Application of expectation confirmation theory on users' continuous intention of smart devices in gymnasiums

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Abstract

This research uses the "Expectation Confirmation Theory" (ECT) as the basis to explore the user's perception of smart sports stadium software in Taiwan. The results found that service quality has a higher impact on the confirmation level of smart software devices than information quality and system quality. The user's satisfaction is influential, and it is found that satisfaction reflects the factors of whether the user continues to use it.

Keywords: Expectation confirmation theory, gymnasiums, information system success model, willingness to use

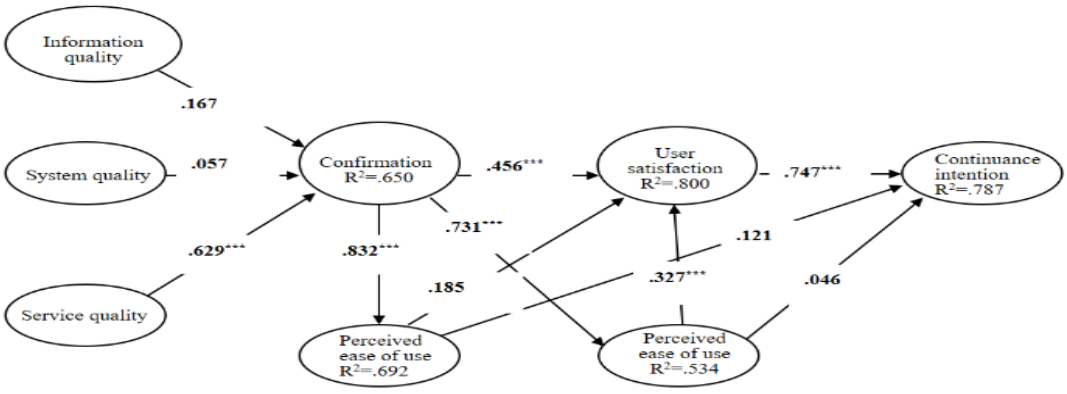
Introduction

The purpose of the research is to exlpore the users who are willingness to continuoue the smart device as the research objects to conduct questionnarie survey and anaylize the research results. The users used the smart software devices through the body monitoring devices of agent, wearable device, system's terminal hardware, hardware, professioinal software, etc. to explore the relationship between the qualtiy characteristics and use characteristics of perceptual smart devices, and expectation confirmation theory (ECT). The samples for the implementation of the test by using online questionnaires, and conduct questionnaire surveys for different genders, ages, use experience, and the number of exercises using information system smart software devices each week. The online questionnaire collection was completed on April 10, 2020. A total of 208 valid questionnaire were collected. Smart PLS 2.0 analyzes the results of the formal questionnaires, including confirmatory factor analysis and SEM structural equation model.

Result anysis and hypothesis verification

According to the empirical results, the diagram of path mode is shown in Figure 1 and hypotheses and analysis results of this research are as follows and Table 1,

H1: The user perceives that the "quality characteristics" of using smart software device has "confirmation" significant impact.
H2: The user's "confirmation" has a positive impact on the use characteristics of using smart software devices.
H3: The user's "confirmation" has a positive impact on "satisfaction" of using smart software devices.
H4: The user perceives the "use characteristics" of using smart software devices has a significant impact on user "satisfaction".
H5: The user perceives that the "use characteristics" of the smart software device have a significant impact on the "continuance intention".
H6: The user's "satisfaction" has a significant impact on the "continuance intention".



Note: t > 1.96 • p < .05 ; **t > 2.58 • p < .01 ; ***t > 3.29 • p < .001

Figure 1 The diagram of model coefficient path

Conclusions

The conclusions of this research are summarized based on the research results, which are described in detail as follows,

1. The quality characteristics of users of smart software devices in gymnasiums has impact on the confirmation of smart devices.
2. The use characteristics and confirmation of users of smart software devices in gymnasiums has impact on satisfaction.
3. The use characteristics of users of smart software devices in gymnasiums has impact on satisfaction.