

Research on the ease of use and usefulness of e-operating systems for e-consumes' behavior

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Abstracts

Information technology offers the potential convenience for e-consumes improving home consumes' performance. Thus, about the ease of use and usefulness of e-operating systems for e-consumes' behavior, that is an important issue have to be discuss.

The technology acceptance model, and extensions of it, suggests a causal relationship between the perceived ease of use and usefulness of an information technology system.

This study had received the responses from 300 questionnaires in relation to their use of e-shopping system. Research analysis used the structural equation models of technology acceptance. Results found support for our hypotheses indicating that, the ease of use is important; it also does determine perceived usefulness.

Keyword: ease of use, usefulness

Background

With the rapid development of information technology, the economy's dependence on the Internet has gradually increased. The Internet platform is considered to be one of the most indispensable elements of competition. Therefore, with the powerful

development of information technology, while in order to attract more purchasing power, the simple e-operation and practicality of e-technology tools will become the key to e-stores' success.

Literature and Hypotheses

In the cost-benefit theory and rational behavior theory by Davis (1986) proposed model, both important factors of perceived ease of use and usefulness are affect the e-operation use.

The ease of use is defined as the ease with which potential users can operate while learning a particular information system (Davis, 1989). Perceived ease of use, refers to "the degree to which a person believes that using a particular system would be free of effort." This follows from the definition of "ease": "freedom from difficulty or great effort." All else being equal, we claim, an application perceived to be easier to use than another is more likely to be accepted by users.

Perceptual usefulness is defined as an extrinsic motivating factor that influences user intent (Davis, et al., 1992). Perceived usefulness is defined here as "the degree to which a person believes that using a particular system would enhance his or her job performance." This follows from the definition of the word useful: "capable of being used advantageously." A system high in perceived usefulness, in turn, is one for which a user believes in the existence of a positive use-performance relationship.

There are higher the level of perception for ease of use, the higher the willingness to use the system or new technology. Luo and Strong (2000) study to explore the users to used social software, found that perceptual usefulness, perceived ease of use, and clustering effects have a positive impact on users' use.

Davis (1989) also argues believes that if users can feel that smart phones then the

usefulness of the system will be more positive, there are the following effects, such as: can help with learning, can shorten working hours at work, and improve work efficiency; in addition, the navigation system can assist driving will not be lost.

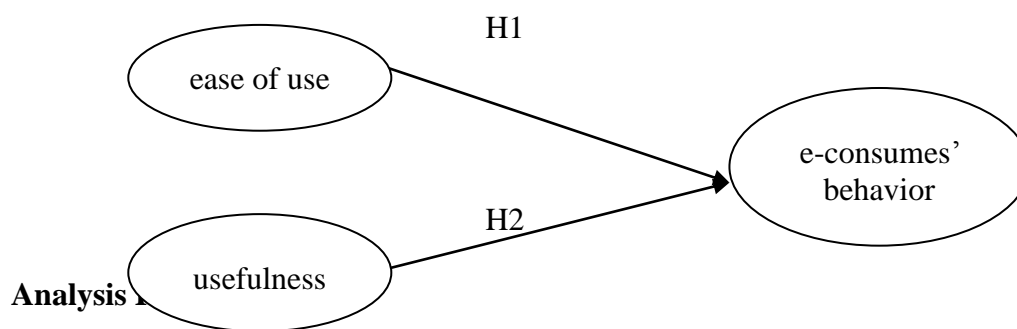
TAM model has been expanded by a number of researchers and has been applied to many different technologies including e-learning (Cheung and Vogel, 2013), teleconferencing (Park, et al., 2014), short message service (Muk and Chung, 2015) and etc.

Thus, this study proposed following as these hypotheses:

H1: Consumers perception the e-operation is ease of use have a positively and significantly on e-consumes' behavior.

H2: Consumers perception the e-operation is usefulness have a positively and significantly on e-consumes' behavior.

The research model is as showing the Figure 1.



AMOS software is used tool by this study to process analysis the research hypotheses for the research model. The results showed that the each indicators of the model are: $\chi^2_{df}=2.834$, CFI = 0.980, GFI = 0.954, AGFI=0.878, RMR = 0.043, RMSEA = 0.078. According the test result, all of these indicators are to an acceptable level after examines. Showing this research mode is an acceptable mode.

Further, the reliability and validity of this mode will be verified. In terms of internal reliability, as shown in Table 1, these factors as ease of use, usefulness, and e-consumes' behavior their Cronbach's α value for each: 0.827, 0.823, and 0.905, respectively.

The value of CR ease of use, usefulness, and attitude are 0.841, 0.841, and 0.890; and the AVE value are: 0.582, 0.584, 0.622, respectively. Which are reached to the levels of reliability and validity.

Table1 The reliability and validity of research model

	Construct		
	ease of use	usefulness	e-consumes' behavior
Cronbach's α	0.827	0.823	0.905
CR	0.841	0.841	0.890
AVE	0.582	0.584	0.622

Moreover, this study process to test the research hypotheses.

First, the H1 was tested. As shown in Table 2, the ease of use of e-operation had a positively and significant on the e-consumes' behavior ($\beta = 0.270$, $p=0.000$). The H1 was accepted. To test the H2, whether the usefulness of e-operation had a positively and significant on the e-consumes' behavior by path analysis, also was reached the verified ($\beta = 0.631$, $p=0.000$). The empirical results of research hypotheses as flowing:

Table 2 Summaries of value of hypotheses

Hypotheses	Standardization β	Standardization Error	t-value	p-value
H1: ease of use→e-consumes' behavior	0.270	0.052	3.918	0.000
H2: usefulness→e-consumes' behavior	0.631	0.066	8.368	0.000

Conclusion

This research shows that consumer perception of the ease of use and usefulness of e-operating system will change its e-consumer' behavior. The research results also confirmed that there are two factors that affect consumers' consumption behavior: the ease of use and usefulness of the e-operation system. Among both, the factor of usefulness will significantly to change e-consumes' behavior than ease of use.

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