




CURRENT TRENDS IN CYBERSECURITY



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Introduction

This paper will examine the current trends in cybersecurity. Cybersecurity is “the practice of protecting information systems, networks, and data from unauthorized access, theft, or damage” (TerraZone, 2024, para 5).

Main Body

Artificial intelligence can be used by hackers (TerraZone, 2024, para 12). There are several different kinds of cybersecurity attacks: phishing, malware, and Distributed Denial of Service (St. John, 2024, paras. 19, 41, 47). Phishing is using “text messages, deceptive emails, websites, and other forms of communication to deceive individuals into downloading malware or divulging sensitive information” (St. John, 2024, para. 20).

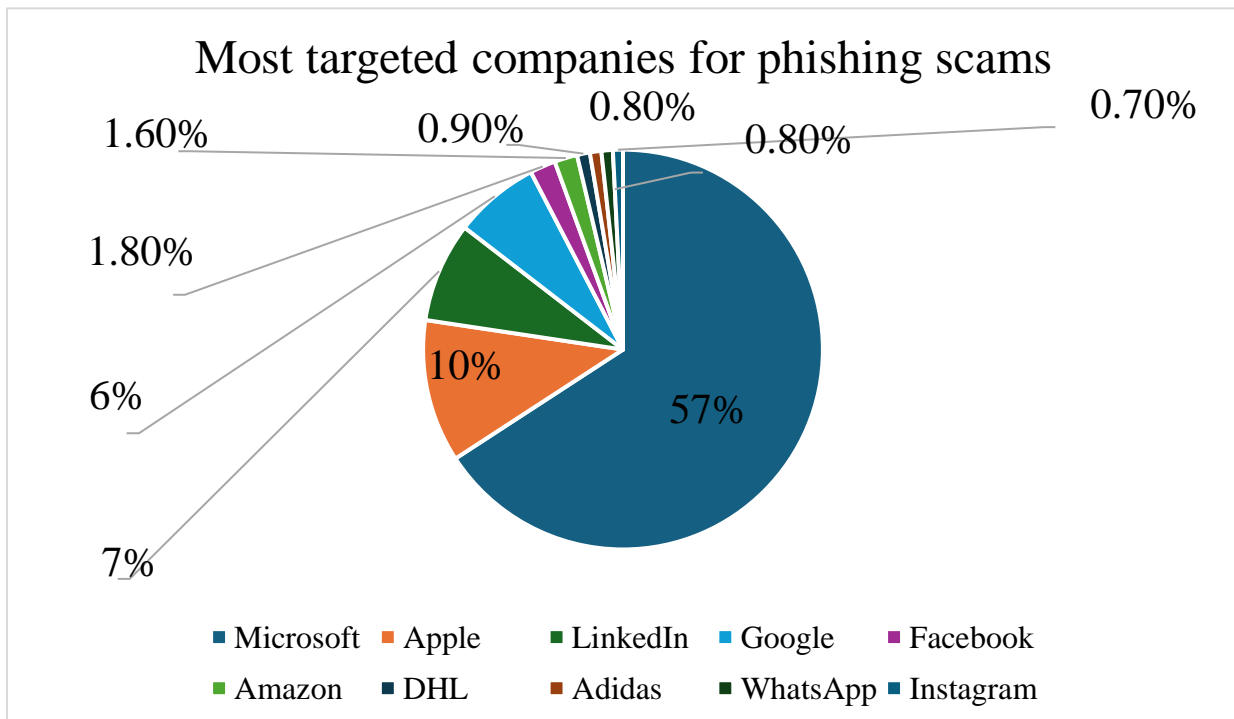


Figure 1

Distributed Denial of Service is when “hackers use multiple devices to flood a target system, network, or website with a high volume of traffic” (St. John, 2024, para. 48). This “tactic overwhelms the target’s capacity to handle legitimate requests, rendering it inaccessible to legitimate users” (St. John, 2024, para. 48).

Several different kinds of cybersecurity defences are software updates, strong passwords, employee training and awareness, encrypting data, and two-factor authentication (TerraZone, 2024, paras. 15, 17, 19, 21). Other cybersecurity defences are anti-virus software and firewalls (Kavak, et al., 2021, p. 4). Artificial intelligence and machine learning are used to improve security (Korinchak, 2024, para. 6). Facial recognition, fingerprint scanners, blockchain technology, and biometric authentication are used to strengthen security (Jerbi, 2023, p. 192, 193).

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