

Security most important to retaining mobile banking customers, study finds

by Nanyang Technological University



Associate Professor Xu Hong from NTU's School of Social Sciences (left) and Assistant Professor Yu Han from NTU's School of Computer Science and Engineering. Credit: NTU Singapore

A study by a research team from Nanyang Technological University, Singapore (NTU Singapore) and China's first digital-only bank WeBank has found that security, service quality and system quality are the most important factors for customers who use mobile banking.

Two in five respondents (40%) said that the security they felt while carrying out transactions on mobile applications was their most important consideration.

This was followed by the level of service quality (25%), which referred to whether the banking applications could fulfill users' needs, such as carrying out transactions and easy access to credit card services.

System quality, which considers the performance of the application, including compatibility with different mobile phones and loading speeds, came in a close third (24%).

The results of the study were published in the *Journal of Retailing and Consumer Services*, an academic publication by Elsevier, last December.

The researchers said their study which ranked factors that are important in determining customer loyalty would be useful to financial institutions who are looking at improving their mobile banking applications.

Already widely used in China prior to COVID-19, mobile banking applications have seen a sharp rise in uptake throughout Asia during the pandemic, as the touchless payment systems provided by most mobile banking applications have gained traction.

The NTU-WeBank team obtained their results after surveying 224 mobile banking users of a large bank in China in 2019. Over three-quarters of the respondents (79%) were frequent users of mobile banking, meaning that they used it at least once a week.

The researchers said that although the study was conducted in China, the results are applicable to other countries where mobile banking has a high level of adoption, such as Singapore, Thailand, and Vietnam.

Associate Professor Xu Hong, from NTU's School of Social Sciences who led the study, said: "It was already known that all these factors: security, service quality, system quality, and interface design had an impact on customers, and this study highlights implications for banks' strategies for retaining their mobile banking users, as well as exploring how to capture new customers."

Assistant Professor Yu Han, from NTU's School of Computer Science and Engineering, who co-led the research, said: "Our study has implications for banks' strategies for retaining their mobile banking users, as well as exploring how to capture new customers."

Assoc Prof Xu and Asst Prof Yu are part of the team at the Joint NTU-WeBank Research Center on Fintech which initiated this study. The joint center was launched in early 2019 with the aim of developing new technologies to support Banking 4.0, where banking can be personalized and done anytime, anywhere.

Mr Joe Chen, Executive Vice President of WeBank, said: "The findings are relevant to other banks who are increasingly rolling out more digital solutions, which include payment, lending, and wealth management applications. As mobile banking worldwide is becoming increasingly accepted as replacement for branch-based banking in many countries, it is important for banks to know the factors that affect and influence customer loyalty. In this regard, the Joint NTU-WeBank Research Center will continue to generate research outcomes and innovations for the benefit of the Fintech industry."

NTU Senior Vice President (Research) Professor Lam Khin Yong, added: "The NTU-WeBank partnership is another example of the University's strong links with the private sector. It also shows our strong support for industry collaborations that accelerates the translation of research into innovation and commercial adoption. This study also serves as a good example of interdisciplinary research involving faculty from the social sciences and computer science, as it solves a very important issue in today's fintech industry."

A multi-pronged approach to build customer loyalty

The team's analysis of the results also showed that a mobile application's interface design had a strong and positive impact on respondents' evaluation of system and service quality.