

Effective Strategies for Combatting Social Engineering in Cybersecurity

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Securing the Weakest Link:

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ABSTRACT

In today's world, where digital interactions and online transactions are crucial for both personal and professional activities, social engineering attacks have become more common and sophisticated, threatening data security and organizational integrity. These attacks exploit a lack of awareness to gain illegal access to systems. While research includes various studies and methods for preventing these attacks, a thorough analysis of effective strategies is lacking. Current methods involve health campaigns, frameworks with human security sensors, user-focused approaches, and vulnerability models. This chapter thoroughly examines different types of social engineering attacks, such as phishing, vishing, and pretexting, highlighting the human element as the weakest link in cybersecurity. It then delves into prevention methods, stressing the need for awareness training and behavioral changes among users as a key defense. This chapter seeks to equip readers with practical insights and tools

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