## Documents

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**Understanding Human Behavior in Phishing Attacks Across Diverse User Groups: An Ethical Hacking Analysis**
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**Abstract**
In the face of increasingly advanced cyber threats employing different social engineering methods, there is a crucial need to comprehend how individuals respond to deceptive emails and messages. This research investigates the analysis of human behavior across various user groups by utilizing phishing emails and messages as testing tools. By employing ethical hacking methodologies, the study studies and executes realistic phishing attacks, aiming to observe and comprehend how individuals fall victim to social engineering tactics, resulting in financial losses and compromised passwords. In order to collect data, a survey was prepared together with a fake website (IIUM Wi-Fi login page) to provide insights into the vulnerabilities inherent in user interactions with phishing attempts. The findings highlight that a lot of people tend to click on unknown links out of curiosity, which can easily make them a victim of social engineering attack. The results suggest that around 84% of the targeted respondents consider whatsapp /messages to be very important in daily communication. However, 25.5% of them have clicked on the phisihing link via whatsapp message and inserted their login details. Findings uncovered potential vulnerabilities and a 28.6% impulsivity rate. A phishing experiment illustrated cybersecurity risks, underscoring the need for awareness and education. © 2024 IEEE.

**Author Keywords**
Ethical Hacking; Human Behavior; Phishing Attack; Social Engineering

**Index Keywords**
Behavioral research, Computer crime, Cybersecurity, Losses, Personal computing, Philosophical aspects; Cyber threats, Engineering methods, Ethical hacking, Financial loss, Human behaviors, Phishing, Phishing attacks, Social engineering, Testing tools, User groups; Electronic mail

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