Chapter 13
Insider Threat in Banking Systems

Qussai Yaseen
Jordan University of Science and Technology, Jordan

ABSTRACT

Insider threat poses huge loss to organizations since malicious insiders have enough knowledge to attack high sensitive information. Moreover, preventing and detecting insider attacks is a hard job because malicious insiders follow legal paths to launch attacks. This threat leads all kinds of attacks in banking systems in the amount of loss it causes. Insider threat in banking systems poses huge harm to banks due to the importance and attractiveness of assets that banks have. This chapter discusses insider threat problem in banking sector, and introduces important surveys and case studies that show the severeness of this threat in this sector. Moreover, the chapter demonstrates some policies, technologies and tools that may prevent and detect insider threat in banking systems.

Insider Threat in Banking Systems

INTRODUCTION

Insider threat is one of the riskiest threats that worry individuals and organizations. A malicious insider is a trusted insider who misuses his/her privileges in a system to hinder the system’s operations, damage data, or disclose sensitive information which causes damage to the system. According to different surveys, such as the CSI survey (Richardson, 2010), Forrester Research (Forrester Research, 2010) and the ISBS survey (InfoSecurity Europe, 2010), insider threat causes huge harm to individuals and organizations. The CSI survey (Richardson, 2010) stated that the cost of data records lost to insider attacks is greater than the cost of those lost to outsiders. This is because insiders are familiar with the system, and attack the valuable records, while outsiders steal what they can access.

Financial institutions are especially subject to insider threats due to the highly sensitive stored information and their highly dependence on information technologies. According to CERT (Cappelli, Moore & Trzeciak, 2012), the financial sector suffers from the most cases of fraud, and the second most in IT sabotage and theft of intellectual property carried out by malicious insiders. Furthermore, there are non-malicious insiders who may pose risks unintentionally, through mistakes or bad behaviors that may be exploited by external parties. Non-malicious insiders may be fooled by some attackers to click on URL that contains malware, or may mistakenly send corporate materials to unauthorized recipients.

This chapter discusses the problem of insider threat in banking systems. It introduces the problem of insider threat in information systems and its growing threat. Furthermore, the chapter presents some survey results that show how risky is the insider threat. Next, the problem of insider threat in banking systems is introduced. Basically, the chapter discusses the special sensitivity of this problem in banking systems, and how insider threat poses high risk in this sector. Surveys results and case studies that show the increasing risk and loss posed by insider threat and threaten this sector are introduced. In addition, the chapter discusses how recent exposure of technologies such as Cloud Computing increased the threat and maximized the vulnerabilities that may be used by insiders to harm banking systems. Next, the technologies and tools used to fight insider threat in banking systems are introduced.

INSIDER THREAT

Insider threat is a critical security problem. The threat of insiders can be posed unintentionally or intentionally by malicious insiders. Malicious insider threat is defined as the threat that is caused by a person who has authorized access privileges and knowledge of the computer systems of an organization, and is inspired to
Arts Partnerships Are Bridging Disparities: Cross-Sector Partnerships Are Giving Disadvantaged Youth Access to Successful Careers in the Arts
https://www.igi-global.com/chapter/arts-partnerships-are-bridging-disparities/183089?camid=4v1a

Theoretical Starting Points
https://www.igi-global.com/chapter/theoretical-starting-points/212451?camid=4v1a

Measuring the Poverty of Elderly People with Needs Analysis in Turkey
https://www.igi-global.com/chapter/measuring-the-poverty-of-elderly-people-with-needs-analysis-in-turkey/128625?camid=4v1a