

## APPLICATION OF QUALITY FUNCTION DEPLOYMENT TO IMPROVE THE QUALITY OF INTERNET SHOPPING WEBSITE INTERFACE DESIGN

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**ABSTRACT.** *The popularization and rapid development of the Internet has fostered the growth of online shopping leading it to become an important new channel for consumers to make purchases. However, the Internet users' rate of satisfaction has declined since online shopping has become an important consumer option. In order to improve customer satisfaction and to enhance the shopping experience, it is very important, first of all, to understand the customer quality needs particular to the Internet shopping website, then to meet these needs through suitable website interface design. A B2C shopping website is used as an example in this study. Quality function deployment (QFD) is utilized to attain an understanding of customer quality needs, quality elements, and the relationship between them. Suggestions for improving the quality of website design are proposed based on the case study and the major performance indices discussed. Conclusions can be used as reference for online shopping website operators wishing to enhance the competitiveness of their websites in the highly competitive online shopping market.*

**Keywords:** Online shopping, Shopping website, Quality function deployment (QFD), Quality need, Quality element

**1. Introduction.** The Internet can be characterized as being fast, convenient and distance-free. This means that there are no times or geographic limitations. Operating expenses and rent are less for online shopping stores. The growth in the number of online shopping sites has been rapid. Data from the Institute for Information Industry (III) [1,2] confirm e-commerce to be a growing trend in Taiwan. Internet user transactions and the revenue generated by online shopping companies are estimated to be about 145.2 billion NT dollars, 93.5 billion NT dollars from the online shopping market. In 2007, the online shopping market reached 185.5 billion NT dollars. The predicted growth rate in 2008 is 36% [3].

Although online shopping has become a growing new trend and an important purchasing channel, consumers are still not very satisfied with the current design and operation of the shopping websites [4]. According to an analysis from the Eastern Integrated Consumer Profile (E-ICP) [5], the quality of the website design is a very important factor affecting the consumer's online shopping behavior. In order to increase market share in the face of fierce competition, every aspect of the services offered on websites must be improved. Attention must be paid to consumer needs to improve customer satisfaction. The goal is