

CONSUMERS' ADOPTION AND CONTINUANCE INTENTION TO USE MOBILE PAYMENT APPLICATIONS

The African continent continues to register an increase in the uptake of smartphones and other personal digital assistants, all of which are capable of making mobile payments. Consequently, mobile payment service providers continue to hold optimistic views about the future of mobile payments. Despite the proliferation of smartphone adoption in African countries, little is known about the factors that influence the adoption and continued use of the novel technology such as mobile payment services, particularly in developing countries such as South Africa. Although there are growing research streams in this regard, there have been conflicting reports, inconsistencies and contradictions that need to be explained.

One area that is experiencing exponential growth is the mobile payment service which enables users to pay for goods and services using their mobile phones wherever they go. According to a report by the Groupe Spéciale Mobile Association (GSMA) in 2014, mobile payment services are now available in 61% of the world's developing countries, and about 53% of active global mobile payment services are in Sub-Saharan Africa. Due to this growth, it is suggested that mobile payments will change lives and ways of conducting business; since consumers and mobile devices have become inseparable. These available studies are predominantly Western-based, with little evidence to suggest that similar studies have been conducted in emerging countries. Due to cultural, social and economic differences, Western theories may not be equally applicable in developing countries. This calls for more research to validate and continuously update and streamline Western theories in developing countries.

In this regard, an empirical research was conducted by Michael Humbani, a [Doctoral](#) student in the [Department of Marketing Management](#) to determine the predictors of the adoption and continuance intention to use mobile payment services. Despite an enabling environment in South Africa characterised by merchants, banks and telecommunications operators who are active partners in the mobile payments space, few consumers are actively engaged in mobile payments. Thus, research is needed to further the understanding of why some consumers who may initially adopt a mobile payment technology, may decide to discontinue using it. The study used a three-step approach. First, the study empirically tested the ability of the Western-based technology readiness index (TRI) to predict adoption of mobile payments in South Africa. Second, and after the TRI was validated, the study examined the applicability of the extended expectation-confirmation model, in the context of information technology (E-ECM-IT), to predict continuance intention to use mobile payment services. Prior studies indicate that adoption and continuance intention constructs have been investigated separately leading to a compartmentalised approach of doing research which in turn leads to a fragmented view instead of a more integrated and holistic perspective. This study took a view that adoption is an important but the initial step for continued use to take place, suggesting that the two phenomena could be studied collectively. Until the continued usage of an information technology can be established, it would be premature to classify its initial adoption as a success. To supplement the paucity of research in this regard, the study examined the combined effect of TRI and E-ECM-IT to predict adoption and continuance intention concurrently in a single study – a novel perspective not covered in depth thus far in existing research.

A total of 416 respondents were sampled from an online consumer panel, comprising consumers aged 18 years and older who owned a credit card and who had downloaded a

mobile payment application ('app') at the time of the survey. Multiple regression analysis was employed to determine how well the TRI predicts adoption and a partial least squares-structural equation modelling (PLS-SEM) approach was employed to predict continuance intention. Later, a structural equation modelling (SEM) was employed to validate the proposed integrated model, measuring both adoption and continuance intention.

The study found the main adoption drivers to be convenience and compatibility, while satisfaction remains the most significant predictor of continuance intention. The key barriers to adoption include perceived cost, and perceived risk. The study found no significant relationship between adoption and three of the four constructs of the TRI (optimism, innovativeness and discomfort). The study also found no significant relationship between the main construct of the E-ECM-IT- perceived ease of use and the dependent variable - continuance intention. These results cast a shadow on the robustness of the TRI and E-ECM-IT, and underscores the importance of re-testing and validating Western models in the African context.

Overall, the integrated model explained 78.5% of variance in consumers' continued intention to use mobile payment apps. Thus, the integrated model may provide an ameliorated way to understand the factors that influence adoption and how they impact on the continuance intention to use mobile payment apps. Recommendations concerning how service providers can increase adoption and foster continued use are proposed in the study. For example, the voice of the consumer can be captured during the design of the mobile payment app to create apps that consumers are likely to actually use. Service providers should collaborate to develop and provide robust mobile payment applications that are compatible with consumers' life style and purchase behaviour.

The research was conducted by Michael Humbani, as part of the fulfilment of the requirements of a [Doctor of Philosophy \(PhD\) degree](#) with specialisation in Marketing Management in the [Department of Marketing Management](#), under the supervision of [Professor Melanie Wiese](#).