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Barriers to Balanced Scorecard Implementation in the Digitalization Era

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Abstract
This study aimed to identify the barriers and problems associated with the implementation of the Balanced Scorecard (BSC) in Jordanian banks during the digitalization era. To accomplish this objective, a qualitative approach was employed, using semi-structured interviews to gather data from banks that have not adopted BSC and those that have partially implemented it. The data analysis consisted of within-company and cross-company analyses. The findings from the interviews revealed several barriers and problems hindering BSC implementation in these banks. Social issues, such as the lack of top management support, were identified as significant obstacles. Technical issues, including system complexity, data gathering, continuous adaptation, and digital transformation, were also highlighted as primary barriers to BSC implementation. Political issues, such as resistance from employees and employee turnover, were observed during the implementation process. Conceptual issues were identified, indicating misunderstandings regarding the relationship between the organizational strategy and the BSC scorecard. Moreover, the BSC was perceived as a "general model" that may not easily align with the specific needs of every bank.
Keywords: Balanced Scorecard, Digitalization, Barriers, Implementation, Banks.

Introduction

In today's dynamic business landscape, characterized by globalization and internationalization, competition has become a pressing concern for companies worldwide. This shift has led many companies to embrace innovative management accounting practices like Just-in-Time (JIT), Activity-Based Costing (ABC), and the Balanced Scorecard (BSC). The adoption of these management accounting innovations has gained significance in the digitalization era, where companies have transitioned from traditional industries to information and communications technology (ICT)-based economies.

Despite the numerous benefits associated with these new management innovations, their global implementation remains relatively low (Faudziah and Rababah, 2011; Fadzil and Rababah, 2011, 2012; Upton, 2012; Rabab'ah, 2013; Hasan, 2017; Rababah, 2017). The Balanced Scorecard (BSC), initially introduced by Kaplan and Norton in 1992, was developed to address the limitations of the outdated, financially-focused performance indicators. The BSC integrates traditional financial performance measures with operational and non-financial measures, comprising four categories: financial, customer-related, internal business processes, and learning and growth (Upton, 2012).

The adoption of the Balanced Scorecard reflects the recognition that relying solely on financial measures is inadequate for assessing performance. Depending solely on financial metrics allows management to manipulate numbers to achieve short-term results, often at the expense of long-term performance. The Balanced Scorecard acts as a tool for establishing a balance between short and long-term objectives within organizations. It considers both financial and non-financial measures, as well as leading and lagging indicators. Additionally, it provides a comprehensive perspective by considering external and internal performance aspects (Kaplan and Norton, 1996).

Although the implementation of the Balanced Scorecard (BSC) offers significant advantages in measuring company performance, its adoption rate remains low (Rabab'ah, 2014; Rababah and Bataineh, 2016; Ondieki, 2017; Kasasbeh, 2018). Many businesses that have implemented the BSC perceive it as a short-term solution, and less than 20% of organizations using the BSC have reported tangible performance improvements (Williams, 2004; Rababah, 2015). Madsen and Stenheim (2014) have highlighted that while practitioner-oriented literature and business media share numerous success stories regarding the BSC, researchers have demonstrated that its implementation can be a complex process. There are various pitfalls and dysfunctional consequences associated with the implementation and utilization of the BSC.
Previous research (Wenisch, 2004; Rabab'ah, 2014; Madsen and Stenheim, 2014; Rababah, 2015) has primarily aimed to identify the factors influencing the implementation of the Balanced Scorecard (BSC). Wenisch (2004) conducted a qualitative study and found that motivators play a crucial role in the initial decision to adopt the BSC, while facilitators like IT and catalyst factors are directly associated with the change process. Rababah (2015) identified cultural factors, including innovation and attention to detail, as significant determinants of BSC implementation success or failure.

However, despite these studies, there is a lack of research focusing on the problems or reasons for the non-implementation of the BSC (Tayler, 2010). Rabab'ah (2014) examined the implementation rate and influencing factors of the BSC in Jordanian companies. He discovered that the reasons for BSC implementation aligned with Abrahamson's four perspectives: fad, fashion, efficiency choice, and forced decision. He also identified changing business environments, top management support, and information technology as the most crucial factors influencing BSC implementation. Challenges faced during implementation included high installation and maintenance costs, lack of information, employee resistance, absence of software packages supporting the BSC, and misunderstandings about the relationship between organizational strategy and the BSC scorecard.

In a qualitative study of Scandinavian BSC users, Madsen and Stenheim (2014) identified four problem areas related to BSC implementation. These included conceptual issues, where understanding the complexities of the BSC and adapting it to fit the organization posed challenges. Technical issues encompassed infrastructure, software, and an overemphasis on measurement. Social issues involved misalignment between the BSC and organizational culture, lack of employee contribution, and inadequate top management support. Political issues encompassed underestimation of time and resource requirements, absence of concept champions, difficulties in maintaining continuity during challenging times, and various forms of organizational resistance.

This paper aims to provide empirical evidence on the main problems perceived by BSC users regarding its implementation. The goal is to assist managers in addressing implementation challenges in the future. This study contributes to the existing literature on BSC implementation issues (Kasurinen, 2002; Rabab'ah, 2014; Madsen and Stenheim, 2014; Furtado et al., 2019; Schiuma & Lerro, 2019). Previous studies, like kasasbehet (2018), have recommended further exploration of the challenges encountered during BSC implementation. The study specifically focuses on the Jordanian Commercial Banks sector, considering the intense competition faced by Jordanian banks from foreign counterparts and the significant changes witnessed in the banking industry in recent years, which have also influenced management accounting practices in Jordan. Earlier studies predominantly concentrated on the BSC in general.

Literature Review

Balanced Scorecard

The development of the Balanced Scorecard can be attributed to the contributions of management and business experts who were influenced by modern management principles and the concepts of quality and knowledge management.

The Balanced Scorecard serves as a strategic planning tool that helps organizations evaluate their activities, performance, and strategies. It emphasizes the need to strike a balance between financial outcomes and growth, short-term and long-term goals, and tactical and strategic approaches. It is more than just a measurement system; it is an administrative system that connects objectives, metrics, and target levels. It describes the organization's original strategy and provides management with feedback on internal processes and external outcomes. Kaplan and Norton introduced this model in 1996.

The Balanced Scorecard is structured around four key perspectives that measure the overall performance of the organization

Financial perspective: Focuses on financial objectives such as return on investment, profitability, cash flow, economic value added, and product costs.

Customer perspective: Relates to customer service quality, market share, and customer satisfaction. It involves meeting customer needs, introducing new products and services, and responding to customer desires.

Internal business processes perspective: Concentrates on improving internal processes, such as developing management systems and fostering collaboration between different departments. It ensures overall organizational performance, including innovations in product design and development processes.

Learning and growth perspective: Identifies the capabilities in which the organization must grow to achieve high-level internal processes for the benefit of customers and shareholders.

Previous studies have highlighted various benefits of implementing the Balanced Scorecard. For instance, Ashton (1998) identified advantages such as translating company data into a strategic plan that guides employees towards achieving optimal results and long-term success, linking business objectives and rewards to strategic goals at the team and individual levels, providing insights into the drivers of business success, identifying cause-and-effect relationships across operations, and serving as a dynamic communication and feedback tool.

While conclusive evidence on the outperformance of Balanced Scorecard users compared to non-users is lacking, a recent study by Hussain et al (2017) found significant differences in performance measurement and financial performance between the two groups. The importance of utilizing new management accounting information has increased in the digitalization era and during challenging times such as the COVID-19 pandemic (Rababah et al., 2020; 2021).

Challenges and Difficulties in Implementing the Balanced Scorecard
Although there is limited research specifically focused on the challenges of implementing the Balanced Scorecard (BSC) in banks, previous studies have identified various obstacles and issues in the implementation process. Ismail (2007) conducted a study among Egyptian companies and highlighted several concerns, including inadequate information systems, lack of knowledge about BSC implementation, management's reluctance towards non-financial measures, significant costs associated with acquiring and maintaining performance evaluation systems, ambiguous company strategies, and a scarcity of software packages to support the BSC.

Another study by Thompson and Mathys (2008) identified four primary barriers to BSC implementation. These barriers encompassed a lack of understanding of organizational processes, unfamiliarity with the requirements of items that align with the BSC, organizational unawareness of the need for appropriate metrics, and misunderstandings regarding the relationship between the organizational strategy and the BSC scorecard.

In a study conducted by Rabab'ah (2014) in Jordan, several problems arose during the BSC implementation. These problems included high installation and maintenance costs, insufficient information to effectively carry out the BSC, employee resistance, scarcity of software packages supporting the BSC, and misunderstandings about the relationship between the organizational strategy and the BSC scorecard.These findings highlight the challenges that organizations may face when implementing the Balanced Scorecard, including cost considerations, information deficiencies, employee resistance, and issues related to strategy alignment and software support. Addressing these challenges is crucial to ensure a successful implementation and maximize the benefits of the Balanced Scorecard framework. Based on Madsen and Stenheim (2014), they stated that "there are four problems associated with the implementation of the Balanced Scorecard. These problems include conceptual issues such as contextualization and causal relationships, technical issues such as data gathering, social issues such as participation, commitment, and incompatibility with the organizational culture, and political issues related to time, resources, lack of a champion, and resistance. However, In the digitalization era, implementing the Balanced Scorecard can be challenging due to various barriers. The rapid pace of technological advancements and the complexity of integrating digital tools and systems into the Balanced Scorecard framework pose significant challenges. Organizations need to address technical issues such as data compatibility, integration challenges, and data security to effectively utilize digital technologies for data collection and analysis. The implementation process requires careful consideration and investment in technology infrastructure to efficiently manage the abundance of digital information available. Furthermore, organizations must adapt continuously and remain flexible to keep up with the evolving digital landscape. They should be ready to modify their Balanced Scorecard metrics and objectives in response to emerging digital trends and market dynamics. Overcoming these barriers necessitates a proactive approach to technology adoption, providing adequate training and skill development opportunities, and embracing digital transformation as an integral part of the Balanced Scorecard implementation in the digitalization era (Wickramasinghe & Sharma, 2019; Furtado et al., 2019; Schiuma & Lerro, 2019).

Balanced scorecard in the digitalization era

The digitalization era has brought about significant changes in the business landscape, transforming the way organizations operate and compete. In this era, organizations have access to vast amounts of data and advanced technology that enable them to collect, analyze, and utilize information in real-time. Amidst this digital revolution, the implementation of the Balanced Scorecard has become even more crucial. The Balanced Scorecard provides organizations with a comprehensive framework to align their strategic objectives with performance metrics, allowing them to monitor and evaluate their progress in a dynamic and rapidly changing digital environment.

One of the key advantages of the Balanced Scorecard in the digitalization era is its ability to incorporate both financial and non-financial metrics. Traditionally, organizations primarily relied on financial indicators to measure their performance. However, in today's digital age, success is not solely determined by financial outcomes. The Balanced Scorecard recognizes the significance of non-financial aspects such as customer satisfaction, employee engagement, and innovation. By including these metrics, organizations can gain a more holistic view of their performance, enabling them to adapt and respond effectively to the demands and challenges of the digital era.

Moreover, the implementation of the Balanced Scorecard in the digitalization era is closely linked to leveraging technology and data analytics. With the abundance of digital tools and systems available, organizations can efficiently collect and analyze data to inform their decision-making processes. The Balanced Scorecard aligns well with this data-driven approach by providing a framework to identify the most relevant and meaningful metrics. By leveraging technology and data analytics, organizations can measure their performance in real-time, identify trends and patterns, and make informed adjustments to their strategies and tactics. This integration of technology and the Balanced Scorecard allows organizations to stay agile and responsive in the ever-evolving digital landscape.

In the digitalization era, the implementation of the Balanced Scorecard can face certain barriers. One significant challenge is the rapid pace of technological advancements and the complexity of integrating digital tools and systems into the Balanced Scorecard framework. As organizations strive to leverage digital technologies for data collection and analysis, they may encounter technical issues such as data compatibility, integration challenges, and ensuring data security and privacy. The implementation process requires careful consideration and investment in technology infrastructure to effectively capture, process, and utilize the abundance of digital information available. Additionally, the digital era brings about a need for continuous adaptation and flexibility, as the digital landscape evolves rapidly. Organizations must remain agile and capable of adjusting their Balanced Scorecard metrics and objectives to align with emerging digital trends and changing market dynamics. Overcoming these barriers requires a proactive approach to technology adoption, adequate training and skill development, and a willingness to embrace digital transformation as an integral part of the Balanced Scorecard implementation process in the digitalization era.

Methodology of Research

In this study, a qualitative methodology was employed to investigate the implementation barriers and problems of BSC implementation. Data was collected through semi-structured interviews conducted with financial managers/assistant financial managers of banks in Jordan. The study took place from May 15, 2022, to July 2, 2022. This study analyzes the data collected from interviews with representatives of six banks that have now implemented BSC approach to find the barriers and problems of BSC implementation. The data analysis depended on both within company and cross company analysis. This method used by many previous studies in management accounting filed such as (Rababah, 2012; Ahmad and Rbaba 2014; Rababah et al., 2022).

Data Analysis Techniques

Within-Company Analysis

This section presents the within-company analysis, offering an overview of the background information of the selected companies. The companies included in the interviews were large Omani businesses representing diverse sectors. In this analysis, general details about each company, such as the number of employees, are provided. Additionally, the section highlights the significant obstacles and challenges encountered by these companies in their efforts to integrate artificial intelligence into their accounting systems.

Within-Bank Analysis

Barriers Bank 1

The semi-structured interview with Bank one focused on the barriers to deploying BSC.The responses indicated that the Bank is not planning to invest in BSC tech soon, as they are focusing on other projects that are more critical to the business. Real-time Monitoring and Cost was identified as a significant barrier to the deployment of BSC. Although the Bank does not have cost-saving measures in place, they believe that the implementation of BSC can result in labor cost savings for the Bank. Lack of technical expertise was another significant barrier to the deployment of BSC. The Bank does not have training programs at the moment, but they are willing to bring expertise to the organization, provided the Bank puts a plan in place in the future. The Bank is also not planning to partner with any consultation agency now due to other projects, but they consider partnering with expert consultants when it comes to implementing the plan.

The lack of trust in BSC was identified as a barrier to the implementation of BSC. However, the Bank believes that with incentive training programs to employees and explaining to customers and shareholders the importance of BSC, they can build trust in BSC among employees, customers, and other stakeholders. The resistance to change was another barrier to the implementation of BSC. The Bank plans to manage resistance to change from employees who are used to working with traditional systems by involving employees in the implementation process, addressing any concerns or questions they may have, and providing training and resources to help employees adapt to the new system.

Barriers for Bank 2

Based on the responses provided during the semi-structured interview with Bank two, several insights can be gleaned regarding the barriers of deploying BSC in the bank. Regarding the barriers of implementing BSC, lack of technical expertise emerged as the two primary concerns. However, the Bank recognized that cost savings could be achieved in the long run by automating repetitive tasks, and there were training programs and external consultants available to help upskill staff and implement and maintain BSC. The lack of trust in BSC was also acknowledged as a potential barrier, and the Bank suggested that transparency, education, and rigorous testing and validation procedures could help build trust in BSC among employees, customers, and other stakeholders. While resistance to change was also identified as a potential barrier to implementing BSC, but the Bank suggested that involving employees in the implementation process, providing training and resources, and communicating the benefits of the new system could help manage resistance to change.
Through a semi-structured interview with Bank two, it was discovered that the organization faced barriers hindering the adoption of Balanced Scorecard (BSC) technology. Two prominent barriers identified were the rapid pace of technological advancements and the complexity associated with integrating digital tools and systems into the Balanced Scorecard framework. In their pursuit to harness the potential of digital technologies for effective data collection and analysis. Finally, the Bank recommended investing in training and resources to upskill existing staff, working with experienced external consultants or service providers, and involving employees and other stakeholders in the implementation process to overcome the barriers to implementing BSC. They also advised organizations considering implementing BSC to start with a clear understanding of their specific needs and goals and to communicate the benefits of the new system and provide training and resources to help employees adapt to the new technology.

Barriers for Bank 3

Bank three provided valuable insights into the challenges faced by organizations in adopting BSC. The interview revealed that cost, lack of technical expertise, lack of trust in BSC, and resistance to change are the significant barriers that banks face in adopting BSC. The interviewee also emphasized the need for appropriate training of the employees and social responsibility to keep the workforce reskilling or outplacement, which might counterbalance the cost-saving benefits of deploying BSC. Through a semi-structured interview with Bank three, it was discovered that the organization faced barriers hindering the adoption of Balanced Scorecard (BSC) technology. Two prominent barriers identified were the rapid pace of technological advancements and the complexity associated with integrating digital tools and systems into the Balanced Scorecard framework. In their pursuit to harness the potential of digital technologies for effective data collection and analysis

Barriers for Bank 4

After conducting an interview with Bank 4 as a partially implementer, it was confirmed that the main obstacles to adopting Balanced Scorecard in the Bank are related to data management. The interviewee mentioned that it is interested in developing technology for long-term plans to provide the best performance. The interviewee also indicated that it does not suffer from a lack of experts and has employees with sufficient experience to work with the latest technology. Moreover, the Bank offers its employees training sessions covering the latest and most popular technological advancements. Moreover, in the digital era, banks must recognize the necessity for ongoing adaptation and flexibility, given the rapid evolution of the digital landscape. To thrive, banks need to maintain agility and the ability to modify their Balanced Scorecard metrics and objectives in response to emerging digital trends and shifting market dynamics. Overcoming these barriers necessitates a proactive stance towards technology adoption, adequate training and skill development, and a readiness to embrace digital transformation as an integral aspect of the Balanced Scorecard implementation process in the digitalization era. By actively embracing these factors, organizations can effectively navigate the challenges of the digital era and leverage the full potential of the Balanced Scorecard to drive performance and strategic success. Furthermore, the interviewee suggested that external consultants should be involved in the implementation of BSC to share experiences and maximize benefits.

Barriers for Bank 5

By conducting semi-structured interview with Bank five as an implementer bank, it was founded that the barriers affected the Bank from adopting BSC technology is rapid pace of technological advancements and the complexity of integrating digital tools and systems into the Balanced Scorecard framework. As organizations strive to leverage digital technologies for data collection and analysis. Technology Compatibility is a barrier to Implement BSC in the digital era which requires utilizing compatible technologies and tools. It is crucial to select technology solutions that align with the organization's digital strategy and can seamlessly integrate with existing systems. Ensuring compatibility and effective synchronization between the BSC and digital tools can be complex and time-consuming.

Barriers and Motivators for Bank 6

Based on the semi structure interview The Bank 6 as an implementer bank considers that the lack of top management support one of the most important obstacles that prevent the use of Balanced Scorecard. In the other side the financial manager said that we tried to implement BSC but we encountered technical obstacles such as data compatibility, integration challenges, and ensuring data security and privacy. The implementation process requires careful consideration and investment in technology infrastructure to effectively capture, process, and utilize the abundance of digital information available. Continuous Adaptation one of important obstacles that prevent the use of Balanced Scorecard; digitalization is a rapidly evolving landscape. The BSC implementation should be flexible and adaptable to incorporate emerging digital trends, technologies, and best practices. Regular monitoring and evaluation are essential to ensure that the BSC remains relevant and aligned with the organization's digital transformation journey

Cross-Bank Analysis: Identifying Barriers for BSC Implementation in Jordanian Banks

This section presents a comprehensive cross-company analysis, summarizing the barriers and issues faced by Jordanian Banks in implementing Balanced Scorecard (BSC). The analysis encompasses the perspectives of all the banks involved.

In Jordan, all banks encountered difficulties in fully implementing BSC. two banks were only able to implement it partially, while four banks did not use BSC at all in their accounting processes. One common reason cited by all banks for not utilizing BSC was a lack of experience

in this domain. Additionally, three out of six banks expressed concerns about the possibility of system failures and incorrect interpretation of data by the BSC software. However, two out of six banks acknowledged that the software was capable of identifying overlaps that could arise from system failures. Furthermore, three out of six banks expressed concerns about potential program errors resulting from system failures. Despite these concerns, all banks agreed that their existing corporate systems lacked the capacity to effectively utilize artificial intelligence. These findings align with previous studies, such as the work of Rababah (2012), which highlighted cost and lack of experience as barriers to the implementation of new systems. one out of six banks reported that real-time monitoring and reporting is a barrier to the implementation of BSC, with digitalization, there is an increasing expectation for real-time monitoring and reporting of key performance indicators (KPIs). The BSC needs to be adapted to provide up-to-date and dynamic insights into organizational performance. This requires implementing systems and processes that enable real-time data collection, analysis, and reporting (Furtado et al., 2019). Two out of six banks reported that System Complexity is a barrier to the implementation of BSC system in Jordanian banks and this is consistent with previous studies such as (Wickramasinghe and Sharma, 2019).
Technological hurdles were also identified as significant obstacles to the adoption of BSC. Four of six banks agreed that the technology compatibility where the Implementing BSC in the digital era requires utilizing compatible technologies and tools. It is crucial to select technology solutions that align with the organization's digital strategy and can seamlessly integrate with existing systems. Ensuring compatibility and effective synchronization between the BSC and digital tools can be complex and time-consuming. These technological challenges resonate with previous studies by Schiuma and Lerro (2019), which identified Technology Compatibility as major obstacles in the implementation BSC in the digitalization era. Furthermore, while three banks discuss the challenges of adapting the Balanced Scorecard to the digital era and highlights the importance of regularly monitoring and evaluating its relevance and alignment with digital transformation initiatives. Digitalization is a rapidly evolving landscape. The BSC implementation should be flexible and adaptable to incorporate emerging digital trends, technologies, and best practices. Regular monitoring and evaluation are essential to ensure that the BSC remains relevant and aligned with the organization's digital transformation journey (Furtado et al., 2019). Moreover, all banks agreed that the high cost of BSC implementation and expensive consultants were barriers to adopting BSC in Jordan. Additionally, three out of six banks noted a lack of senior management support for implementing BSC, while three out of six banks reported resistance from employees. These findings are consistent with prior research conducted by Nassar and Rababah (2020), who examined the barriers and issues surrounding nanotechnology implementation in developing countries.

Conclusions

This study aimed to examine the challenges and obstacles associated with implementing the Balanced Scorecard (BSC) in Jordanian banks during the era of digitalization. The importance of this study lies in its contribution to identifying and addressing the challenges and obstacles specific to BSC implementation in Jordanian banks during the digitalization era. It is one of the first studies in Jordan to focus on BSC implementation within this context, with the primary goal of providing valuable insights to assist managers in effectively overcoming future implementation challenges.

By building upon the existing literature on BSC implementation issues Rabab'ah (2014); Madsen and Stenheim (2014); Kasasbehet (2018); Furtado et al (2019); Schiuma & Lerro (2019), this study specifically concentrates on the Jordanian Commercial Banks sector. This sector is of particular interest due to the intense competition faced by Jordanian banks from foreign counterparts and the significant changes observed in the banking industry in recent years, which have influenced management accounting practices in Jordan. While previous studies generally examined BSC implementation in a broader context, this study narrows its focus to the Jordanian Commercial Banks sector.

The findings of the data analysis reveal that the implementation of the Balanced Scorecard (BSC) in Jordanian banks is influenced by various types of problems. A summary of the major conclusions drawn from the data analysis is presented in Table 1.

Table 1
Five categories of problems associated with BSC implementation

Issue type	Problem
1. Social issues	Social issues, particularly the lack of top management support, were identified as the most significant problem faced by banks before and during the implementation of the BSC. Previous studies have also emphasized the crucial role of top management support in influencing BSC implementation in Jordan.
2. Cultural issues	Culture was identified as a significant barrier to BSC implementation in Jordanian commercial banks. Different performance measurements among employees and a lack of acceptance of BSC measurement contribute to this challenge. Cultural factors play a pivotal role in determining the success or failure of BSC implementations.
3. Technical issues	Technical issues, including compatible technologies and tools, digital trends and shifting market dynamics, system complexity, data gathering, continuous adaptation, and digital transformation, emerged as the primary barriers to BSC implementation. Previous studies have also highlighted the importance of addressing these technical challenges.
4. Political issues	Political issues These issues are related to organizational politics and internal dynamics rather than external political factors, such as resistance from employees, a lack of software packages supporting the BSC, and employee turnover. These political issues have been found to impact BSC implementation.
5. Conceptual issues	Conceptual issues were identified as problems in the implementation of BSC. Misunderstandings regarding the relationship between organizational strategy and the BSC scorecard were reported, and the BSC was perceived as a "general model" that may not easily fit every bank.

This finding is consistent with previous studies by Rabab'ah (2014); Kasasbeh (2018), who emphasized the crucial role of top management support in influencing BSC implementation in Jordan. Technical issues have been identified as barriers to BSC implementation, which aligns with previous studies conducted by Madsen and Stenheim (2014); Kasasbeh (2018); Wickramasinghe and Sharma (2019); Furtado et al (2019); Schiuma and Lerro (2019); Rawashdeh et al (2022) that also highlight the importance of addressing these technical challenges. Earlier studies, such as those by Rabab'ah (2014); Kasasbeh (2018), have emphasized the impact of political issues on BSC implementation. Additionally, conceptual issues were identified as problems in BSC implementation. Furthermore, culture was found to be a significant barrier to BSC implementation in Jordanian commercial banks. This finding supports Rababah's (2015) assertion that cultural factors play a pivotal role in determining the success or failure of BSC implementations.

Overall, the findings highlight the various types of problems that influence the implementation of the Balanced Scorecard in Jordanian banks, including social, cultural, technical, political, and conceptual issues. Addressing these challenges is crucial for successful BSC implementation in the banking sector.

Recommendations and Suggestions for Future Research

Although the Balanced Scorecard (BSC) is recognized as a more beneficial measurement than traditional financial metrics, its implementation rate remains low due to various barriers and problems. However, the specific implementation barriers have not been clearly identified. This paper aims to address this gap by examining the barriers and problems encountered during the implementation of BSC in Jordanian Commercial Banks. The identified problems include a lack of top management support, system complexity, challenges in data gathering, continuous adaptation, and digital transformation, resistance from employees, a lack of suitable software packages, and employee turnover.

To further advance the field, future studies should explore the implementation of the Balanced Scorecard in the context of the digitalization era and examine the impact of artificial intelligence on its implementation. Additionally, while this study focused solely on Jordanian Commercial Banks, it is important to acknowledge that the generalizability of the findings may be limited. Therefore, it is recommended that future research expands the research scope to include a wider range of banks within Jordan and other countries. Conducting in-depth case studies with user banks would be particularly valuable in gaining a comprehensive understanding of the most significant problems encountered during the implementation process.

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