

# **AN EXTEND TECHNOLOGY ACCEPTANCE MODEL TO ANALYSIS CONSUMERS' BEHAVIORAL INTENTION: A CASE OF LCD TV**

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## **ABSTRACT**

Consumers will try to obtain product information through various information channels before buying products. The information would influence their behavioral intention. The more valuable information of products from firms can be used to communicate with consumers who will have more positive attitude toward the products. Therefore, the firms' marketing strategies must be more accurate to meet consumer's demand, in order to improve their sales performance. The advantages of LCD TV, such as space saving, high resolution, and larger screen size, made it became the mainstream on TV market, and also brought the significant change to the entire display industry. This study proposed an extended Technology Acceptance Model (TAM) combined with diffusion of innovations and learning motivation, to explore perceived usefulness, perceived ease of use, diffusion of innovations, and learning motivation which have impact on consumers' attitude and behavioral intention to use LCD TV. Compared to CRT TV, LCD TV is an innovative technology product. New technology products will replace old technology products gradually, so we include diffusion of innovations into our research framework. Besides, consumers obtain the related information of products through various channels before making purchase decisions. This process is a learning process that has impact on consumers' attitude toward LCD TV. Therefore, we will also include learning motivation into our research framework.

In this research, we have seven hypotheses as follows:

H1: Perceived ease of use positively influences perceived usefulness of LCD TVs.

H2: Perceived usefulness positively influences attitude toward using LCD TVs.

H3: Perceived ease of use positively influences attitude toward using LCD TVs

H4: Perceived usefulness positively influences behavioral intention toward using LCD TVs.

H5: Attitude positively influences behavioral intention toward using LCD TVs.

H6: The degree of innovation diffusion positively influences consumers' attitude toward LCD TVs.

H7: Motivation of learning positively influences attitude toward LCD TVs.

We collected 1007 samples via the online questionnaire. The valid questionnaires are 682 after appropriate screening. According to purchasing power, this study excludes the respondents in the age group (under 20 years-old), because the students are more than 99% in the age group. A total of 611 valid questionnaires were obtained. We used structural equation model (SEM) to verify the hypotheses. The research results showed as follows: (1) diffusion of innovation and learning motivation not have significant influence consumers' attitude toward using LCD TVs; (2) Perceived usefulness and perceived ease of use positively influence the attitude toward using LCD TVs; (3) perceived usefulness is enhanced when consumers perceive higher ease of use of LCD TVs; (4) attitude toward using LCD TVs has stronger effect on behavioral intention, followed by perceived usefulness and perceived ease of use.

**Keywords:** Technology Acceptance Model, Diffusion of Innovations, Learning motivation, Structural Equation Model