ISSN 1816-6075 (Print), 1818-0523 (Online)
Journal of System and Management Sciences
Vol. 14 (2024) No. 9, pp. 438-452
DOI:10.33168/JSMS.2024.0927

Leveraging Innovation and Identity for Sustainable Competitive Advantage: An Analysis of Jordanian Bank Performance Drivers

Samer Al-Tarawneh, Mohd. Suhaimi Bin Shamsudin*, Monizaihasra Bt. Mohamed, N Alia Fahada Binti W Ab Rahman, Mohd Shaladdin Bin Muda

Faculty of Business, Economics & Social Development, Universiti Malaysia Terengganu, Malaysia,
Samertarawneh1988@gmail.com, mohdsuhaimi.s@umt.edu.my (Corresponding author), monizamohamed@umt.edu.my, n.alia@umt.edu.my, shaladdin@umt.edu.my

Abstract. This study explores interrelationships between innovation, green organizational identity, competitive advantage and performance in the Jordanian banking sector. Survey data was gathered from 248 managers across commercial banks. Analysis using PLS-SEM found significant positive links between all variables. Further, competitive advantage fully mediated innovation's effect but only partially mediated organizational identity's impact on bank performance. By illuminating these connection mechanisms, the research provides valuable insights for policymakers seeking to enhance banks' environmental sustainability and competitiveness. Findings confirm the strategic necessity of embedding green values while actively fostering creativity and internal collaboration.

Keywords: Innovation, Green Organizational Identity, Competitive Advantage, Organizational Performance, Bank

1. Introduction

The banking industry has developed quickly and successively in recent years. In an environment of open markets and globalization, the introduction of international banks into local markets has increased bank rivalry (Ghaith, Al-Gharaibeh, & Al-Naseri, 2023; Luu, Nguyen, & Nasir, 2023). New financial services, solutions, and products are the outcome of these changes. In order to outperform their rivals, banks have shifted to providing sophisticated solutions (such as interactive and personalized connections) (Wewege & Thomsett, 2019).

Performance is the key determinant of whether a company succeeds in accomplishing its goals, as was previously mentioned (Tuan, 2023). Moreover, performance indicates the degree to which a company has utilized all of its resources sensibly in order to accomplish its operational and strategic objectives (Ramanathan et al., 2021). Aside from intense rivalry, businesses worldwide are facing pressure from shifting consumer behaviors and demographics. Traditional banks are under threat from the advent of new institutions, especially foreign banks (Ghaith et al., 2021; Liu, 2021). According to empirical research, the majority of Jordanian banks manage their outputs insufficiently (in terms of financial resources), which raises risks and causes inconsistent performance (Al-Ardah & Al-Okdeh, 2022; Ghaith, Enas, Mutia, & Abdul Malek, 2018). Barakat (2023), claim that a range of socio-political and economic issues, in addition to different obstacles and problems, hinder Jordanian banks' performance. In 2012, the largest bank in Jordan, Housing Bank of Trade and Finance, had significant losses amounting to over 70 million dinars, highlighting the severity of the issue of inadequate management in the country's banks (Abualloush, Bataineh, & Aladwan, 2017; Khabashna, Abd Halim, & Ghaith, 2023). Small banks may have their assets frozen as a result of this circumstance.

According to Milic (2021), green banking is defined as banking that considers environmental risks, such as those resulting from climate change, which may have a meaningful influence on the macroeconomy's and the financial sector's long- and short-term stability and development. It's possible to discern between Jordanian banks' reactive actions to environmental externalities that impact their customary primary duty of preserving financial and macroeconomic stability and their proactive involvement in "greening" the economy (Al-Dhaimesh, 2019; Robins, Dikau, & Volz, 2021).

In order to achieve the conventional objectives of price and financial stability, green banking refers to the process of considering environmental risk as well as other sustainability-related factors, such as climate mitigation policy, in the design of monetary policy and financial regulation (Aslam & Jawaid, 2023; Ibrahim, Khan, Shah, Baker, & Ghaith, 2022). This might be referred to as the "passive" side of green banking since banks may need to integrate environmental considerations into macro-prudential frameworks in order to achieve their stated objectives, without pursuing a "sustainability agenda" (Zhang, Wang, Zhong, Yang, & Siddik, 2022).

Conversely, banks can be required to play a "developmental role" by actively using the resources at their disposal to encourage green investment or discourage brown investment (Nassiri, 2020). The impact of climate change and other environmental threats on Jordanian banks' primary goals provides compelling evidence for them to consider environmental considerations when implementing monetary policy. Banking should be concerned with environmental damages and climate-related risks to the extent that they impact the stability of banks, insurance companies, and other financial entities. Although risks arising from climate change can constitute a significant systemic risk for the financial sector and economies at large, environmental risk has received little attention from Jordanian banks and financial regulators to date, and even fewer have included it in their framework for systemic risk (Alnaim, Sulong, Salleh, & Ghaith, 2022; Alnsour et al., 2023). Nonetheless, there is growing agreement that policies aimed at mitigating the effects of climate change will have a significant impact on the way economies and financial systems operate (Fekete et al., 2021).

The banking industry has witnessed rapid development and increasing competition due to globalization and the entry of international banks into local markets (Buch & Goldberg, 2020). This has prompted banks to innovate and provide sophisticated solutions to outperform rivals (Onileowo, Muharam, Ramily, & Khatib, 2021). However, despite these efforts, many Jordanian banks face challenges in managing their outputs effectively, leading to inconsistent performance and financial risks (Al-Ardah & Al-Okdeh, 2022). Socio-political and economic issues further hinder their performance, as evidenced by significant losses incurred by major banks in Jordan (Ananzeh, Al Shbail, Al Amosh, Khatib, & Abualoush, 2023). In this context, green banking has emerged as a critical consideration for banks, encompassing both reactive responses to environmental risks and proactive efforts to promote sustainability in the economy. Green banking involves integrating environmental considerations into monetary policy and financial regulation to achieve price and financial stability (Vanishvili & Katsadze, 2022). However, Jordanian banks have yet to fully incorporate environmental risk management into their frameworks, despite the potential systemic risks posed by climate change (Abu-Rumman, 2021). Addressing this gap, this research explores the relationship between innovation, green organizational identity, green organizational climate, and competitive advantage and performance in Jordanian banks. By shedding light on these variables, the study aims to provide insights that can enhance environmental sustainability and long-term competitiveness in Jordanian banks.

This research adds significantly to the body of knowledge on bank environmental management by examining the relationship between innovation, green organizational identity, and competitive advantage and performance in Jordanian banks. The significance of this research lies in its ability to offer Jordanian banks crucial insights into the variables that can support both environmental sustainability and their long-term competitiveness and sustainability.

2. Literature Review

2.1. Innovation on Organizational Performance and Competitive Advantage

It has been amply demonstrated that performance is influenced positively by innovation (Martínez-Román, Gamero, & Tamayo, 2011; Sok & O'Cass, 2011; Yam, Lo, Tang, & Lau, 2011). Innovation is a type of organizational ability or routine related to the generation of new ideas and knowledge in order to take advantage of market opportunities (Camisón & Villar-López, 2014; Elmquist & Le Masson, 2009). Nevertheless, studies which have been conducted to analyse innovation in service companies are recent (K.-H. Chen, Wang, Huang, & Shen, 2016; Kindström, Kowalkowski, & Sandberg, 2013; Plattfaut et al., 2015; Stauss, den Hertog, van der Aa, & de Jong, 2010). An outstanding one is (Hogan, Soutar, McColl-Kennedy, & Sweeney) work (2011), in which the authors identify the main innovation for these types of companies and develop a measurement scale with good reliability and validity indicators.

There has been no systematic evaluation of the relationship between innovation and competitive advantage. Several scholars claim that businesses with a high standard of innovation build and retain competitive advantages (Distanont & Khongmalai, 2020; Obeidat et al., 2021; Sellitto, Camfield, & Buzuku, 2020; Skordoulis et al., 2020).

Study referred to the creation of innovative technologies, market practises and internal improvements that generate capital innovation (Hanifah, Halim, Ahmad, & Vafaei-Zadeh, 2020; Kruger & Steyn, 2020; Kutieshat & Farmanesh, 2022). By creating a competitive advantage, therefore, the company has capital and capability comparable to its rivals, which allows it to offer superior value for consumers (Abdulwase et al., 2020). As a result, we propose the following hypothesis:

H_1: Innovation has a significant influence on organizational performance

H_2: Innovation has a significant influence on competitive advantage

2.2. Green Organizational Identity on Organizational Performance and Competitive Advantage

Several research studies have demonstrated the significant relationship between organizational identification and a range of attitudes and behaviors, including in-role and extra-role performance in organizations, as well as job satisfaction, job involvement, and affective organizational commitment (Latif, Ajmal, & Islam, 2023; Urbini, Chirumbolo, Caracuzzo, & Callea, 2023; Yorulmaz, Mansuroğlu, & Kaya Özbağ, 2020). Further research on the relationship between organizational identity and performance (Källgren & Vejbrink Kildal, 2022; Miao, Eva, Newman, & Schwarz, 2019) has also revealed a strong positive correlation. Organizational identity theory states that the green organizational identity plays a crucial role in the setting of an organization when it comes to environmental management. The present investigation involved the establishment of two variables, namely green organization identity and performance, under the leadership of entrepreneurs. These diverse and arbitrary elements support the performance and conduct of imported members in organizations. Performance is positively impacted by these beneficial consequences of green organizational identity on organizational actions pertaining to corporate citizenship behaviour (T.-W. Chang, Chen, Luan, & Chen, 2019; Ghaith & Mutia, 2019). Green conduct starts with performance when it comes to environmental conservation. The organizational identity theory outlined earlier indicates a positive correlation between an organization's green identity and performance (Mushtaq, Zubair, Khan, & Khurram, 2019).

Members of an organization must have a shared understanding of their interconnectedness with other organizations, teams, and individuals in order to practice environmental management. Green organizational identities build a shared interpretation model based on comprehending and delving deeply into the meaning of behaviors and assist members in recognizing the connection between environmental protection and the organization's aims. The body of research suggests that a green organizational identity can strengthen an organization's capacity to address environmental problems and its capacity for green adaptation (Tu & Wu, 2021). Consequently, we propose the following hypothesis:

H_3: Green organizational identity has a significant influence on organizational performance

H_4: Green organizational identity has a significant influence on competitive advantage

2.3. Competitive Advantage on Organizational Performance

Banking needs a competitive edge in a cutthroat market to continue operating at a high level, especially in emerging nations (Ng'ang'a, 2022). Competitive strategies are sometimes associated with high bank performance (Torres-Teves, Caintic, & De Ocampo, 2023). Banks also favor cost-based competition policies over differentiating strategies, which may necessitate large financial capacity and capital (Kinyungu & Ogollah, 2017). Competitive advantage has a significant effect on company performance, as empirical research has shown (Haseeb, Hussain, Kot, Androniceanu, & Jermsittiparsert, 2019; Khan, Yang, & Waheed, 2019; Udriyah, Tham, & Azam, 2019). Thus, the following hypothesis is proposed;

H_5: Competitive advantage has a significant influence on organizational performance

2.4. Mediating role of Competitive Advantage

A strong intermediary between financial networking and new business performance has been demonstrated to be a competitive advantage in the finance sector (Khalil, Khawaja, & Sarfraz, 2022). Nonetheless, competitive advantage has a conflicting mediating role. According to Mohsenzadeh and Ahmadian (2016), competitive strategies are unable to mediate the relationship between marketing prowess and export performance.

It has been asserted that, even with the substantial link between innovation and market performance (Suksri, Chobpichien, & Aemsawas, 2015), the association will be stronger if other elements are strengthened. According to Elgarhy and Abou-Shouk (2023), a competitive advantage may strengthen the link between innovation and market performance. The relationships between innovation-related issues, market performance, and sustainable development have been mediated via the competitive advantage (Wang, 2019). To achieve better market performance, the banking industry as a whole should effectively integrate innovation, one of the many advantages of competitive advantage (Zhao, Tsai, &

Wang, 2019). This strategy has produced significant cost and efficiency savings as well as product differentiation, both of which have increased market performance.

Employee behavior is influenced by organizational identity, according to organizational identity theory. According to Li, Huang, and Yan (2022), organizational identity can foster self-concept at the group level, support the development of employees' feeling of worth, assist them communicate their expectations for their job, and encourage the creation and stimulation of innovation.

According to Mushtaq et al. (2019), organizational identity would enhance innovation performance throughout the formative stages of the process. Green organizational identity will have a direct impact on how businesses behave when it comes to environmental protection, and the cognitive model founded on environmental principles is favorable to the successful application of green innovation. In addition, a green organizational identity can enhance members' comprehension of green ambidexterity innovation and inspire them to look for solutions during the green innovation process (Y. Chen, Gao, & Zhang, 2022). Innovation can be fostered inside an industry by integrating its organizational identity through the blending of its various knowledge structures (Hinrichs, Stierand, & Glăveanu, 2023). So;

H_6: Competitive advantage has a mediating effect on the relationship between innovation product, and organizational performance

H_7: Competitive advantage has a mediating effect on the relationship between green organizational identity and organizational performance

3. Research Methodology

In order to investigate the direct correlations between innovation, green organizational identity, and organizational performance as well as the influence of competitive advantage (acting as a mediator) on the associations between the aforementioned IVs and the DV, the current study used a quantitative approach. This is due to the fact that one of the evaluation processes for this study involves hypothesis testing, which was created to look at how these explanatory variables affect the variable that is being explained as well as the impact of a mediator who would be able to strengthen these associations. A methodical questionnaire was utilized in this study to gather quantitative information that was both explanatory and enlightening.

All commercial banks in Jordan, totalling 24 and including both Islamic and corporate banks, were encompassed in the data gathering process. The number of employees and bank divisions varies across Jordan, reflecting differences in investment levels. The focus of this study was on managers and department heads pertinent to the research. A total of 400 questionnaires were distributed across the 24 banks, each containing 17 questions. The study analyzed the first 248 completed surveys gathered between September 2022 and November 2022. Due to the diverse nature of the banking sector and the necessity for targeted expertise, a purposive sampling approach was employed rather than probability sampling. This method ensured that respondents possessed the necessary experience and skills to provide relevant data. By gradually selecting cases based on their importance to the investigation, the purposive sampling approach facilitated the exploration of broader testing goals (Janes, 2001).

Table 1: measurement items

No.	Variable	No. of items	Adaption
1	Bank Performance	6	Tavitiyaman et al. (2011)
2	Competitive Advantage	6	Chang (2011)
3	Innovation	8	Nwachukwu (2018)
4	Green Organizational Identity	6	C. H. Chang and Chen (2013)

4. Data Analysis

There were 253 replies to this survey. Researchers like Hair et al. (2017) advise utilizing SPSS to perform a frequency analysis in order to assess whether the data contains any missing values. According to Hair et al. (2017), answers that have more than 5% missing values ought to be eliminated, while answers that have less than 5% missing values ought to have the answers' mean score values substituted in their place. SPSS was used to enter each item in this study into a frequency analysis. Five of the responses were removed because the descriptive statistics of the missing values revealed that they had more than 5% of missing values. Consequently, 248 (253-5) were the total number of complete responses.

The Smart PLS version 4.0.8.5 was used to evaluate the data in this investigation. The two primary phases of analysis in this program are the measurement model evaluation and the structural model evaluation. The data analysis, including the measurement and structural model evaluations, will be done in the parts that follow.

Five criteria are used to evaluate the measurement model. Factor loadings must exceed 0.70 as the initial requirement. Composite reliability (CR) and Cronbach's Alpha (CA) should both be more than 0.70. Furthermore, convergent validity and discriminant validity are used to evaluate the measurement's validity. Average Variance Extracted (AVE) is used to evaluate convergent validity; a valid AVE value is 0.50. When all of the cross-loading is less than the indicator loading, the measurement is deemed to have discriminant validity.

Table 2: Factor Loading, Reliability and Validity Full Data

Variable	Item	FL>0.70	CA>0.70	CR>0.70	AVE>0.50
Bank performance	BP1	0.899	0.959	0.960	0.832
	BP2	0.920			
	BP3	0.926			
	BP4	0.930			
	BP5	0.909			
	BP6	0.887			
Competitive advantage	CA1	0.886	0.960	0.960	0.832
	CA2	0.887			
	CA3	0.916			
	CA4	0.917			
	CA5	0.923			
	CA6	0.944			
Green organizational identity	GOI1	0.917	0.946	0.947	0.789
	GOI2	0.908			
	GOI3	0.923			
	GOI4	0.886			
	GOI5	0.918			
	GOI6	0.768			
innovation	PRCI1	0.941	0.947	0.952	0.863
	PRCI2	0.923			
	PRCI3	0.921			
	PRCI4	0.932			
	PRCI5	0.874			
	PRCI6	0.928			
	PRCI7	0.906			

	PRCI8	0.911			

Three primary characteristics should be taken into account, according to academics, in order to assess the structural model: Hair et al. (2014), Hair et al. (2017), Hair et al. (2011), Lowry & Gaskin (2014), and R-square (R2), path coefficient (β), and effect size (F2). According to Hair et al. (2017), researchers should not evaluate the goodness of fit index (GoF) because it is not appropriate for Smart PLS. As such, the GoF is not examined in this study.

Table 3 presents the R2 value for every model. It demonstrates that, in the direct model, innovation and green organizational identity account for 0.676 of bank performance and 0.565 of competitive advantage. The percentage rises to 0.814 in the mediation model when competitive advantage is taken into account as a mediator, meaning that these three factors can account for 81.4% of the variation in bank performance. These factors include innovation and green organizational identity.

Table 3: R2 of the Model

Model	Competitive advantage	Bank performance
Direct effect	0.565	0.676
Mediation effect	0.565	0.814

The outcomes of testing the hypotheses are shown in Table 4. Together with the label, the table shows the following: the hypothesis (H), path coefficient (β), standard deviation (Std), t-statistics (T), and p-value, or degree of significance (P). It is important to note that, according to Hair et al. (2017), a hypothesis is accepted if the p-value is less than 0.05 and the T-value is more than 1.96. Table 4 presents the findings from the examination of the direct impact on organizational performance.

Table 4: Results of Direct Effect Hypotheses

H	Path	β	Std	T	P	Label
H1	Innovation -> Bank Performance	0.221	0.075	2.935	0.003	Supported
H2	Innovation -> Competitive Advantage	0.288	0.073	3.923	0.000	Supported
H3	Green Organizational Identity -> Bank Performance	0.298	0.086	3.484	0.000	Supported
H4	Green Organizational Identity -> Competitive Advantage	0.204	0.079	2.592	0.010	Supported
H5	Competitive Advantage -> Bank Performance	0.561	0.056	10.021	0.000	Supported

It was predicted that innovation will have a beneficial and substantial impact on Jordanian banks' organizational performance. This assumption is confirmed by Table 4's data. The organizational performance of Jordanian banks was strongly impacted by innovation ($\beta = 0.221$, $T = 2.935$, $P<0.05$). As such, H1 is encouraged, and higher levels of innovation will result in improved organizational performance for Jordanian banks. According to the study's findings, which are displayed in the following hypothesis, there is a substantial relationship between innovation and competitive advantage ($\beta = 0.288$, $T = 3.923$, $P<0.05$). Consequently, one of the factors boosting Jordanian banks' competitive advantages is innovation. H2 is therefore supported.

It was suggested that Jordanian banks' organizational performance will be significantly impacted by their green organizational identity. Table 4 presents the results, which indicate that the organizational performance of banks in Jordan is positively and significantly impacted by green organizational identity ($\beta=0.298$, $T=3.484$, $P<0.001$). This suggests that banks' organizational performance will rise when they concentrate on enhancing their green corporate identity. H3 is therefore supported. Additionally, Table's results demonstrated that competitive advantage was strongly impacted by green organizational identity ($\beta = 0.204$, $T = 2.592$, $P<0.05$). Thus, the study came to the conclusion that one of the factors influencing Jordanian banks' competitive advantages is their green corporate identity. H4 was therefore supported.

This study suggested that the competitive advantage of Jordanian banks acted as a mediator between organizational performance, green organizational identity, and innovation. The following was the key hypothesis: "H: Competitive advantage has a mediating effect on the relationship between organizational performance in Jordanian banks and innovation, green organizational identity." Two other hypotheses were developed in order to investigate this one. We examined the mediator hypotheses by implementing Hair et al. (2017) recommendations. In Table 5, the direct influence was examined.

Table 5: Result of Mediator testing

Path	β	Std	T	P	Label
Innovation -> CA -> BP	0.162	0.043	3.732	0.000	Supported
Green Organizational Identity -> CA -> BP	0.114	0.046	2.484	0.013	Supported

Table 5's results showed that while innovation had a substantial impact initially, it became less important when the mediator was taken into account. With a p-value of less than 0.05, the indirect effect (Innovation -> CA -> BP) is considered significant. As a result, mediation took place, and since the mediator was involved, the direct impact became negligible, indicating full mediation. Competitive advantage can thus be used to describe the relationship between innovation and organizational performance. H5 is therefore supported. Furthermore, there is a substantial (β=0.114, T=2.484, P<0.05) indirect influence of green organizational identity on BP through the mediator competitive advantage (green organizational identity -> CA -> BP). Thus, the impact of green organizational identity on the organizational performance of Jordanian banks was partially mediated by competitive advantage. This suggests that competitive advantage may account for a portion of the association between green corporate identity and organizational performance. H6 is therefore approved.

5. Discussion

Innovation has been found in this study to positively impact organizational performance in Jordan. The outcome supported H1 by demonstrating that the suggested association is determined to be statistically significant at a p value of 0.01. The findings of earlier research (Chaudhry, Roomi, & Dar, 2020; Rahim & Buang, 2021; Rasool, Samma, Wang, Zhao, & Zhang, 2019; YuSheng & Ibrahim, 2020) are in line with this outcome. As new goods gain acceptance and usage among consumers and users, placing attention on their technical specifications, functionality, user-friendliness, portability, durability, and other significant aspects will impact the organization's overall performance. In the banking industry, product innovation thus seems to be the primary force behind service innovation, and this suggests a close relationship with bank performance. The statistical significance of the postulated association between innovation and competitive advantage is determined to be at p<0.01, indicating support for H2. This outcome is in line with other research (Chaudhry et al., 2020; Rahim & Buang, 2021; Rasool et al., 2019; YuSheng & Ibrahim, 2020) that looked at innovation in the banking industry. As evidenced, for example, by Qiu, Jie, Wang, and Zhao (2020) and Skordoulis et al. (2022), innovation helps to accurately estimate competitive advantage to embrace new ideas. This study demonstrates that innovation enhances competitive advantage and improves customer satisfaction in Jordanian banks.

According to established research based on organizational identity theory, there is a correlation between green organizational identity and organizational performance (Chang, Chen, Luan, & Chen, 2019; Liu, Mei, & Guo, 2021; Soewarno, Tjahjadi, & Fithrianti, 2019; Xing, Wang, & Tou, 2019). This is due to the fact that a bank must inform its staff members about their recent interactions with the bank. A bank uses a variety of methods to communicate with its staff, one of which is internal communications outlining proper and improper behavior. The bank should make it obvious to workers about its green corporate policy, which encourages an improvement in their green performance, particularly when it comes to environmental issues where there are additional requirements for how workers must perform at work. Support for H4 is indicated by the PLS-SEM bootstrapping analysis's result, which demonstrates a positive significant connection between competitive advantage and green organizational identity. The road toward a green corporate identity and competitive advantage is noteworthy and favorable, according to the model's output. The theory is validated. The results of other writers (Y. Chen, Gao, & Zhang, 2022; Firmansyah, 2017; Muisyo, Qin, & Ho, 2021) are consistent with this one.

Since competitive advantage lowers related risk and boosts performance, it has emerged as one of the variables in green behavior analysis that is most carefully examined. Furthermore, our study's experiment revealed notable variations based on competitive advantage (Acarli & Sağlam, 2015; Liébana Cabanillas, 2012), specifically in the connection between performance and green organizational identity. However, there are variations based on competitive advantage in the relationship between green corporate identity and performance.

Lastly, Locket, Thompson, and Morgenstern (2009) state that because RBV is predicated on the heterogeneity of banks, it is difficult, if not impossible, to assemble a homogenous sample, making it impossible to conduct an empirical study on competitive advantage. Moreover, RBV ignores outside variables like the demand side of the market in favor of concentrating on a company's internal bank. This could imply that, in the event that a bank possesses the means and aptitude to secure a competitive edge, demand might not materialize since the model fails to account for the client and, thus, should not be relied upon for planning purposes alone.

6. Theoretical Implications

The organizational identity theory, the NRBV theory, and the RBV theory have not been examined for the existing framework in Jordan's banking industry. These theories are examined in banking environments in the current study. It creates a new avenue for academics, decision-makers, and managers to create policies that will help academic institutions retain skilled banking employees and enhance their performance, enabling them to actively contribute to the banks' competitive advantage.

Furthermore, this study's theoretical value resides in its capacity to broaden understanding of Jordanian banks. Reexamining the notions from a fresh angle is the researcher's primary goal in this survey. Following a comprehensive assessment of the literature, the researcher found that the majority of studies that examined bank performance did so from an organizational perspective. To the best of the researcher's knowledge, no prior study had looked at the impact of competitive advantage, green organizational climate, green organizational identity, and innovation on performance in Jordanian banks. Consequently, the impact of the variables on bank performance in the research region was conceived and empirically examined in this study. Since prior research only sought to link a few other performance characteristics from an organizational perspective, this contribution is quite valuable.

The idea of resource-based theory is supported by the current study, which demonstrates how providing enough organizational resources contributes to improving overall organizational performance. The utilization of resource-based theory in the banking industry in Arab nations contributes to enhanced performance both for individuals and banks. The study's conclusions support its use in the Arab environment, expanding its applicability. It creates fresh discussion points for banking managers to develop effective procedures for raising individual and group performance.

7. Practical Implications

The implications of this study suggest that bank managers play a crucial role in fostering a green organizational identity and climate within banks. By actively promoting environmental awareness and integrating green management principles into organizational frameworks, managers can stimulate enthusiasm for green innovation among employees and establish low-pollution production systems. Additionally, managers should guide banks in engaging in green ambidexterity innovation activities, aligning innovation efforts with green market demands to drive high-quality development and gain a competitive advantage. Moreover, focusing on improving managerial roles in promoting individual and bank performance through training programs for green behavior development can enhance employee confidence and innovativeness in their work.

8. Recommendations

Given the limits of this study, future researchers could carry out comparable investigations in Jordan's other financial institutions, including investment and finance firms, in an effort to validate the results. This will lead to a clearer definition of green practices in other sectors' operational activities and more knowledge of them. Furthermore, information on competitive advantage, particularly from the organizations' archival documents, might be gathered by future academics. This will make it possible for the study to include objective data. Stated differently, future research in this area should measure competitive advantage using secondary or documented data that the company has access to rather than primary data obtained from questionnaire design or other primary sources.

Furthermore, this study suggests that future research use the variable as a mediating factor because of the unfathomable importance of innovation in the functional operations of banks. As a result, this will increase the variable's range and comprehension when applied in various contexts and offer deeper understanding of the success elements influencing bank performance. Additionally, workers who are trained in green techniques are better equipped to do their tasks. Green practices will boost employees' confidence by helping them better grasp their jobs and responsibilities. Their performance will improve overall with this confidence, which can only help the bank.

9. Conclusion

The analysis results empirically validate the potency of innovation and green organizational identity principles in shaping banks' competitive positioning and performance. Competitive advantage emerged as both channel and outcome in these relationships, emphasizing its instrumental role. As pressures mount and stakeholder expectations expand, proactively cultivating innovation-fueling cultures centered on ethical, eco-conscious ideals enables institutions to realize strategic and social responsibilities simultaneously. Further exploration incorporating additional organizational lenses would offer richer perspectives on banking sustainability.

References

Abdulwase, R., Ahmed, F., Nasr, F., Abdulwase, A., Alyousofi, A., & Yan, S. (2020). The role of business strategy to create a competitive advantage in the organization. *Open Access J Sci, 4*(4), 135-138.

Abu-Rumman, A. (2021). The Impact of Risk Management on Financial Performance of Banks: The Case of Jordan. *Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12*(5), 1332-1342.

Abualloush, S., Bataineh, K., & Aladwan, A. S. (2017). Impact of information systems on innovation (product innovation, process innovation)-field study on the housing bank in Jordon. *International Journal of Business Administration, 8*(1), 95-105.

Al-Ardah, M., & Al-Okdeh, S. (2022). The effect of liquidity risk on the performance of banks: Evidence from Jordan. *Accounting, 8*(2), 217-226.

Al-Dhaimesh, O. H. (2019). The effect of sustainability accounting disclosures on financial performance: An empirical study on the Jordanian banking sector. *Banks and Bank Systems, 14*(2), 1.

Alnaim, M., Sulong, F., Salleh, Z., & Ghaith, A. (2022). Conceptual paper on corporate environmental performance as mediating between innovation and financial performance in Jordanian industrial sector. *Academy of Strategic Management Journal, 21*, 1-9.

Alnsour, I., Alghadi, M., Ahmad, A., Alibraheem, M., Altahat, S., Al-Smadi, R., & Alshboul, K. (2023). Islamic financial technology acceptance: An empirical study in Jordan. *International Journal of Data and Network Science, 7*(4), 1659-1668.

Ananzeh, H., Al Shbail, M. O., Al Amosh, H., Khatib, S. F., & Abualoush, S. H. (2023). Political connection, ownership concentration, and corporate social responsibility disclosure quality (CSRD): empirical evidence from Jordan. *International Journal of Disclosure and Governance, 20*(1), 83-98.

Aslam, W., & Jawaid, S. T. (2023). Green banking adoption practices: Improving environmental, financial, and operational performance. *International Journal of Ethics and Systems, 39*(4), 820-840.

Barakat, R. Z. Y. (2023). Opportunities and Challenges For Jordanian Islamic Banks.

Buch, C. M., & Goldberg, L. S. (2020). Global banking: Toward an assessment of benefits and costs. *Annual Review of Financial Economics, 12*, 141-175.

Camisón, C., & Villar-López, A. (2014). Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of Business research, 67*(1), 2891-2902.

Chang, C. H., & Chen, Y. S. (2013). Green organizational identity and green innovation. *Management Decision, 51*(5), 1056-1070.

Chang, T.-W., Chen, F.-F., Luan, H.-D., & Chen, Y.-S. (2019). Effect of green organizational identity, green shared vision, and organizational citizenship behavior for the environment on green product development performance. *Sustainability, 11*(3), 617.

Chaudhry, N. I., Roomi, M. A., & Dar, S. (2020). Barriers to financial product innovation in Islamic banks in Pakistan: an interpretive structural modeling approach. *Journal of Islamic Accounting and Business Research*.

Chen, K.-H., Wang, C.-H., Huang, S.-Z., & Shen, G. C. (2016). Service innovation and new product performance: The influence of market-linking capabilities and market turbulence. *International Journal of Production Economics, 172*, 54-64.

Chen, Y., Gao, L., & Zhang, Y. (2022). The impact of green organizational identity on green competitive advantage: The role of green ambidexterity innovation and organizational flexibility. *Mathematical Problems in Engineering, 2022*.

Distanont, A., & Khongmalai, O. (2020). The role of innovation in creating a competitive advantage. *Kasetsart Journal of Social Sciences, 41*(1), 15-21.

Elgarhy, S. D., & Abou-Shouk, M. (2023). Effects of entrepreneurial orientation, marketing, and innovation capabilities, on market performance: The mediating effect of sustainable competitive advantage. *International Journal of Contemporary Hospitality Management, 35*(6), 1986-2004.

Elmquist, M., & Le Masson, P. (2009). The value of a 'failed'R&D project: An emerging evaluation framework for building innovative capabilities 1. *R&D Management, 39*(2), 136-152.

Fekete, H., Kuramochi, T., Roelfsema, M., den Elzen, M., Forsell, N., Höhne, N., . . . Olivier, J. (2021). A review of successful climate change mitigation policies in major emitting economies and the potential of global replication. *Renewable and Sustainable Energy Reviews, 137*, 110602.

Ghaith, A., Al-Gharaibeh, S. M., & Al-Naseri, D. A. (2023). Exploring the relationship between knowledge management and core competencies to improve universities success in Jordan: Testing the mediating effect of employee engagement. *Periodicals of Engineering and Natural Sciences, 11*(5), 76-90.

Ghaith, A., Awang, Z., Barhem, B. Y., Alsakarneh, A., Eneizan, B., & Nofal, M. (2021). Structural Equation Modelling Using AMOS based Empirical Analysis: Direct and Indirect Effects of Job Performance Factors among Jordanian Islamic Banks. *Webology, 18*(2).

Ghaith, A., Enas, A., Mutia, A. H., & Abdul Malek, T. (2018). The Impact of Human Resource Management Practices, Organizational Culture, Motivation and Knowledge Management on Job Performance with Leadership Style as Moderating Variable in the Jordanian Commercial Banks Sector. *Journal of Reviews on Global Economics, 6*, 477-488.

Ghaith, A., & Mutia, S. (2019). Effect of behavioral variables on organizational citizenship behavior (OCB), with job satisfaction as moderating among Jordanian five-star hotels. *International Journal of Ethics and Systems*.

Hanifah, H., Halim, H. A., Ahmad, N. H., & Vafaei-Zadeh, A. (2020). Can internal factors improve innovation performance via innovation culture in SMEs? *Benchmarking: An International Journal, 27*(1), 382-405.

Haseeb, M., Hussain, H. I., Kot, S., Androniceanu, A., & Jermsittiparsert, K. (2019). Role of social and technological challenges in achieving a sustainable competitive advantage and sustainable business performance. *Sustainability, 11*(14), 3811.

Hinrichs, N., Stierand, M., & Glăveanu, V. (2023). Food for thought: How curiosity externalization is fostered through organizational identity. *Organizational behavior and human decision processes, 179*, 104293.

Hogan, S. J., Soutar, G. N., McColl-Kennedy, J. R., & Sweeney, J. C. (2011). Reconceptualizing professional service firm innovation capability: Scale development. *Industrial Marketing Management, 40*(8), 1264-1273.

Ibrahim, H. I., Khan, H., Shah, K. A. M., Baker, R., & Ghaith, A. (2022). TVET Learning in the Time of the Pandemic: The Malaysian Insight. *Journal of Positive School Psychology, 6*(2), 1098-1105.

Källgren, M., & Vejbrink Kildal, A. (2022). Who are we and what do we measure?: A case study of the dynamic relationship between performance measurement and organizational identity.

Khabashna, W., Abd Halim, M., & Ghaith, A. (2023). *Analyzing the Use of TAM Model with Customer Satisfaction and Security Risk in Jordanian Banks.* Paper presented at the MUAJ-EMJ 1st International Conference on Asian Studies Proceeding ICAS'2023.

Khalil, M., Khawaja, K. F., & Sarfraz, M. (2022). The adoption of blockchain technology in the financial sector during the era of fourth industrial revolution: a moderated mediated model. *Quality & Quantity, 56*(4), 2435-2452.

Khan, S. Z., Yang, Q., & Waheed, A. (2019). Investment in intangible resources and capabilities spurs sustainable competitive advantage and firm performance. *Corporate Social Responsibility and Environmental Management, 26*(2), 285-295.

Kindström, D., Kowalkowski, C., & Sandberg, E. (2013). Enabling service innovation: A dynamic capabilities approach. *Journal of Business Research, 66*(8), 1063-1073.

Kinyungu, R., & Ogollah, K. (2017). Influence of competitive strategies on organizational performance of Kenya Commercial Bank. *International Academic Journal of Human Resource and Business Administration, 2*(3), 201-221.

Kruger, S., & Steyn, A. A. (2020). Enhancing technology transfer through entrepreneurial development: practices from innovation spaces. *The Journal of Technology Transfer, 45*(6), 1655-1689.

Kutieshat, R., & Farmanesh, P. (2022). The impact of new human resource management practices on innovation performance during the COVID 19 crisis: A new perception on enhancing the educational sector. *Sustainability, 14*(5), 2872.

Latif, M., Ajmal, M., & Islam, A. (2023). Organizational identification and extra-role behavior: Mediating role of communal orientation and psychological well-being. *Pakistan Journal of Commerce and Social Sciences (PJCSS), 17*(3), 446-483.

Li, L., Huang, G., & Yan, Y. (2022). Coaching Leadership and Employees' Deviant Innovation Behavior: mediation and Chain Mediation of Interactional Justice and Organizational Identification. *Psychology research and behavior management*, 3861-3874.

Liu, M. X. (2021). *Stay competitive in the digital age: the future of banks*: International Monetary Fund.

Luu, H. N., Nguyen, C. P., & Nasir, M. A. (2023). Implications of central bank digital currency for financial stability: Evidence from the global banking sector. *Journal of International Financial Markets, Institutions and Money, 89*, 101864.

Martínez-Román, J. A., Gamero, J., & Tamayo, J. A. (2011). Analysis of innovation in SMEs using an innovative capability-based non-linear model: A study in the province of Seville (Spain). *Technovation, 31*(9), 459-475.

Miao, Q., Eva, N., Newman, A., & Schwarz, G. (2019). Public service motivation and performance: The role of organizational identification. *Public Money & Management, 39*(2), 77-85.

Milic, L. (2021). *Combating Climate Change with Green Central Banking: A Continuous-Time, Stock-Flow Consistent Approach.*

Mohsenzadeh, M., & Ahmadian, S. (2016). The mediating role of competitive strategies in the effect of firm competencies and export performance. *Procedia Economics and Finance, 36*, 456-466.

Mushtaq, S., Zubair, D. S. S., Khan, M., & Khurram, S. (2019). Mediating role of environmental commitment between green organizational identity and green innovation performance. *Pakistan Journal of Commerce and Social Sciences, 13*(2), 385-408.

Nassiri, A. A. (2020). Central Banking and Sustainable Development. *Available at SSRN 3637485*.

Ng'ang'a, D. N. (2022). *Data Mining Application and Competitive Advantage of Commercial Banks in Kenya.* University of Nairobi.

Nwachukwu, C. (2018). The impact of different types of innovations on customer satisfaction in microfinance bank in Nigeria.

Obeidat, U., Obeidat, B., Alrowwad, A., Alshurideh, M., Masadeh, R., & Abuhashesh, M. (2021). The effect of intellectual capital on competitive advantage: The mediating role of innovation. *Management Science Letters, 11*(4), 1331-1344.

Onileowo, T., Muharam, F., Ramily, M., & Khatib, S. F. (2021). The nexus between innovation and business competitive advantage: a conceptual study. *Universal Journal of Accounting and Finance, 9*(3), 352-361.

Plattfaut, R., Niehaves, B., Voigt, M., Malsbender, A., Ortbach, K., & Poeppelbuss, J. (2015). Service innovation performance and information technology: An empirical analysis from the dynamic capability perspective. *International Journal of Innovation Management, 19*(04), 1550038.

Rahim, M. S. A., & Buang, A. H. (2021). The Theory of Product Innovation and Its Application in Islamic Banking. *Journal of Islamic Finance, 10*(2), 112-123.

Ramanathan, U., Mazzola, E., Mohan, U., Bruccoleri, M., Awasthi, A., & Garza-Reyes, J. A. (2021). How selection of collaborating partners impact on the green performance of global businesses? An empirical study of green sustainability. *Production Planning & Control, 32*(14), 1207-1222.

Rasool, S. F., Samma, M., Wang, M., Zhao, Y., & Zhang, Y. (2019). How human resource management practices translate into sustainable organizational performance: the mediating role of product, process and knowledge innovation. *Psychology research and behavior management*, 1009-1025.

Robins, N., Dikau, S., & Volz, U. (2021). Net-zero central banking: A new phase in greening the financial system.

Sellitto, M. A., Camfield, C. G., & Buzuku, S. (2020). Green innovation and competitive advantages in a furniture industrial cluster: A survey and structural model. *Sustainable Production and Consumption, 23*, 94-104.

Skordoulis, M., Ntanos, S., Kyriakopoulos, G. L., Arabatzis, G., Galatsidas, S., & Chalikias, M. (2020). Environmental innovation, open innovation dynamics and competitive advantage of medium and large-sized firms. *Journal of Open Innovation: Technology, Market, and Complexity, 6*(4), 195.

Sok, P., & O'Cass, A. (2011). Achieving superior innovation-based performance outcomes in SMEs through innovation resource–capability complementarity. *Industrial marketing management, 40*(8), 1285-1293.

Stauss, B., den Hertog, P., van der Aa, W., & de Jong, M. W. (2010). Capabilities for managing service innovation: towards a conceptual framework. *Journal of Service Management*.

Suksri, N. H., Chobpichien, J., & Aemsawas, M. (2015). The mediating role of both hotel environmental marketing strategy and competitive advantage on the link between organizational factors and hotel performance in Samui Island hotels. *Journal of Management Sciences, 2*(2).

Torres-Teves, A. F., Caintic, P. S., & De Ocampo, M. B. (2023). Understanding Porter's Generic Competitive Strategies and its Effect on Perceived Business Performance: Evidence from a Credit Cooperative. *Asian Journal of Entrepreneurship, 4*(2), 15-28.

Tu, Y., & Wu, W. (2021). How does green innovation improve enterprises' competitive advantage? The role of organizational learning. *Sustainable Production and Consumption, 26*, 504-516.

Tuan, L. (2023). The entrepreneurial pathway of Vietnamese super-rich. The sources of their successful business performance. *International journal of entrepreneurship and small business, 10*, 1-17.

Udriyah, U., Tham, J., & Azam, S. (2019). The effects of market orientation and innovation on competitive advantage and business performance of textile SMEs. *Management Science Letters, 9*(9), 1419-1428.

Urbini, F., Chirumbolo, A., Caracuzzo, E., & Callea, A. (2023). Job satisfaction and OCBs: What's new? The mediating role of Organizational Identification. *International Journal of Organizational Analysis, 31*(5), 1748-1762.

Vanishvili, M., & Katsadze, I. (2022). Bank financing of green economy: review of modern research. *Scientific Collection «InterConf+»*(18 (95)), 120-143.

Wang, C.-H. (2019). How organizational green culture influences green performance and competitive advantage: The mediating role of green innovation. *Journal of Manufacturing Technology Management, 30*(4), 666-683.

Wewege, L., & Thomsett, M. C. (2019). *The digital banking revolution: how fintech companies are transforming the retail banking industry through disruptive financial innovation*: Walter de Gruyter GmbH & Co KG.

Yam, R. C., Lo, W., Tang, E. P., & Lau, A. K. (2011). Analysis of sources of innovation, technological innovation capabilities, and performance: An empirical study of Hong Kong manufacturing industries. *Research Policy, 40*(3), 391-402.

Yorulmaz, M., Mansuroğlu, E., & Kaya Özbağ, G. (2020). Mediating role of job satisfaction in the relationship between organizational identification and organizational commitment: An empirical study on ship agency employees. *Pomorstvo, 34*(2), 233-244.

YuSheng, K., & Ibrahim, M. (2020). Innovation capabilities, innovation types, and firm performance: evidence from the banking sector of Ghana. *SAGE Open, 10*(2), 2158244020920892.

Zhang, X., Wang, Z., Zhong, X., Yang, S., & Siddik, A. B. (2022). Do green banking activities improve the banks' environmental performance? The mediating effect of green financing. *Sustainability, 14*(2), 989.

Zhao, Q., Tsai, P.-H., & Wang, J.-L. (2019). Improving financial service innovation strategies for enhancing china's banking industry competitive advantage during the fintech revolution: A Hybrid MCDM model. *Sustainability, 11*(5), 1419.