

## Security Report Profiling for Mobile Banking Applications in Indonesia Based on OWASP Mobile Top 10-2016

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**Abstract :** The mobile banking application is a type of mobile application that is growing rapidly. This is caused by the ease of service and time savings in making transactions. On the other hand, this certainly provides a challenge in security issues. The use of mobile banking can not be separated from cyberattacks that may occur which can result the theft of sensitive information or financial loss. The financial loss and the theft of sensitive information is the most avoided thing because besides harming the user, it can also cause a loss of customer trust in a bank. Cyberattacks that are often carried out against mobile applications are phishing, hacking, theft, misuse of data, etc. Cyberattack can occur when a vulnerability is successfully exploited. OWASP mobile Top 10 has recorded as many as 10 vulnerabilities that are most commonly found in mobile applications. In the others, android permissions also have the potential to cause vulnerabilities. Therefore, an overview of the profile of the mobile banking application becomes an urgency that needs to be known. So that it is expected to be a consideration of the parties involved for improving security. In this study, an experiment has been conducted to capture the profile of the mobile banking applications in Indonesia based on android permission and OWASP mobile top 10 2016. The results show that there are six basic vulnerabilities based on OWASP Mobile Top 10 that are most commonly found in mobile banking applications in Indonesia, i.e. M1:Improper Platform Usage, M2:Insecure Data Storage, M3:Insecure Communication, M5:Insufficient Cryptography, M7:Client Code Quality, and M9:Reverse Engineering. The most permitted android permissions are the internet, status network access, and telephone read status.

**Keywords :** mobile banking application, OWASP mobile top 10 2016, android permission, sensitive information, financial loss

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