# Perceived Security Risk, Perceived Privacy Risk, and Perceived Trust of Mobile Payment Adopters and Non-Adopters: Impact of the COVID-19 Pandemic

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## **ABSTRACT**

With the COVID-19 pandemic, people have shifted to mobile payments enormously. However, cyber threats have increased simultaneously. Therefore, this chapter aims to investigate the dichotomous perceptions regarding mobile payments privacy, security, and trust within the adopter and non-adopter groups. An online survey was carried out among university students in Sri Lanka to collect the data. The independent samples test and the robust bootstrap methods were used to test the DOI: 10.4018/978-1-6684-5575-3.ch005

### Perceived Security Risk, Perceived Privacy Risk, and Perceived Trust

differences between adopters and non-adopters perceptions of mobile payments' privacy, security, and trust. The adopters have significantly higher perceived trust in mobile payments than the non-adopters. Further, adapters are twofold according to the usage level, the advanced users, and the laggards. This chapter provides unique and comprehensive insights into mobile payments user and non-user segments in Sri Lanka and the dichotomous nature of contactless payments' trust and risk perceptions. The findings will help banks design their marketing campaigns that suit the available customer segments in the market.

# INTRODUCTION

The Covid-19 pandemic has been spreading throughout the world since 2019, causing changes in human behaviour to a vast extent. In the absence of proper treatment, all countries strictly observe preventive measures like wearing face masks and social distancing. As a measure of the latter, shifting from cash to digital payments, which was a medium of convenience, became necessary because physical cash handling can expedite the spread of the virus (Sreelakshmi and Prathap, 2020). In line with this, the World Health Organization (WHO) also recommended using digital payment methods instead of cash and contact-based payments. In addition to that, previous works during pandemic times (Daragmeh et al., 2021) confirm adoption of mobile payments as a way of social distancing can prevent the spread of the virus. Somehow, in Sri Lanka, mobile phone banking has increased from 65.6% in the fourth quarter of 2020 compared with the fourth quarter of 2019 (before pandemic) (Central Bank of Sri Lanka, 2021). The Central Bank of Sri Lanka also facilitated several electronic modes of payments as a measure of relief for the pandemic. Although the spread of the epidemic can be a positive factor or even a catalyst in the acceptance and development of digital payments (Mansour, 2021; Shahabi et al., 2020), the enormous rise of cyber threats was also witnessed within the country. A nearly 460 per cent increase in cybersecurity-related matters was recorded in 2020 compared with 2019 (The National CERT of Sri Lanka, 2021).

Ozdemir et al. (2008) reveals a decrease in internet banking, which appears to be primarily due to security risk and privacy risk concerns. So, banks should reduce the risk perception associated with using the service. Addressing these risk concerns has become a key challenge in the mobile banking context in Sri Lanka for years (Dandeniya, 2014). Even though the COVID-19 outbreak compelled people to make digital payments, everyone is not at ease with or even willing to use those (Undale et al., 2021). Therefore, there is a potential to occur a sharp fall of users unless banks are concerned about the security of apps (Undale et al., 2021). In this sense, the pandemic can potentially switch people from cash to mobile payment (m-payment)

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