


Chapter 8

Smart Performance Analysis of Security- Enabled Mobile Apps for Banking Transactions

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ABSTRACT

Banking sector has emerged into modern financial services and managing their transactions anywhere and anytime. This study explores the proposed frameworks based on the security of mobile banking systems focusing on multiple threats such as transaction fraud, phishing attacks, and unauthorized access. It focuses on the issues related to the user behavior that further leads into the vulnerabilities. Despite of focusing on the security level of mobile banking system, it is also important to focus on other measures like execution time consumption, storage, usage complexity and scalability. This study highlights the assessment of positive user experience towards the utilization of mobile banking applications. It is found that security enabled

DOI: 10.4018/979-8-3693-6925-8.ch008

framework can provide best and effective results to the users if all other parameters are considered by researchers. Overall, this study findings are able to promote a reliable and authentic banking application in an emerging financial economy.

INTRODUCTION

Trend of digital banking is growing rapidly all across the world. In the era of smartphones and digital services, banks have given their services as well as facilities with the help of authentic applications. It has made the lives of entire population easier and more reliable. Now-a-days, the need of visiting the banks has decreased and they can migrate the accounts and transfer their money with the means of these digital applications (Daniel et al., 2023). There is no need to step out towards the banks unnecessary. Further, digital transactions allow the users to access their banks at anytime from anywhere without any failure (Setiyawati & Bangkalang, 2022). Banks have ensured the multilevel security in order to protect the users as well as other stakeholders so that they can't be misguided by anyone. This impactful trend of digital transactions is highly followed by the users and their experience deals with the multiple factors like system design related factors, and user related factors. System related factors include functionality, usability, purpose and complexity whereas as user related factors deals with the moods, motivations, needs, expectations, and users' tendencies as shown in Figure.1. User experience basically includes the overall acceptance of the service and product provided by the banks. It ensures the customer satisfaction by further proceeding with the continuous intention and customer loyalty.

Figure 1. User experience for mobile applications



Mobile banking systems enable the users to perform non-financial as well as financial banking transactions from his or her current using corresponding devices. In the current era, users are experiencing multiple mobile applications like PhonePe,

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