Executive Summary

Reducing COVID-19 Infection Risks in Retail Stores through Mobile Payments: Investigating the Determinants of In-Store Proximity M-Payment Usage
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This research focuses on proximity mobile payment (m-payment) applications and how the acceptance of such applications can be further increased to convince more consumers to use contactless payment methods to reduce the infection risk in stores. To understand which factors determine the restrained acceptance of in-store m-payment, this research develops and tests a conceptual model that includes the effects of the general technology readiness of smartphone users as well as determinants (such as convenience and trust) that are specifically related to in-store m-payment application usage.

Based on the results of our study, convenience was identified as the strongest predictor of the intention to use (in-store) m-payment. Hence, we conclude that a critical success factor of (in-store) m-payment services will be making these services even more effortless and faster than the alternatives, such as credit cards or cash. Compared to other payment options, smartphones have the advantage of already being our companion in everyday life. However, our results indicate that consumers set their smartphones aside as soon as they head towards the checkout, which is not desirable from the retailer perspective and especially not during the current coronavirus disease 2019 (COVID-19) pandemic. To make people use their smartphones for payment, existing barriers and mental barriers, such as the error proneness of systems, complicated operations and delays in the payment process, must be prevented.

The second strongest indicator of m-payment usage intention is the perceived usefulness of m-payment from the consumer perspective. Therefore, in addition to being convenient, in-store m-payment must become more useful.

Based on the findings of our study, trust in (in-store) m-payment was found to be the third strongest predictor of (in-store) m-payment usage intention. Therefore, increasing trust in (in-
store) m-payment by reducing consumers’ risk perceptions seems to be a complicated undertaking that makes it necessary for a retailer to incorporate trustworthy institutions (e. g., objective tests of consumer associations) and business partners (e. g., strong and well-known brands).

Contrary to our expectations, the findings of our empirical study do not support our assumption that consumers’ perceived ease of use of m-payment will positively influence their intention to use m-payment in stationary retail environments. This result implies that from the consumer perspective, the ease of use of m-payment might not substantially differ from the ease of use of other cashless payment methods or technologies, e. g., credit or debit cards and cash.

Moreover, the results of the moderation analyses reveal that the relationship between the intention to use m-payment and the actual usage of in-store m-payment is moderated by gender and age. In particular, women and older consumers are less likely to use their smartphones for contactless in-store m-payment transactions, which is very unfortunate because older shoppers, who are more vulnerable to the risk of serious illness, would benefit the most from using proximity m-payment options during the COVID-19 pandemic (Health.gov.au 2020).