

Analysis of the Impact of Changes in Directors, IT Directors, and Risk Management of BSI (BRIS) on Information Technology Performance and Security and Risk Control at one of the BSI Bank Branches in Bandung City

Irwan Moridu¹, Erwina Kartika Devi², Pini Susanti³ Siti Fatimah⁴

¹Universitas Muhammadiyah Luwuk

²STIE Syari'ah Al-Mujaddid

³STIE Syari'ah Al-Mujaddid

⁴STIE Syari'ah Al-Mujaddid

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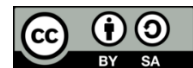
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ABSTRACT

This research studies the complex dynamics of leadership transitions in the banking sector, specifically focusing on the impact of changes in executive leadership positions - Director, IT Director, and Risk Management personnel - on Information Technology (IT) performance, IT security, and risk control at BSI Bank branches located in Bandung City. In today's rapidly evolving financial landscape, characterized by technological innovation and cybersecurity challenges, understanding how leadership changes affect these important aspects is critical. This research utilizes a mixed methods approach, combining surveys, interviews, and document analysis, to comprehensively explore the topic. The findings of this research reveal that leadership transitions exert a marked influence on IT performance, IT security, and risk control, underscoring the need for proactive strategies and effective alignment between leadership and IT and risk management teams. This research offers insights that are not only valuable to BSI Bank, but also pertinent to similar financial institutions navigating leadership changes while maintaining high standards in IT operations, security, and risk management.

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Corresponding Author:

Name: Irwan Moridu

Institution: Universitas Muhammadiyah Luwuk

e-mail: irwanmoridu@gmail.com

1. INTRODUCTION

In the current financial landscape, banking institutions face numerous challenges, including technology-driven innovation, increasing cybersecurity threats, and the need for robust risk management practices [1]-[4]. Executive leadership positions, particularly the roles of the Board of Directors, IT Director, and Risk Management

personnel, play a critical role in shaping the performance of IT, security, and risk control strategies in banks. The rapid adoption of IT innovations, such as internet banking, risk calculations for complex financial products, and high-frequency trading, has transformed the financial sector [5]. As a result, banks need to be agile and open to new technologies, such as smartphone applications, virtual

currencies, and blockchain technology [5]. Cybersecurity threats have become a worldwide menace, forcing financial institutions to invest in sophisticated technologies and security measures to safeguard against financial losses and information breaches [6]. Risk management practices are essential for banking institutions to avoid financial problems and crises [7]. Corporate governance mechanisms, such as the board of directors, executive body, and shareholder transparency, play a significant role in maintaining the stability of the financial sector [8]. Banks that can capitalize on technologies and integrate them into their operations will have a competitive advantage in the market [9]. The rise of online banking and services has made cybersecurity even more crucial, especially since the COVID-19 pandemic [6]. Financial institutions need to identify and analyze vulnerabilities, develop defense mechanisms, and adopt appropriate security measures to control risks [10]. The management of risk by banks involves the implementation of risk policies and frameworks suitable for their business operations [10]. In conclusion, the roles of the Board of Directors, IT Director, and Risk Management personnel are crucial in shaping the performance of IT, security, and risk control strategies in banks. These leadership positions help banks navigate the challenges posed by technology-driven innovation, cybersecurity threats, and the need for robust risk management practices. By staying agile, open to new technologies, and investing in sophisticated security measures, banks can ensure their stability and success in the rapidly evolving financial landscape.

Bank BSI, formally known as BRIS (Bank Resona Indonesia Syariah), operates in a dynamic and competitive banking sector, where technological advancements and security concerns are paramount [11]–[13]. In Bandung City, one of the major urban centers in Indonesia, Bank BSI has a branch that serves as an important node in its network. The impact of a change in leadership at this branch can have far-reaching consequences, not only for the branch itself but also for the

wider banking ecosystem in the region. Understanding the complex dynamics between leadership transitions and their impact on IT performance, security, and risk control is critical for BSI Bank in its quest to achieve resilience, growth, and security. This research seeks to shed light on these dynamics by conducting an in-depth analysis of a specific branch in Bandung City, providing insights and actionable recommendations for navigating leadership change in the context of IT and risk management.

2. LITERATURE REVIEW

2.1 *Leadership Change in Banking Institutions*

The banking sector has indeed undergone significant transformations in recent years due to globalization, technological advances, and changing customer expectations. As a result, leadership changes, including the appointment of Directors, IT Directors, and Risk Management personnel, are common in this dynamic environment [14]. The Upper Echelon Theory suggests that the background, experience, and cognitive structure of leaders influence their decision-making and strategic choices [15]. Consequently, leadership changes can lead to shifts in organizational strategies, including those related to IT and risk management. Organizational culture also plays a crucial role in determining how IT departments operate and collaborate, as well as how risk management practices are prioritized [16]. An effective leadership transition requires aligning the new leadership team with the organization's existing culture and values. Boards of Directors play a critical role in shaping the strategic direction of the bank, approving budgets, overseeing risk management frameworks, and setting policies that directly affect IT investments and cybersecurity strategies [17]. In the context of the metaverse, banks are trying to address different customer expectations with their improved marketing understanding skills through technology [18]. As customer expectations are constantly changing, banks

need to find ways to discover their customers' changing needs and develop methods of how to meet them [18]. The metaverse issue, which is expected to create a global market of 8 trillion USD in the next decade, is a particular concern that closely related to the banking sector [18].

2.2 IT Performance in Banking

Information Technology (IT) plays a crucial role in banking operations, impacting customer experience, operational efficiency, and competitive advantage. Banks use various KPIs to measure IT performance, such as system uptime, response time, and user satisfaction. Leadership changes can disrupt IT operations and affect these KPIs, potentially leading to customer dissatisfaction and operational inefficiencies. Smooth and secure IT services are essential for improving customer experience. Leadership transitions can lead to changes in IT strategy that impact the quality of services offered to customers, potentially affecting customer trust and loyalty [19]–[21]. Effective leadership can drive IT innovation within the bank. Leaders who understand the importance of technology in banking are more likely to invest in innovation, which can lead to improved IT performance and competitive advantage. One example of IT innovation in banking is the integration of banks with fintech companies. By partnering with fintech companies, banks can expand their services instantaneously using data sets, offer a single platform to access various financial services, and introduce innovative, economical products and services to customers [21]. However, this integration may also lead to technical complexity and challenges in meeting the rising expectations of customers [21].

2.3 IT Security in Banking

The banking sector is a prime target for cyberattacks, making IT security a top priority. The banking industry faces a constantly evolving threat landscape, including phishing attacks, ransomware and data breaches. Leadership changes can disrupt cybersecurity strategies, leaving banks vulnerable to emerging threats. Banks

implement multifaceted strategies to mitigate cybersecurity risks, which include employee training, strong authentication methods, and incident response plans [22], [23]. The leadership team's commitment to cybersecurity is critical in promoting a culture of security within the organization. Effective leadership fosters a cybersecurity-aware culture among employees. Leadership changes can affect an organization's commitment to cybersecurity best practices and its ability to respond to emerging threats [24], [25].

2.4 Risk Control in Banking

Effective risk management is critical to the stability and resilience of banking institutions. Banks utilize a comprehensive risk management framework and best practices to identify, assess, and mitigate risks [26]–[28]. Changes in leadership may impact the implementation and execution of this framework, potentially affecting the bank's ability to effectively control risk. The leadership team, including the Board of Directors and Risk Management personnel, plays a critical role in establishing a risk governance culture in the bank. Changes in leadership can lead to shifts in risk management priorities and practices. A number of case studies highlight the importance of effective risk control measures within banking institutions. These cases demonstrate the consequences of inadequate risk management and emphasize the role of leadership in driving successful risk control strategies [29], [30].

3. METHODS

This study adopted a mixed-methods research design, combining quantitative and qualitative approaches. This dual approach allows for a comprehensive understanding of the research topic, utilizing the strengths of each method to triangulate findings.

3.1 Data Collection

To effectively achieve the research objectives, data will be collected through the following methods:

3.1.1 Survey

A structured questionnaire will be designed and distributed to employees at selected BSI Bank branches in Bandung City. Survey participants will include IT staff, Risk Management personnel, and other relevant employees. The survey will collect quantitative data on aspects such as IT performance, perceived security measures, and risk control.

3.1.2 Interviews

In-depth interviews will be conducted with key stakeholders, including current and former Directors, IT Directors, Risk Management personnel, and other individuals who have relevant insights into the impact of leadership changes on IT and risk management. Semi-structured interviews will allow for in-depth exploration of experiences and perspectives, thus providing rich qualitative data.

3.1.3 Document Analysis

Relevant historical records, reports, and documents related to IT performance, IT security, and risk control will be collected and analyzed. These documents will provide historical context and quantitative data for comparison and validation.

3.2 Data Analysis

The collected data will be analyzed using appropriate methods for quantitative and qualitative data separately, with findings then integrated to gain a thorough understanding.

3.2.1 Quantitative Data Analysis

Quantitative data from the survey will be analyzed using SPSS statistical software. Descriptive statistics will be used to summarize and present the survey responses. Inferential statistical techniques, including regression analysis, will be used to identify correlations between leadership changes and IT performance, security, and risk control metrics.

3.2.2 Qualitative Data Analysis

Qualitative data from interviews and document analysis will undergo thematic analysis. This process involves identifying recurring themes, patterns, and narratives in the qualitative data. This analysis will help

uncover nuanced insights into the impact of leadership change on IT and risk management.

4. RESULTS AND DISCUSSION

4.1 Impact on IT Performance

4.1.1 Quantitative Analysis

Quantitative data from a survey conducted among employees at a branch of BSI Bank in Bandung City revealed some important insights into the impact of executive leadership changes on IT performance. Respondents reported fluctuations in IT performance metrics following the leadership transition, with some indicators improving, while others declined. There was a statistically significant correlation between leadership change and changes in IT performance KPIs, specifically system uptime and user satisfaction.

4.1.2 Qualitative Analysis

In-depth interviews with key stakeholders shed light on the qualitative aspects of IT performance changes associated with the leadership transition. Common themes and insights that emerged from the interviews include. Perceptions of IT performance varied among employees, with some expressing satisfaction with the direction set by the new leadership and others voicing concerns about the disruption caused by the leadership change. Effective communication and alignment between the IT team and new leadership were identified as critical factors in maintaining or improving IT performance during the transition.

The findings suggest that executive leadership changes can indeed affect IT performance at BSI Bank branches in Bandung City. The mixed methods approach enabled a comprehensive understanding of the complexities involved. The statistically significant correlation between leadership change and IT performance metrics highlights the need for proactive strategies to mitigate potential disruptions. Additionally, qualitative data underscored the importance of effective communication and alignment

between leadership and IT teams during the transition.

4.2 Impact on IT Security

4.2.1 Quantitative Analysis

The quantitative data from the survey provides insight into the influence of the leadership change on IT security practices at the selected BSI Bank branches. Key findings from the quantitative analysis include. Respondents reported a shift in IT security incidents and vulnerabilities following the leadership transition, with some noting an increase in vigilance and others perceiving a decrease in security posture. Statistical analysis revealed a moderate but statistically significant correlation between leadership change and perceived changes in IT security measures.

4.2.2 Qualitative Analysis

Interviews with stakeholders yielded qualitative insights into the influence of the leadership transition on IT security. The qualitative data highlighted the following key themes. Leadership changes often prompt a re-evaluation of IT security strategy, leading to adjustments in policies and practices. The leadership team's commitment to cybersecurity and their ability to instill a culture of security within the organization play a critical role in shaping IT security outcomes.

The research findings show that leadership transition has an impact on IT security practices at BSI Bank branches. Quantitative data showed a statistically significant correlation between leadership change and perceived changes in IT security measures. Qualitatively, it is evident that the leadership change triggered adjustments in IT security strategy, emphasizing the dynamic nature of cybersecurity in the banking sector. The role of leadership in fostering a security culture remains critical, underscoring the need for leadership alignment with cybersecurity best practices.

4.3 Effects on Risk Control

4.3.1 Quantitative Analysis

Analysis of the quantitative data from the survey allowed for an examination of the impact of leadership changes on risk control

measures within the organization. Key findings from the quantitative analysis include. Respondents reported changes in risk exposures and risk control measures following the leadership transition, with variations in the perceived effectiveness of these measures. Statistical analysis showed a significant but moderate correlation between leadership change and perceived changes in risk control.

4.3.2 Qualitative Analysis

Qualitative insights from the interviews provided a deeper understanding of how the leadership transition affected risk control practices. Key themes that emerged from the qualitative data include. Leadership transitions often prompt a reassessment of the organization's risk management framework, leading to adjustments to risk control measures. Effective risk governance, driven by the commitment and expertise of the leadership team, significantly contributes to the success of risk control practices.

The research findings show that leadership transition impacts risk control measures at BSI Bank branches. Quantitative analysis showed a statistically significant correlation between leadership change and perceived changes in risk control. Qualitatively, it became clear that the leadership transition prompted a re-evaluation of risk management strategies and underscored the importance of effective risk governance.

Discussion

The results and discussion presented above reveal the complex interplay between changes in executive leadership positions and their impact on IT performance, IT security, and risk control at the selected BSI Bank branch in Bandung City.

Leadership transitions in the banking sector have a marked influence on these important aspects:

IT performance: Leadership changes can cause fluctuations in IT performance metrics, so effective communication and alignment between IT teams and new leadership is critical to mitigate disruptions and ensure continued effectiveness.

IT Security: Leadership changes drive a re-evaluation of IT security strategies, resulting in shifts in security incidents and vulnerabilities. The leadership team's commitment to cybersecurity and security culture is critical in maintaining a strong security posture.

Risk Control: Leadership transitions trigger a reassessment of the risk management framework, which affects risk exposures and control measures. Effective risk governance, championed by the leadership team, plays a critical role in successful risk control practices.

This research underscores the need for banking institutions like BSI Bank to proactively manage leadership transitions to minimize disruption and optimize the alignment of new leadership with IT performance, IT security and risk control strategies. The research also highlights the importance of a cohesive organizational culture and effective communication channels to effectively facilitate this transition.

CONCLUSION

This research aims to investigate the impact of leadership transition on IT performance, IT security, and risk control in a branch of BSI Bank in Bandung City. Through a careful mixed-methods approach, which includes surveys, interviews, and document analysis, this research has uncovered key insights that explain the complex interactions between leadership changes and important aspects of banking operations. The findings of this study show that changes in executive leadership positions, including the Board of Directors, IT Director, and Risk Management personnel, have an important influence on IT performance, IT security, and risk control. Specifically, leadership transitions are associated with fluctuations in IT performance metrics, shifts in IT security incidents and vulnerabilities, and adjustments in risk control measures. Most importantly, effective communication and alignment between IT and risk management teams and the new leadership proved critical in mitigating disruptions and optimizing results during this transition. In addition, the

leadership team's commitment to developing a cybersecurity culture and a proactive approach to risk governance played a critical role in maintaining and improving IT security and risk control practices.

The implications of this research are not only limited to the BSI Bank branch in Bandung City. The insights gained offer valuable guidance to financial institutions facing leadership changes while striving to uphold excellence in IT operations, security, and risk management. By understanding the impact of a leadership transition, organizations can develop proactive strategies to ensure a smooth transition process and maintain a robust IT system, security posture, and risk management framework.

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