

## Continued usage of Wearable Fitness Technology: An Extended UTAUT2 Model Perspective

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**Abstract :** Aside from the rapid growth of global information technology and the Internet, another key trend is the swift proliferation of wearable technologies. The future of wearable technologies is very bright as an emerging revolution in this technological world. Beyond this, individual continuance intention toward IT is an important area that drew academics' and practitioners' attention. The literature review exhibits that continuance usage is an important concern that needs to be addressed for any technology to be advantageous and for consumers to succeed. However, consumers noticeably abandon their wearable devices soon after purchase, losing all subsequent benefits that can only be achieved through continued usage. Purpose-This thesis aims to develop an integrated model designed to explain and predict consumers' behavioural intention (BI) and continued use (CU) of wearable fitness technology (WFT) to identify the determinants of the CU of technology. Because of this, the question arises as to whether there are differences between technology adoption and post-adoption (CU) factors. Design/methodology/approach- The study employs the unified theory of acceptance and use of technology<sup>2</sup> (UTAUT<sup>2</sup>), which has the best explanatory power, as an underpinning framework—extending it with further factors, along with user-specific personal characteristics as moderators. All items will be adapted from previous literature and slightly modified according to the WFT/SW context. A longitudinal investigation will be carried out to examine the research model, wherein a survey will include these constructs involved in the conceptual model. A quantitative approach based on a questionnaire survey will collect data from existing wearable technology users. Data will be analysed using the structural equation modelling (SEM) method based on IBM SPSS statistics and AMOS 28.0. Findings- The research findings will provide unique perspectives on user behaviour, intention, and actual continuance usage when accepting WFT. Originality/value- Unlike previous works, the current thesis comprehensively explores factors that affect consumers' decisions to continue using wearable technology. That is influenced by technological/utilitarian, affective, emotional, psychological, and social factors, along with the role of proposed moderators. That novel research framework is proposed by extending the UTAUT<sup>2</sup> model with additional contextual variables classified into Performance Expectancy, Effort Expectancy, Social Influence (societal pressure regarding body image), Facilitating Conditions, Hedonic Motivation (to be split up into two concepts: perceived enjoyment and perceived device annoyance), Price value, and Habit-forming techniques; adding technology upgradability as determinants of consumers' behavioural intention and continuance usage of Information Technology (IT). Further, using personality traits theory and proposing relevant user-specific personal characteristics (openness to technological innovativeness, conscientiousness in health, extraversion, neuroticism, and agreeableness) to moderate the research model. Thus, the present thesis obtains a more convincing explanation expected to provide theoretical foundations for future emerging IT (such as wearable fitness devices) research from a behavioural perspective.

**Keywords :** wearable technology, wearable fitness devices/smartwatches, continuance use, behavioural intention, upgradability, longitudinal study

**Conference Title :** ICAWIT 2023 : International Conference on Advances in Wearable Intelligence Technologies

**Conference Location :** Dubai, United Arab Emirates

**Conference Dates :** February 16-17, 2023