## A STUDY ON FACTORS AFFECTING THE SUCCESS OF ELECTRONIC COMMERCE

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## Abstract

In the business-to-customer (B2C) area, electronic commerce (EC) growth rate of Japan is two times slower than that of the United States. There are three problems which are supposed to explain this phenomenon. First, a number of online customers who intend to purchase a product/service and who actually purchase it by adopting Internet shopping are decreasing. Also, the EC model of the US cannot be used to identify the factors influencing the decrease in the number of online customers. In addition, consumption behavior of Japanese is notably different from other societies. Therefore, a localization of the EC model is necessary. Second, there are problems in the continuance of purchasing in Internet shopping: a decrease in the rate of return online customers and a lack of customer perception in benefits gained from Internet shopping. Third, EC companies have to face with the difficulties in implementing EC sites and understanding online customers' behavior. To solve these problems, the consumer behavior modeling and online consumer behavior analysis were applied in this dissertation. The objectives of this dissertation are as follows:

- Conduct a comparative study of the model among selected countries
- Identify the factors related to the success of EC
- Develop a model for exploring the factors influencing the success of Internet shopping

A comparative study began by applying the EC model of the US to the datasets of Japan and South Korea. The results show that there are differences between the models of three countries. Therefore, the localized models of Japan and South Korea were developed separately. For the EC model of Japan, intention to use Internet shopping was removed and perceived usefulness is insignificantly related to the attitude toward the usage of Internet shopping. For the EC model of South Korea, intention to use Internet shopping was also removed and perceived usefulness and compatibility are insignificantly related to the attitude toward the usage of Internet shopping. From a model localization, perceived trust is the most important factor affecting purchasing behavior of Japanese customers. In South Korea, the purchasing behavior is highly related to perceived usefulness and perceived service quality. The differences between online customer nationalities regarding their purchasing perceptions through the Internet will yield insights that can help Internet shops better increase the number of customers in different world market segments.

To solve the second problems, the model of continuance of purchasing behavior in Internet shopping was proposed. A new factor, customer loyalty, has been added to the based model and showed that it is significantly related to the continuance of purchasing behavior. The models of continual purchasing behavior for Japan and South Korea consist of the same factors: confirmation, satisfaction, perceived usefulness, customer loyalty, and perceived incentive. The results show that perceived usefulness and perceived incentive are the most important factors for the Japan model; in contrast, satisfaction is the most important one for the South Korea model. In addition, perceived benefits of extrinsic benefits measured by time and money savings, social adjustment, and self-enhancement as well as intrinsic benefits measured by pleasure and novelty as well as fashion involvement have strong effects on the continuance of purchasing. The findings indicate that customer retention must be promoted in Internet shopping by guaranteeing not only extrinsic benefits but also intrinsic benefits. This implies that Internet shop should carefully select an appropriate technique to provide the benefits to the customers because each technique can serve different purposes in online applications in the EC business domain.

Finally, the integrated model of factors affecting Internet shopping has been developed to help EC companies implementing the EC sites and understanding customer behaviors. The results indicate that perceived trust is the most important factor to make customer purchase through the Internet. Perceived ease of use is significant related to the actual use of Internet shopping and customers continue purchasing online because of satisfaction.

These findings not only guide managers to conduct the EC business, support of EC strategy planning, promote EC adoption, but also provide the theoretical grounds for studying factors influencing the success of EC. The implications of this dissertation are related to technical and managerial improvements aimed at gaining more online customers, retaining online customers, and helping the implementation of EC sites. Further study can be done by applying the integrated model of factors affecting the success of EC to the development of verification system for critical success factors of EC. The system would help in verifying those factors of the EC sites and in allocating the resources for creating the factors. Despite several significant findings and implications, this dissertation has a limitation on unspecified products, services, or Internet shopping websites and on unspecified source of perception measured in an online questionnaire.