Abstract

Digital forensics is crucial in investigating online gambling activities, particularly through Live Forensics, Memory Forensics, and Network Forensics. Despite being illegal under Law No. 7 of 1974 and the ITE Law, the rapid proliferation of online gambling in Indonesia presents significant investigative challenges that require varied forensic methods. This research aims to detail the structure of online gambling systems, identify investigative obstacles, and conduct comprehensive digital forensic activities to address specific investigative questions. The study successfully extracts and analyzes digital evidence using memory and network forensic methods, uncovering crucial information about user activities, transaction methods, and provider servers. The results demonstrate the effectiveness of digital forensics in providing accurate and detailed evidence, thus enhancing the investigative process. Moreover, the study identifies the technical challenges investigators face, such as encryption and dynamic IP addresses used by gambling websites. This research enriches the digital forensics literature and offers practical solutions for law enforcement agencies to improve the investigation and prosecution of illegal online gambling activities. This study highlights the importance of utilizing advanced and varied forensic techniques to overcome the complexities of digital evidence in online gambling cases.

Keywords: digital forensics, online gambling, live forensics, memory forensics, network forensics, investigation.