

STUDY ON INFORMATION SECURITY THREATS IN COMMERCIAL BANKING SECTOR IN SRI LANKA

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Information is a critical resource and information risk management is a vital area that is focused by many organisations in today's technologically advanced business environment. Information security threat is a key concern and a major risk factor for banking and financial sector. Banks are facing many types of information security threats such as hacking and unauthorized access, credit card and ATM frauds, denial of service attacks, mobile banking vulnerabilities, malware, phishing and many other threats. According to the findings on global state of information security survey 2014 conducted by PWC, information security incidents, reported in banking and financial sector have increased by 169% compared to the previous year. However, very limited research done on this area in Sri Lankan banking sector. Key objective of this study is to identify critical factors that influence information security threats in the Sri Lankan commercial banking sector and how that critical factors can influence information security threats. After analysing the literature, critical factors that influence information security threats were identified as information security internal control, resource allocation for information security, training and awareness on information security and information security governance. Correlation between these independent factors and dependent factor information security threats were tested through hypothesis. Eleven banks out of twenty four commercial banks in Sri Lanka were selected as the sample and employees from each bank's IT department were chosen based on judgmental sampling for the questionnaire survey. Key findings of this research study indicate that information security governance and information security internal controls are the most significant critical factors that influence information security threats. Further, it was found that resource allocation and training and awareness have a moderate influence on information security threats. Therefore, it is concluded that banks should focus more on information security governance and internal controls to reduce the information security risk exposure.

Keywords: Information security, Risk management, Security risk exposure