "The Case for Stored-Value Smart Cards: Analysis of Facilitators and Inhibitors". Proceedings of the 2001 America' Conference on Information Systems (AMCIS), August, 2001 pp. 952-954