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Human Computer Interaction
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PhD Title:
Understanding and leveraging user characteristics, security features and use context to improve security experience of mobile payment

Keywords:
Perceived Security, User Experience, Mobile Payment.

Research Abstract:
Mobile payment, which is allowing for numerous diverse electronic transactions, is vital to the development of mobile services. Mobile payment has been flourishing in China in recent years, while users have continually doubted the security of these transactions. Many studies had contributed to providing better security technologies for mobile payment. Recently, researchers has realized that security is a feeling more than a reality for normal users. Although security experience design has arouse industry concern, there are still few studies on what influence users perceived security in mobile payment. Therefore, this study aims to investigate security experience of mobile payment in a mature market, to explore the possible factors that will influence security experience and to apply these factors for improving the security design of mobile payment.

Research Methodology:
Mix methods will be used to address these research questions. The project will start with using interview study to explore the factors that influencing perceived security in mobile payment. Then survey will be conducted to collect the quantitative data for investigating the relationships among the factors of perceived security in mobile payment. A preliminary framework of security experience in mobile payment will be developed. Following that, experiments will be used to further explore the effects of the key factors of perceived security. Prototypes will be designed based on the results of this study and users will be invited to evaluate the effectiveness of findings.

Results / outcomes:
1. Contribute a comprehensive understanding of what users security concern, what users security needs and what users have,
2. Provide a framework to illustrate the factors relating to security experience of mobile payment,
3. Allow design implication and opportunities for mobile payment services providers and user experience designers.