Safety Analysis and Strategy of Alipay

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ABSTRACT

With the widespread use pay treasures, which occupy an increasingly large daily, the proportion of third-party payment, pay treasure security issues become more and more prominent. So, how to better respond to Alipay security risks, how to improve its security, these are very important to discuss the contents. This article briefly learn Alipay technical processes missing from the mobile phone, Internet and transaction worries wireless network vulnerabilities, a brief description of the security issues Alipay, and put forward relevant measures in the third chapter of governance.

KEYWORDS

Alipay, Internet Business, Safety, Third Party Payment

1. TECHNOLOGY INTRODUCTION THREAD ABOUT ALIPAY WALLET

1.1. Alipay Wallet’s Innovation

At present, Alipay Wallet is China and even the world, with the most active users of third-party payment platform (Yang, 2009; Ma, 2011; Xiao, 2009; Lv, 2013; Yang, 2013; Yu, 2012).

Since mobile client applications with a new name—“Alipay wallets” shelves, great changes have taken place in the interface. At the same time, along with a short period of time the continuous optimization of updates, its function with the ever-changing enriched and expanded.

Alipay Wallet is to bring the third party payment in e-commerce into People’s Daily life, and popularization (Xiong, 2014). In order to offline market development, further popularize the utility ratio, Alipay wallet join card ticket management, sweep the yard payment, transfer, prepaid phone, payment and so on daily practical function.

In order to improve the safety performance, the company also try to upgrade the combination lock, such as fingerprint lock, etc.

1.2. The Payment Process of Alipay

Figure 1 shows the Alipay payment flow chart.

1. First, consumers choose the required goods and services. Then offer the purchase demand for merchants, in addition to other related user information - including bank card number, bank details, payment amount, mobile phone number, and so on also should be submitted
2. After receiving the purchase request, merchant websites inform the mobile payment platform to charge (Mainly by the mobile operators as the role)
3. After the audit, mobile payment platform to the third party credit agencies to send authentication request, the third party credit institutions to conduct certification of the transaction, to ensure the safety of the transaction and payment process standardization and orderly
4. After the third party credit institutions to be certified, the payment platform to authorize the user to pay

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5. Payment platform will send the results of the payment back to the merchant, the merchant then deal with the user’s payment transactions according to the feedback results.

2. THE ANALYSIS OF ALIPAY SECURITY ISSUES

2.1. The Analysis of Alipay Security Threats

There are two types of mobile phone payment, near field payment due to the near field communication characteristics (Wei, 2013; Yuan, 2011), makes it hard for trading data being stolen, security a little better than the remote payment, there are still some security problems, such as “man in the middle attack”, namely by insert on a mobile phone some form of spyware or malware, infect other mobile phones, to steal the user’s data. But generally, through the anti-virus software and operating system architecture to control the flow of information between applications, provide solutions to reduce the attack effect (Li, 2014). Compared with the near field payment, remote payment because of involving data remote transmission, so the payment platform in data transmission, authentication, encryption, etc., have higher requirements. This section mainly in remote payment for example analysis the process of mobile payment security threats.
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