
CYBERSECURITY AND SOCIAL ENGINEERING



Nicholas T. Martin
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WHAT IS SOCIAL ENGINEERING?

- Psychological tricks used to manipulate people into sharing sensitive data or providing access to secure systems
- Unlike many other forms of "hacking", social engineering targets people rather than systems

COMMON SOCIAL ENGINEERING ATTACKS

Phishing - Fake emails or messages, often with malicious links to extract the victim's sensitive information

Pretexting – The use of authority to create a convincing story (e.g., "I'm with tech support")

Baiting - Providing enticing rewards, commonly free, to lure potential victims to malicious websites or to provide sensitive data

WHY IT WORKS

Trust – It is common for people to trust reputable companies (Amazon, Apple, etc.)

Urgency – Social engineering attacks often motivate victims with a sense of urgency

Fear – Fraudulent threats or dangers (unpaid fines, banking fraud, etc.)

Reward – People tend to act illogically when offered rewards (e.g., free downloads, cash prizes, etc.)

2023 MGM CYBERATTACK

- Hacker group, "Scattered Spider", researched MGM employees on LinkedIn to find one to impersonate
 - The attackers contacted the MGM employee help desk posing as an employee and convinced the help desk to hand over login credentials
 - Once inside the MGM systems, the hackers carried out a ransomware attack that ultimately cost the company \$94 million dollars (Schrader, 2025)
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HOW TO PROTECT YOURSELF

According to Cybersecurity & Infrastructure Security Agency (CISA):

- Be suspicious of calls or messages that ask for sensitive information
 - Verify the legitimacy of requests before providing the information
 - Utilize anti-phishing features that are common with email providers
 - Implement Multi-Factor Authentication (MFA)
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RESOURCES

Cybersecurity and Infrastructure Security Agency. (2021, February 1). *Avoiding social engineering and phishing attacks.*

<https://www.cisa.gov/ncas/tips/st04-014>

Schrader, D. (2025, February 14). *An overview of the MGM cyber attack.*

Netwrix. <https://netwrix.com/en/resources/blog/mgm-cyber-attack/>
