

# “Smartwatches as Smart Shopping Devices: Enhanced Information Retrieval in an Omni- channel Environment”

*TREO Talk Paper*

**Teun Koldeweij**  
University of Twente  
teun.koldeweij@gmail.com

**Ton Spil**  
University of Twente  
a.a.m.spil@utwente.nl

**Björn Kijl**  
University of Twente  
b.kijl@utwente.nl

## Abstract

The smartwatch market is expected to grow substantially at a rate of 18% per year. Smartwatches are an emerging wrist-worn product group that is championed as an extension, or replacement for a smartphone, with the proposition of offering a more direct interaction with the user.

This paper contributes to smartwatch adoption and retailing literature by confirming traditional determinants of behavioral intention in the UTAUT (Unified Theory of Acceptance and Use of Technology) model (performance expectation, social influence and facilitating conditions) and by revealing factors that enable smartwatch shopping. In addition, it shows that two original determinants, anxiety and attitude in the extended UTAUT model, are significant for the use intention of smartwatch shopping. This study encourages future studies to use the extended UTAUT model as anxiety and attitude show significant influence on the behavior of potential smart watch users.

As expected, performance expectancy, social influence and facilitating conditions have a significant influence on the intention of behavior. Smartwatch shopping should therefore be supported by the right technology, social influences and the right facilitating environment. Not expected, and maybe more important is the conclusion that in this study (n=107) the use is not significantly correlated with the intention. An explanation could be that many people want to have a smartwatch but that the threshold of use is too high.

The possible use of smartwatches in a retail environment is partly determined by the way the retailer chooses to organize the distribution channels and information systems as a facilitating environment. The concept of omni-channel retailing offers a chance for smartwatch applications because of its unique characteristic of a fading barrier between online and offline retail channels. As an enabling technology, NFC (Near Field Communication) and social media platforms provide a way of presenting personal and relevant information to the consumer in both online and offline channels.

The way for enhanced information retrieval by smartwatch shopping seems a possibility, were it not for several hurdles that must be taken. Consumer's adoption, retailer initiatives and application development are current issues that withhold the smartwatch to be a smart shopping device. Should these changes be made, then the smartwatch could prove to be a useful tool to communicate shopping and product information to the consumers in an innovative way, enhancing the information retrieval.