

ABSTRACT

IMPLEMENTATION OF DATA READING DIGITAL FORENSIC TEST ON ANDROID SMARTPHONES USING ANDRILLER AND MOBILEEDIT FORENSIC EXPRESS USING THE NATIONAL INSTITUTE OF JUSTICE (NIJ) METHOD

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The use of smartphones in Indonesia is the fourth largest in the world, reaching 192.15 million active users throughout 2022. The use of smartphones cannot be separated from crimes involving the use of smartphones. These crimes are known as cyber crimes. a total of 8,831 cases related to cybercrime were recorded from January 1 to December 2022. Cybercrime handling is then followed up by the cybercrime handling unit using tools that can support the ongoing case investigation process. This process, of course, also requires some software that is used to carry out the process of searching for digital evidence. Besides that, some processes, such as academic needs, require software to run digital forensic tests. With so many types of software to carry out digital forensic processes, there are also many choices provided. This study discusses analyzing the effectiveness of mobile forensic recovery tools on Android smartphones using the National institute of justice (NIJ) method. This research involves the installation of tools, testing, and analysis of the results. The findings of this study can be used to improve mobile forensic techniques and improve digital investigations. This research uses two different digital forensic tools, namely Andriller, Mobiledit Forensic, with the National institute of justice (NIJ) method. Mobile forensic testing follows the NIJ method, which includes identification, collection, examination, analysis, and Reporting stages. Test results are analyzed and Reported. This research found that both tools, Andriller and Mobiledit Forensic Express Pro, can be used for mobile forensic analysis without root access to the smartphone. Mobiledit Forensic Express Pro has a higher data recovery rate (83.33%) compared to Andriller (50%).

Keywords: Smartphone, Android, Cybercrime, Andriller, Mobiledit Forensic Express Pro.