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CLOUD TRANSFORMATION AS A MEDIATOR BETWEEN FINANCIAL TECHNOLOGY ADOPTION AND ORGANIZATIONAL AGILITY: EVIDENCE FROM JORDANIAN COMMERCIAL BANKS

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Abstract

This paper examines the mediating role of cloud transformation (CT) in the relationship between financial technology (fintech) adoption and organizational agility among commercial banks in Jordan. The research employs the partial least squares structural equation modeling method (PLS-SEM). Findings indicate that fintech adoption positively influences organizational agility, while CT partially mediates this relationship. This suggests that agility benefits arise when fintech initiatives are supported by scalable and elastic cloud infrastructures. The study is significant in demonstrating how fintech implementation enhances agility through CT within the framework of dynamic capabilities in regulated financial services. Regarding practical implications, bank leadership should align fintech initiatives with cloud modernization, control mechanisms, and talent investments to strengthen agility in product rollout, channel integration, and compliance operations.

Keywords: *Cloud transformation, Fintech compatibility, Fintech security, Fintech interoperability, Organizational agility.*

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1. Introduction

Financial technology (fintech) is transforming the structure and functioning of financial institutions globally through innovations in payments, lending, and other digital financial services (Abbas & Ali, 2024; Zhang et al., 2024). It is a cloud-based system that integrates advanced technologies such as artificial intelligence and blockchain to enhance efficiency, inclusiveness, and agility within the financial sector. Fintech integration has become one of the most significant components of digital transformation strategies in emerging markets, helping banks improve service delivery, operational performance, and customer experience (Vial, 2019). However, in developing countries such as Jordan, fintech adoption remains hindered by technological, regulatory, and infrastructural constraints.

Commercial banks in Jordan are actively pursuing digitalization, but the success of each initiative depends on the combination of technological innovation, adaptive organizational capacity, and cloud-based infrastructure (Almaqtari, 2024; Hammi et al., 2023). In this context, organizational agility (OA) has become a cornerstone of success, representing a bank's capacity to sense market changes, redesign internal operations, and respond swiftly to evolving financial technologies (Teece et al., 1997). Nonetheless, fintech implementation alone may not yield agility unless supported by an enabling technological environment. The mediating mechanism is CT, which links fintech innovation to agility outcomes through elastic computing resources, scalable infrastructure, and real-time data access. By adopting cloud-based fintech solutions, banks can enhance responsiveness, reduce costs, and improve customer-centric operations (Mishra, 2024).

Existing literature has primarily focused on the technological or regulatory aspects of fintech, such as e-payment systems, e-banking compliance, and cybersecurity frameworks (Al-Ahmadi, 2011; Amini & Bakri, 2019; Gharaibeh et al., 2020). However, there remains a paucity of empirical studies examining how fintech adoption contributes to OA through CT, particularly in Jordan's banking sector, where financial digitalization is accelerating under Open Finance projects led by the Central Bank of Jordan. This research addresses that gap by exploring the mediating effect of CT on the relationship between fintech adoption and OA in Jordanian commercial banks. The study is grounded in dynamic capabilities theory (DCT) (Teece, 1997), which describes how firms integrate, build, and reconfigure internal and external competencies to respond to rapidly changing environments. In this study, fintech adoption represents the

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ability to sense and capture digital opportunities, while CT serves as the operational framework that enables organizations to reorganize resources effectively to achieve agility

The study seeks to answer the following research questions (RQs):

RQ1: What is the impact of fintech adoption on OA in Jordanian commercial banks?

RQ2: Does CT mediate the relationship between fintech adoption and OA?

RQ3: How can CT be strategically leveraged to enhance agility outcomes derived from fintech adoption in the banking sector?

A quantitative research design was adopted using structured questionnaires administered to managers and IT professionals in Jordanian commercial banks. Partial least squares structural equation modeling (PLS-SEM) was employed to analyze the data and assess both direct and mediating effects. The study is theoretically relevant to fintech research by applying the concept of dynamic capabilities to fintech and positioning CT as a strategic facilitator between fintech adoption and OA. Practically, it offers value to bank executives and policymakers interested in developing scalable, cloud-based fintech solutions to enhance responsiveness and competitiveness within Jordan's digital financial ecosystem (Khan et al., 2020; Perano et al., 2023).

The remainder of this paper is organized as follows: Section 2 presents the literature review on fintech adoption, CT, and OA. Section 3 outlines the research methodology and conceptual model. Section 4 provides the empirical findings and discussion. Finally, Section 5 presents the managerial implications, limitations, and directions for future research.

2. Literature Review

2.1 Fintech Compatibility

Fintech compatibility (FC) refers to the extent to which business systems, processes, and strategic objectives align with existing technologies in financial institutions. It determines the suitability of fintech solutions within both technological and operational contexts . Fintech applications such as mobile banking, e-wallets, and digital payment systems can be adopted and integrated with minimal resistance or disruption when they are compatible with existing infrastructures (Al-Omoush et al., 2024). High compatibility ensures seamless interoperability between legacy systems and new digital interfaces, facilitating quicker adoption and smoother workflow transitions.

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In the context of Jordanian commercial banks, compatibility ensures compliance between fintech solutions and the regulatory frameworks issued by the Central Bank of Jordan (CBJ), including open banking and digital identity initiatives . Therefore, FC is a critical enabler that aligns technological innovation and business responsiveness by promoting coherence across systems, departments, and regulatory frameworks.

2.2 Fintech Security

Fintech security (FS) concerns the protection of digital financial systems, focusing on data integrity, transaction security, and privacy assurance. Security and trust remain central in fintech adoption, as both consumers and institutions must rely on the confidentiality and cyber resilience of digital services (Al-Omoush et al., 2024; Gai et al., 2018). Effective security controls include encryption, two-factor authentication, risk-based authorization, and adherence to international cloud standards such as ISO 27001 and General Data Protection Regulation.

In Jordanian banks, FS is a strategic requirement for implementing the Central Bank of Jordan's (CBJ, 2022) Open Finance Regulations, which mandate secure API deployment and encrypted data exchange between customers and banks. Research indicates that robust cybersecurity frameworks not only mitigate risks but also enhance customer trust, thereby strengthening a bank's reputation and responsiveness to digital threats . Consequently, FS serves as the strategic foundation upon which sustainable cloud-based financial operations are built.

2.3 Fintech Interoperability

Fintech interoperability (FI) refers to the ability of various digital systems, platforms, and financial applications to share, interpret, and utilize information seamlessly (Gozman et al., 2018). Interoperability is particularly vital in Jordan's financial sector for enabling cross-bank and cross-platform transactions through JoMoPay and eFAWATEERcom within a unified infrastructure .It is further strengthened by the integration of cloud-based architectures, which create scalable environments that synchronize data and support real-time analytics. Consequently, interoperability enhances OA by ensuring that digital services and products can be rapidly adapted to meet external technological changes and evolving customer needs.

2.4 Organizational Agility

OA refers to a firm's capability to detect market changes, exploit emerging opportunities, and realign internal capabilities to achieve responsiveness and innovation (Aslam et al., 2020; Teece, 1997). In the banking industry, agility is demonstrated through rapid adaptation to

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regulatory shifts, technological developments, and changing customer behaviors. Fintech adoption enhances agility by digitizing customer interactions, automating processes, and facilitating real-time decision-making (Sharabati et al., 2024).

Beyond technology, intangible enablers such as leadership, culture, and knowledge integration are also vital to agility (Mishra, 2024). Cloud-based infrastructures further strengthen this capability by allowing banks to scale services efficiently, manage data effectively, and maintain operational flexibility. Therefore, OA is not merely a reaction to change but a dynamic capability developed through the synergy between fintech and cloud-based transformation.

2.5 Cloud Transformation

CT refers to the strategic migration of banking services, operations, and data infrastructure to cloud platforms to achieve greater flexibility, scalability, and innovation (Vial, 2019). It enables real-time collaboration, cost efficiency, and dynamic resource allocation, thereby enhancing operational agility (Khan et al., 2020). Within fintech ecosystems, CT acts as a facilitator that converts technological adoption into measurable performance outcomes by allowing banks to integrate new fintech tools securely and effectively (Perano et al., 2023). In Jordanian commercial banks, the growing adoption of hybrid and public cloud architectures is driven by government-led digitalization efforts and the CBJ policies to modernize financial services. This migration enhances innovation capacity, reduces system latency, and strengthens regulatory compliance. Therefore, CT reinforces the fintech–agility relationship by providing a scalable technological foundation that sustains continuous digital transformation within the financial sector.

3. Hypothesis Development

According to the literature, several technological and organizational factors influence the success of fintech-driven transformation and agility in banking institutions. This study draws on the DCT (Teece, 1997) and the technology–organization–environment (TOE) framework, proposing that FC, FS, and FI are key technological antecedents affecting CT and OA. CT, in turn, functions as a mediating mechanism that enables organizations to translate fintech adoption into greater flexibility and operational responsiveness.

3.1 Cloud Transformation and Organizational Agility

CT is defined as the strategic implementation of cloud-based infrastructures that enable organizations to achieve greater flexibility, scalability, and innovation (Vial, 2019). Through cloud

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services, banks gain higher processing speeds, real-time data analysis, and dynamic resource allocation, all of which are critical to agility (Khan et al., 2020). Within fintech ecosystems, cloud environments facilitate the seamless exchange of financial applications, accelerate decision-making, and promote collaboration across departments. Consequently, CT enhances an organization's responsiveness to regulatory changes and evolving customer needs.

H1: CT positively influences OA.

3.2 Fintech Compatibility and Cloud Transformation

FC describes the degree to which fintech solutions align with an organization's existing systems, workflows, and regulatory requirements . High compatibility minimizes resistance to change, reduces integration costs, and accelerates the migration of fintech processes to cloud platforms. When fintech solutions are coherent with core banking systems and IT architectures, organizations can transition more efficiently to cloud-based environments, thereby improving scalability and operational efficiency.

H2: FC positively influences CT.

3.3 Fintech Compatibility and Organizational Agility

Agility improves through compatibility because technological innovations become supportive rather than disruptive to internal processes. When fintech systems harmonize with existing operational and data platforms, employees can adapt more quickly, and decision-making becomes more responsive. In this context, FC fosters a flexible ecosystem in which innovation integrates seamlessly into daily operations, thereby strengthening OA.

H3: FC positively influences OA.

3.4 Fintech Interoperability and Cloud Transformation

FI refers to the ability of systems to communicate and exchange data across various platforms and applications (Gozman et al., 2018). In a cloud environment, interoperability is essential for seamless integration among fintech providers, regulatory databases, and digital payment gateways. Cloud architectures ensure this interoperability by supporting standardized APIs and communication protocols that enable cross-system interaction. Therefore, interoperability directly contributes to the success of CT in fintech-based organizations.

H4: FI positively influences CT.

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3.5 Fintech Interoperability and Organizational Agility

With interoperability, financial institutions can redesign digital services rapidly to meet evolving customer and market needs. Interoperability facilitates agile collaboration among banks, fintech startups, and regulators, resulting in product innovation and faster go-to-market strategies. In Jordan's commercial banking sector, the interoperability of platforms such as JoMoPay and eFAWATEERcom enhances real-time responsiveness and dynamic service delivery.

H5: FI positively influences OA.

3.6 Fintech Security and Cloud Transformation

FS involves protecting financial information, systems, and users through secure infrastructures and regulatory compliance , A strong cybersecurity foundation builds organizational trust in adopting cloud technologies. Secure fintech systems minimize risks of data breaches and regulatory violations, thereby enhancing the sustainability of CT. Consequently, robust security assurance facilitates the seamless migration of fintech activities to cloud environments while maintaining trust and compliance.

H6: *FS positively influences CT.*

3.7 Fintech Security and Organizational Agility

Security forms the foundation of agility by enabling organizations to innovate within regulated digital environments. Banks that effectively manage cybersecurity risks can redirect resources from crisis management to innovation and strategic adaptation. Secure fintech platforms enhance stakeholder trust, which is essential amid rapid technological transformation, allowing firms to respond adaptively to evolving digital challenges.

H7: *FS positively influences OA.*

4. Method and Data

4.1 Research Design

The study employs a quantitative research design, which is appropriate for testing the hypothesized relationships among variables. The target population comprises professionals in Jordanian commercial banks, specifically those engaged in financial technology, IT systems, and digital transformation projects. Data will be collected using a structured questionnaire developed from validated measurement items used in previous studies (Atieh et al., 2024; Sharabati et al., 2024). The questionnaires will be distributed to 350 participants through both online and

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face-to-face methods, yielding 310 valid responses after screening for completeness and consistency.

Data analysis was conducted using SmartPLS 4 to evaluate the measurement model (reliability and validity) and the structural model (path coefficients and mediation effects). The study applies the DCT to examine the link between technological capability and agility within the TOE framework. This approach explains the impact of technological compatibility, security, and interoperability on CT within organizational contexts. The findings will reveal how fintech-related technologies enhance OA through the mediating role of CT, contributing both theoretical and practical insights to digital transformation in Jordan's commercial banking sector.

4.2 Conceptual Framework

The conceptual framework of this study (Figure 1) illustrates the hypothesized relationships among FC, FS, FI, CT, and OA. The model assumes that financial institutions achieve agility only when technological preparedness and system alignment are established. FC, FS, and FI are identified as the primary technological antecedents influencing CT, which serves as a mediating variable between these technological drivers and the resulting OA.

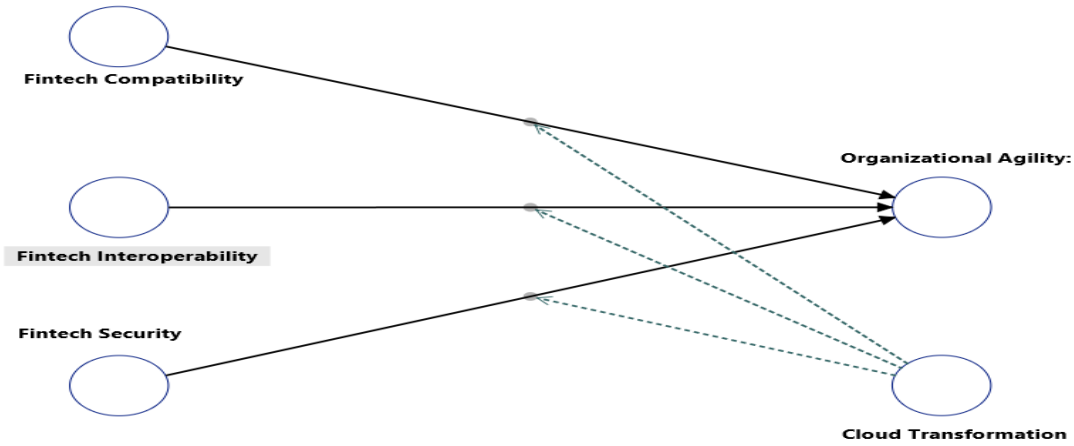

Fig. The conceptual framework

Grounded in DCT (Teece, 1997), the framework posits that commercial banks sustain agility by continuously sensing digital opportunities through fintech, capturing them through technological reconfiguration on cloud platforms, and converting those capabilities into operational responsiveness. Similarly, the TOE framework supports the view that fintech utilization depends not only on technological readiness but also on organizational flexibility and regulatory

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compatibility (Khan et al., 2020; Vial, 2019). The hypothesized model suggests the following causal relationships:

- *FC, FS, and FI → CT*
- *FC, FS, and FI → OA*
- *CT → OA*

FC is essential in this model because it ensures that digital financial tools align with existing banking operations, enabling smoother and less disruptive integration. FS reinforces trust and compliance, providing a secure environment for cloud-based operations, while FI facilitates seamless data and service exchange across multiple platforms. CT functions as the conduit through which these technological dimensions translate into enhanced OA, allowing banks to respond effectively to market and regulatory changes.

The empirical analysis derived from this conceptual model will employ PLS-SEM to test both direct and mediating effects among the variables. This framework advances theoretical understanding by linking the dimensions of fintech adoption to OA through the mediating role of CT in the banking industry.

5. Results and Discussion

The measurement model was created and analyzed using SmartPLS 4. It displays the indicators for each latent construct—FC, FS, FI, CT, and OA—along with their factor loadings and interrelationships. All constructs were operationalized with previously validated measurement items to ensure conceptual distinction and empirical validity. The high outer loadings and composite reliability (CR) values confirmed that the constructs were statistically sound and represented the theoretical dimensions established in the conceptual framework.

The hypothesized structural relationships among the variables were assessed using the measurement model. Discriminant validity was evaluated through the Fornell–Larcker criterion and Heterotrait-Monotrait ratio of correlations (HTMT), confirming that all constructs were empirically distinct. The average variance extracted (AVE) values exceeded 0.50, and Cronbach's alpha coefficients were above the 0.70 threshold, indicating strong internal consistency and convergent validity.

Empirical analysis was conducted using PLS-SEM in SmartPLS 4, a well-established statistical tool suited for complex models involving mediation and multiple causal paths. This method

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was chosen for its robustness in handling non-normal data distributions, small to medium sample sizes, and exploratory models typical of emerging technology research.

The analysis followed two stages. The first examined the direct effects of FC, FS, and FI on CT and OA. The second tested the mediating role of CT to determine its indirect influence on the relationship between fintech adoption factors and agility outcomes. A bootstrapping procedure with 5,000 subsamples was applied to estimate path significance and mediation strength. The findings revealed that fintech-related constructs, particularly FC and FS, exerted strong positive effects on CT, which in turn enhanced OA. FI also improved agility both directly and indirectly through better system integration. These results support the theoretical assumption that, as a dynamic capability operationalizing technological adoption, CT mediates the relationship between fintech adoption variables and OA. This indicates that Jordanian commercial banks effectively integrating fintech systems—while ensuring platform security and digital interoperability—are more likely to achieve higher levels of agility and responsiveness within the rapidly evolving financial landscape.

Table 1 Factor loadings

Constructs	Items	Factor loadings	Cronbach's Alpha	C.R.	AVE
CT	CT1	0.809	0.874	0.837	0.681
	CT2	0.717			
	CT3	0.812			
	CT4	0.812			
	CT5	0.854			
FC	FC1	0.839	0.809	0.867	0.583
	FC2	0.791			
	FC3	0.737			
	FC4	0.725			
	FC5	0.793			
FI	FI1	0.798	0.858	0.838	0.559
	FI2	0.712			
	FI3	0.747			
	FI4	0.871			
	FI5	0.774			

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FS	FI6	0.754	0.893	0872	0.74
	FE1	0.788			
	FS2	0.891			
	FS3	0.785			
	FS4	0.886			
	FS5	0.782			
OA	OA1	0.761	0.874	0.791	0.561
	OA2	0.771			
	OA3	0.769			
	OA4	0.765			
	OA5	0.768			

The findings of the measurement model presented in Table 1 demonstrate that the constructs—CT, FC, FI, FS, and OA—exhibit high levels of psychometric validity and reliability. All item loadings ranged from 0.712 to 0.891, which falls within the accepted range for reflective indicators in PLS-SEM models (Hair et al., 2022). The indicators for CT (0.717–0.854) and FC (0.725–0.839) show strong relationships with their respective latent variables, confirming that these items effectively represent the constructs. Similarly, FI (0.712–0.871) and FS (0.782–0.891) displayed robust loadings, while OA (0.761–0.771) also reflected strong representation of its latent dimension.

All constructs demonstrated internal consistency reliability, with Cronbach's alpha values exceeding the 0.70 threshold considered acceptable in exploratory research. FS ($\alpha = 0.893$) exhibited the highest internal consistency, followed by CT ($\alpha = 0.874$), OA ($\alpha = 0.874$), FI ($\alpha = 0.858$), and FC ($\alpha = 0.809$). These results confirm that the items within each construct are strongly interrelated and consistently measure the same theoretical concept.

CR values for all constructs were also above 0.70, further confirming measurement reliability. Specifically, CR values were 0.837 for CT, 0.867 for FC, 0.838 for FI, 0.872 for FS, and 0.791 for OA, indicating that the constructs possess high reliability with minimal random error. Furthermore, the AVE values for all constructs exceeded 0.50, demonstrating good convergent validity. The AVE values ranged from 0.559 for FI to 0.740 for FS, implying that each construct explained more than 50% of the variance in its indicators.

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Overall, the results confirm that the measurement model is both reliable and valid. All factor loadings exceeded the minimum threshold, reliability indices were above accepted levels, and AVE values verified convergent validity. These findings indicate that the constructs are empirically distinct, internally consistent, and suitable for further analysis using PLS-SEM. Accordingly, the model provides a robust basis for testing the hypothesized relationships among FC, FS, FI, CT, and OA in the context of Jordanian commercial banking.

Table 2 Heterotrait-Monotrait ratio of correlations

Variable	CT	Fintech compatibility	Fintech interoperability	FS	OA
CT					
FC	0.835				
FI	0.862	0.836			
FS	0.195	0.193	0.153		
OA	0.881	0.877	0.834	0.182	

The findings of the measurement model presented in Table 1 demonstrate that the constructs—CT, FC, FI, FS, and OA—exhibit high levels of psychometric validity and reliability. All item loadings ranged from 0.712 to 0.891, falling within the accepted range for reflective indicators in PLS-SEM models (Hair et al., 2022). The indicators for CT (0.717–0.854) and FC (0.725–0.839) show strong relationships with their latent variables, confirming that these items effectively represent the constructs. Similarly, FI (0.712–0.871) and FS (0.782–0.891) exhibit high loadings, while OA (0.761–0.771) also demonstrates strong representation of its underlying dimension.

All constructs displayed internal consistency reliability, with Cronbach's alpha values exceeding 0.70, the minimum acceptable threshold for exploratory studies. FS ($\alpha = 0.893$) achieved the highest internal consistency, followed by CT ($\alpha = 0.874$), OA ($\alpha = 0.874$), FI ($\alpha = 0.858$), and FC ($\alpha = 0.809$). These results affirm that the items within each construct are highly interrelated and consistently measure the same theoretical concept. CR values for all constructs were also above 0.70, further confirming the reliability of the measurement model. Specifically, the CR values were 0.837 for CT, 0.867 for FC, 0.838 for FI, 0.872 for FS, and 0.791 for OA,

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indicating strong reliability with minimal random error. The AVE values for all constructs exceeded the 0.50 benchmark, confirming convergent validity. The AVE values ranged from 0.559 for FI to 0.740 for FS, suggesting that each construct explains more than half of the variance in its indicators. Overall, the results confirm that the measurement model is both reliable and valid. All factor loadings surpassed the minimum threshold, reliability indices met accepted standards, and AVE values established convergent validity. These findings indicate that the constructs are empirically distinct, internally consistent, and suitable for further analysis using PLS-SEM. Consequently, the model provides a robust foundation for testing the hypothesized relationships among FC, FS, FI, CT, and OA in Jordanian commercial banking.

Table 3 AVE root value (Fornell Larcker)

Variable	CT	Fintech compatibility	Fintech interoperability	FS	OA
CT					
FC	0.832				
FI	0.327	0.858			
FS	0.497	0.317	0.794		
OA	0.619	0.37	0.433	0.808	

According to the Fornell–Larcker criterion as shown in table 3, the √AVE of each construct should exceed its correlations with all other constructs. Based on the reported AVE values (CT = 0.681, FC = 0.583, FI = 0.559, FS = 0.740, and OA = 0.561), the corresponding √AVE benchmarks were CT = 0.825, FC = 0.763, FI = 0.748, FS = 0.860, and OA = 0.749. The correlations in Table 3 indicate several violations of this criterion. The correlation between CT and FC (0.832) exceeds the √AVE of both CT (0.825) and FC (0.763). Likewise, the correlation between FC and FI (0.858) surpasses the √AVE of both FC (0.763) and FI (0.748), while the correlation between FI and FS (0.794) exceeds the √AVE of both FI (0.748) and FS (0.860). The remaining correlations (CT–FC = 0.327, CT–OA = 0.619, FC–FS = 0.317, FI–OA = 0.433) are within acceptable limits, remaining below their respective √AVE thresholds. The matrix representation also contains inconsistencies, with values such as 0.858, 0.794, and 0.808 appearing in off-diagonal cells that should contain only inter-construct correlations, not

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diagonals. Before final reporting, it is essential to ensure that diagonal cells correctly display √AVE values and that off-diagonal cells represent inter-construct correlations exclusively. Since several construct pairs violate the Fornell–Larcker criterion, discriminant validity cannot be fully confirmed. It is therefore recommended to inspect cross-loadings to identify overlapping items that may need revision or removal, re-estimate HTMT with bootstrapped CIs ensuring the upper bound is below 0.90 (or 0.85 under stricter conditions), and assess collinearity through VIF, ideally below 3. Any item overlap should be theoretically justified where appropriate. These steps align with current methodological guidance, which treats the Fornell–Larcker criterion as necessary but insufficient and prioritizes HTMT and item-level diagnostics in PLS-SEM for assessing discriminant validity.

Table 4 Structural model/Inner model test

Variable	R-square	R-square adjusted
CT	0.451	0.446
OA	0.375	0.374

As shown in table 4, the model indicates a moderate amount of variance in CT ($R^2 = 0.451$; $R^2adj = 0.446$) and a weak-to-moderate amount of variance in OA ($R^2 = 0.375$; R^2 adj = 0.374). Common benchmark values in PLS-SEM are 0.75, 0.50, and 0.25, representing substantial, moderate, and weak explanatory power, respectively. Accordingly, 0.451 falls between moderate and weak explanatory strength, while 0.375 is between weak and moderate. The small differences between R^2 and R^2adj for both constructs suggest a parsimonious specification, indicating limited inflation due to the number of predictors. Adjusted R^2 accounts for predictor count and decreases when additional variables do not significantly contribute to the model. The CT equation explains approximately 45% of the variance, supporting the argument that fintech-related antecedents have a significant and meaningful relationship with cloud migration and modernization decisions. The 37.5% variance explained in OA aligns with the understanding that agility is shaped not only by technological factors but also by managerial, cultural, and environmental influences not included in the current model. This outcome is typical of organizational research and justifies proceeding with structural path testing in PLS-SEM. Effect sizes (f^2) for each predictor should be examined to measure the incremental contribution of each variable to CT and OA, using reference values of 0.02 (small), 0.15 (medium), and 0.35 (large).

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Predictive relevance (Q^2) should be determined through blindfolding to complement in-sample fit with an out-of-sample proxy, while competing specifications can be compared using adjusted R^2 to maintain model parsimony. These steps are consistent with established PLS-SEM procedures.

Table 5 Hypotheses testing estimates

Hypo.	Relationships	Beta	S.E.	*t*-statistics	*p*-values	Decision
H1	CT -> OA	0.613	0.047	13.168	0.001	Supported
H2	FC -> CT	0.065	0.041	1.612	0.107	Unsupported
H3	FC -> OA	0.04	0.026	1.566	0.117	Unsupported
H4	FI -> CT	0.269	0.044	6.134	0.001	Supported
H5	FI -> OA	0.165	0.034	4.854	0.001	Supported
H6	FS -> CT	0.478	0.05	9.582	0.001	Supported
H7	FS -> OA	0.293	0.038	7.692	0.001	Supported

The structural findings as shown in table 5 indicate that CT has a strong and significant positive effect on OA (H1: $\beta = 0.613$, SE = 0.047, $t = 13.168$, $p < 0.001$), confirming that the mediation pathway is viable. FI is a strong predictor of CT (H4: $\beta = 0.269$, SE = 0.044, $t = 6.134$, $p < 0.001$) and OA (H5: $\beta = 0.165$, SE = 0.034, $t = 4.854$, $p < 0.001$), indicating two distinct pathways to agility. The most influential technological driver is FS, which shows significant paths to CT (H6: $\beta = 0.478$, SE = 0.050, $t = 9.582$, $p = 0.001$) and OA (H7: $\beta = 0.293$, SE = 0.038, $t = 7.692$, $p = 0.001$). In contrast, FC exhibits a non-significant effect on CT (H2: $\beta = 0.065$, SE = 0.041, $t = 1.612$, $p = 0.107$) and a non-significant direct effect on OA (H3: $\beta = 0.040$, SE = 0.026, $t = 1.566$, $p = 0.117$). Two decision-coding errors were identified in the results table: H2 should be marked Unsupported ($p = 0.107$), and H7 should be marked Supported ($p = 0.001$). An additional noteworthy finding concerns mediation. The indirect effect of FI on OA through CT is approximately $0.269 \times 0.613 = 0.165$, similar in magnitude to its direct effect, accounting for nearly 50% of the variance and indicating complementary partial mediation. A comparable pattern is observed for FS, where the indirect effect is $0.478 \times 0.613 = 0.293$, and the direct

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effect remains equally strong, again reflecting complementary partial mediation. FC shows no significant correlation with CT or OA unless the integration, interoperability, or security conditions are stronger. For final reporting, the decision column should be updated accordingly, bootstrapped CIs should be reported for all paths, and the total effects and variance accounted for should be summarized to document the mediation level accurately. The study provides empirical evidence of the effect of Fintech Adoption on OA mediated by CT among Jordanian commercial banks. The results show that CT is a decisive and positive factor in enhancing OA ($\beta = 0.613$, $p < 0.001$), indicating that banks that modernize their technological infrastructure through cloud technologies become more flexible, responsive, and adaptable to ongoing digital transformation. This finding suggests that cloud environments enable organizations to expand digital operations efficiently and integrate fintech applications more effectively into daily processes. The results also reveal that FI ($\beta = 0.269$, $p = 0.001$) and FS ($\beta = 0.478$, $p = 0.001$) both exert positive effects on CT, confirming that interoperability and security are the key technological drivers of cloud-based fintech operations. These two constructs also show significant direct effects on OA ($\beta = 0.165$ and $\beta = 0.293$, respectively; both $p < 0.001$), demonstrating that agile responses to market and regulatory pressures arise from seamless data exchange and robust cybersecurity frameworks. Conversely, FC shows no significant relationship with either CT ($\beta = 0.065$, $p = 0.107$) or OA ($\beta = 0.040$, $p = 0.117$), suggesting that system fit and alignment alone are insufficient to produce transformation or agility without strong technological enablers. This implies that compatibility must be reinforced through interoperability and security capabilities to achieve meaningful performance outcomes.

Overall, the empirical findings support the proposed conceptual framework, showing that FS and FI are the strongest antecedents of CT, which in turn mediates their influence on OA. These results align with DCT (Teece, 1997), confirming that cloud adoption enhances a firm's capacity to sense, seize, and reconfigure resources in response to technological and environmental shifts. Practically, the study highlights that investing in interoperable and secure fintech solutions, aligned with cloud-based infrastructures, can help Jordanian commercial banks improve competitiveness and resilience amid the digital revolution. Such integration strengthens service

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delivery, fosters innovation, and enables rapid adaptation to evolving financial technology dynamics within the Jordanian banking industry.

6. Conclusion and Recommendations

The study highlights the role of Fintech Adoption as a driver of OA mediated by CT in the Jordanian commercial banking sector. The findings confirm that CT functions as a technological mediator, enabling banks to translate fintech capabilities into agility-based performance outcomes. The direct relationship between CT and OA is significant ($\beta = 0.613$, $t = 13.168$, $p = 0.001$), demonstrating that banks upgrading their technological base with scalable cloud systems become more flexible, responsive, and innovative. These findings align with previous research indicating that digital and cloud-based ecosystems enhance a firm's ability to reconfigure resources rapidly and respond effectively to market and regulatory changes (Vial, 2019; Teece et al, 1997).

The results also show that FI ($\beta = 0.269$, $t = 6.134$, $p < 0.001$) and FS ($\beta = 0.478$, $t = 9.582$, $p < 0.001$) are key determinants of CT. Interoperability facilitates cross-platform communication and data transfer between financial applications, supporting seamless integration with cloud environments, while robust security structures establish trust and regulatory compliance in digital operations. Both constructs also exhibit direct positive effects on OA, as secure, connected, and data-transparent systems enable banks to operate more efficiently and adapt to technological disruptions. These findings reflect an important development in fintech research, where interoperability and data security are recognized as the pillars of sustainable digital transformation (Gozman et al., 2018; Al-Omoush et al., 2024).

Interestingly, FC is not a significant independent variable in either CT ($\beta = 0.065$, $p = 0.107$) or OA ($\beta = 0.040$, $p = 0.117$). This suggests that while compatibility is necessary for system coherence, it is insufficient by itself to drive performance improvement. Its relevance becomes apparent only when combined with dynamic factors such as interoperability and security, which allow institutions to leverage cloud technology strategically. This outcome aligns with prior research suggesting that technological alignment must be accompanied by adaptive infrastructure and organizational learning to evolve into strategic agility (Perano et al., 2023).

Overall, the findings confirm that FS and FI are the strongest predictors of CT and OA among Jordanian banks, emphasizing that secure and interconnected systems are essential priorities

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for institutions operating within highly regulated financial environments. The study contributes to the literature by establishing CT as a mediating process that operationalizes fintech adoption into dynamic capabilities, consistent with DCT. The evidence supports the view that agility in the digital era arises not merely from acquiring fintech tools but from how these tools are integrated, secured, and scaled through cloud infrastructure. Practically, the findings underscore that Jordanian commercial banks can enhance OA by investing in secure, interoperable, and cloud-ready fintech systems. Such investments foster a culture of innovation and responsiveness, enabling institutions to adapt swiftly to evolving market conditions, regulatory demands, and customer expectations. The results demonstrate that digital transformation is not solely a technological shift but also an organizational and strategic process dependent on management vision, coordinated technologies, and continuous learning. This study therefore proposes a holistic model of agility through fintech, where security builds trust, interoperability enables connectivity, and cloud scalability drives adaptability. Together, these elements empower Jordanian banks to reengineer digital resources effectively and remain competitive within the dynamic fintech landscape.

References

1. Abbas, A., & Ali, A. (2024). Antecedents and outcomes of marketing agility: A dynamic capability leading to performance. *Advances in Business and Behavioral Decision Making*, *4*(2). https://doi.org/10.62019/abbdm.v4i02.167
2. Adebimpe, O. I., & Lola, A. O. (2024). Cloud-based accounting information systems and financial reporting quality of listed information and communication technology firms in Nigeria. *Journal of Economics, Finance and Management Studies*, *7*(4), 2089–2104. https://doi.org/10.47191/jefms/v7-i4-32
3. Aditya, D. S. (2021). Embarking digital learning due to COVID-19: Are teachers ready? *Journal of Technology and Science Education*, *11*(1), 104–116. https://doi.org/10.3926/jotse.1109
4. Al-Ahmadi, H. (2011). Challenges facing women leaders in Jordan. *Human Resource Development International*, *14*(2), 149–166. https://doi.org/10.1080/13678868.2011.558311
5. Alkhazaleh, A., Assaf, A., Shehada, M., Almustafa, E., & Allahham, M. (2023). Analysis of the impact of fintech firms' lending on the expansion of service base

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

companies in Jordan. *Information Sciences Letters*, *12*(8), 2891–2902. https://doi.org/10.18576/isl/120837

6. Allahham, M., Sharabati, A. A. A., Al-Sager, M., Sabra, S., Awartani, L., & Khraim, A. S. L. (2024). Supply chain risks in the age of big data and artificial intelligence: The role of risk alert tools and managerial apprehensions. *Uncertain Supply Chain Management*, *12*(1), 399–406. https://doi.org/10.5267/j.uscm.2023.9.012
7. Almaqtari, F. A. (2024). The moderating role of IT governance on the relationship between fintech and sustainability performance. *Journal of Open Innovation: Technology, Market, and Complexity*, *10*(2), 100267. https://doi.org/10.1016/j.joitmc.2024.100267
8. Al-Omoush, K. S., Garcia-Monleon, F., & Iglesias, J. M. M. (2024). Exploring the interaction between big data analytics, frugal innovation, and competitive agility: The mediating role of organizational learning. Technological Forecasting and Social Change. *200*, 123188. https://doi.org/10.1016/j.techfore.2023.123188
9. Almustafa, E. A. A., & A. M. (n.d.). Implementation of artificial intelligence for financial process innovation of commercial banks. *Unpublished manuscript*.
10. Alrjoub, A. M. S., Almomani, S. N., Al-Hosban, A. A., & Allahham, M. I. (2021). The impact of financial performance on earnings management practice behavior: An empirical study on financial companies in Jordan. *Academy of Strategic Management Journal*, *20*(Special Issue 2), 1–15.
11. Amini, M., & Bakri, A. (2019). Cloud computing adoption by SMEs in Malaysia: A multi-perspective framework based on DOI theory and TOE framework. *International Journal of Business and Management*, *9*(2), 121–135. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2841175
12. Aslam, H., Blome, C., Roscoe, S., & Azhar, T. M. (2020). Determining the antecedents of dynamic supply chain capabilities. *Supply Chain Management*, *25*(4), 427–442. https://doi.org/10.1108/SCM-02-2019-0074
13. Atieh Ali, A. A., Sharabati, A. A., Alqurashi, D. R., Shkeer, A. S., & Allahham, M. (2024). The impact of artificial intelligence and supply chain collaboration on supply chain resilience: Mediating the effects of information sharing. *Uncertain Supply Chain Management*, *12*, 1801–1812. https://doi.org/10.5267/j.uscm.2024.3.002

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

14. Atta, A. A. B., Ahmad, A. Y. A. B., Allahham, M. I., Sisodia, D. R., Singh, R. R., & Maginmani, U. H. (2023). Application of machine learning and blockchain technology in improving supply chain financial risk management. *Proceedings of the International Conference on Contemporary Computing and Informatics (IC3I 2023)*, 2199–2205. https://doi.org/10.1109/IC3I59117.2023.10397935
15. Bashatweh, A. D., Abutaber, T. A., Jamal, M., Faris, L., Khader, A., Al-Jaghbir, S. A., & Alzoubi, I. J. (2023). Does environmental, social, and governance (ESG) disclosure add firm value? Evidence from Sharia-compliant banks in Jordan. In *A. Bashatweh (Ed.), Contemporary Issues in Business and Finance* (pp. 1–15). Springer. https://doi.org/10.1007/978-3-031-08084-5
16. Bashatweh, A. D., Emad, P., & Ahmed, Y. (2020). Financial performance evaluation of the commercial banks in Jordan: Based on the CAMELS framework. *Journal of Finance and Accounting Studies*, *6*(2), 45–58.
17. Gharaibeh, N., Gharaibeh, M. K., Gharaibeh, O., & Bdour, W. (2020). Exploring intention to adopt mobile commerce: Integrating UTAUT2 with social media. *International Journal of Scientific and Technology Research*, *9*(3), 3826–3833.
18. Gozman, D., Liebenau, J., & Mangan, J. (2018). The innovation mechanisms of fintech start-ups: insights from SWIFT's innotribe competition. *Journal of Management Information Systems, 35*(1), 145–179. https://doi.org/10.1080/07421222.2018.1440768
19. Hammi, B., Zeadally, S., & Nebhen, J. (2023). Security threats, countermeasures, and challenges of digital supply chains. *ACM Computing Surveys*, *55*(14 Suppl.), 1–35. https://doi.org/10.1145/3588999
20. Jameel, A. S. (2024). The effect of organizational culture, rewards, and trust on knowledge sharing among academic staff. *Journal of Psychology Research*, *24*(4), 25–35. https://doi.org/10.61704/jpr.v24i4.pp25-35
21. Jawabreh, O., Baadhem, A. M., Ali, B. J. A., Atta, A. A. B., Ali, A., Al-Hosaini, F. F., & Allahham, M. (2023). The influence of supply chain management strategies on organizational performance in the hospitality industry. *Applied Mathematics and Information Sciences*, *17*(5), 851–858. https://doi.org/10.18576/amis/170511
22. Khan, W. Z., Rehman, M. H., Zangoti, H. M., Afzal, M. K., Armi, N., & Salah, K. (2020). Industrial Internet of Things: Recent advances, enabling technologies, and open

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

challenges. *Computers and Electrical Engineering*, *81*, 106522. https://doi.org/10.1016/j.compeleceng.2019.106522

23. Mishra, N. (2024). Green fintech revolution: Assessing the impact of sustainable finance platforms on environmental and social outcomes. *UGC Care Group 1 Journal*, *17*(3). https://www.researchgate.net/publication/379484138
24. Mittal, N. (2024). Fintech evolution: Pioneering sustainable transformations in investment and finance. *Sudarshan Research Journal*, *179*(2), 10–27. http://www.sudarshanresearchjournal.com
25. Morshed, A., Maali, B., Ramadan, A., Ashal, N., Zoubi, M., & Allahham, M. (2024). The impact of supply chain finance on financial sustainability in Jordanian SMEs. *Uncertain Supply Chain Management*, *12*(4), 2767–2776. https://doi.org/10.5267/j.uscm.2024.4.025
26. Obaid, T., Eneizan, B., Naser, S. S. A., Alsheikh, G., Ali, A. A. A., Abualrejal, H. M. E., & Gazem, N. A. (2022). Factors contributing to effective e-government adoption in Palestine. In *Lecture Notes on Data Engineering and Communications Technologies* (Vol. 127, pp. 663–676). Springer. https://doi.org/10.1007/978-3-030-98741-1_55
27. Allahham, M. A. H. M. O. U. D., Sharabati, A. A. A., Hatamlah, H. E. B. A., Ahmad, A. Y. B., Sabra, S., & Daoud, M. K. (2023). Big data analytics and AI for green supply chain integration and sustainability in hospitals. WSEAS Transactions on Environment and Development, 19, 1218-1230.
28. Ahmad, A. Y. B. (2024). E-invoicing and Cost Reduction: A Case Study of Multinational Corporations. Journal of Information Systems Engineering and Management, 9(2), 25009.
29. Ahmad, A. Y. A. B. (2024, April). The Changing Role of Accountants in the AI Era: Evolving Skill Sets and Career Pathways. In 2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS) (Vol. 1, pp. 1-5). IEEE..
30. Ahmad, A. Y. B., Kumari, D. K., Shukla, A., Deepak, A., Chandnani, M., Pundir, S., & Shrivastava, A. (2024). Framework for Cloud Based Document Management System with Institutional Schema of Database. International Journal of Intelligent Systems and Applications in Engineering, 12(3s), 672-678.

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

31. Y. A. Bani Ahmad, M. Allahham, W. I. Almajali, F. T. Ayasrah and S. Sabra, "Blockchain's Role in Emerging Markets: Accelerating Digital Supply Chain Management and Unlocking New Opportunities," 2024 25th International Arab Conference on Information Technology (ACIT), Zarqa, Jordan, 2024, pp. 1-6, doi: 10.1109/ACIT62805.2024.10877053.
32. Y. A. Bani Ahmad, M. Allahham, W. I. Almajali, F. T. Ayasrah and S. Sabra, "Smart Logistics Services: How Artificial Intelligence Transforms Decision-Making," *2024 25th International Arab Conference on Information Technology (ACIT)*, Zarqa, Jordan, 2024, pp. 1-4, doi: 10.1109/ACIT62805.2024.10876978.
33. Ahmad, A. Y. B., Ali, M., Namdev, A., Meenakshisundaram, K. S., Gupta, A., & Pramanik, S. (2025). A Combinatorial Deep Learning and Deep Prophet Memory Neural Network Method for Predicting Seasonal Product Consumption in Retail Supply Chains. In *Essential Information Systems Service Management* (pp. 311-340). IGI Global.
34. Y. A. Bani Ahmad, M. Allahham, W. I. Almajali, F. T. Ayasrah and S. Sabra, "From Interaction to Action: How User Input Shapes Logistics and Decisions in Jordan's E-Industry," *2024 25th International Arab Conference on Information Technology (ACIT)*, Zarqa, Jordan, 2024, pp. 1-6, doi: 10.1109/ACIT62805.2024.10877225.
35. Y. A. Bani Ahmad, M. Allahham, W. I. Almajali, F. T. Ayasrah and S. Sabra, "Supply Chain Innovation on Acceleration Decision-Making, The Mediating Role of Tech and Integration in the Retail Sector," *2024 25th International Arab Conference on Information Technology (ACIT)*, Zarqa, Jordan, 2024, pp. 1-6, doi: 10.1109/ACIT62805.2024.10876940.
36. Ahmad, A. Y. B., Gupta, P., Thimmiaraja, J., Goswami, B., Arun, M., Manoharan, G., & Younis, D. (2024). A Comparison of the Effects of Robotics and Artificial Intelligence on Business Management and Economics. In Recent Advances in Management and Engineering (pp. 132-137). CRC Press.
37. Ahmad, A. Y. A. B., Alzubi, J., James, S., Nyangaresi, V. O., Kutralakani, C., & Krishnan, A. (2024). Enhancing Human Action Recognition with Adaptive Hybrid Deep Attentive Networks and Archerfish Optimization. Computers, Materials & Continua, 80(3)
38. .

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

39. Ab Aziz, N. H., Alshdaifat, S. M., & Al Amosh, H. (2025). ESG Controversies and Firm Performance in ASEAN: Do Board Gender Diversity and Sustainability Committee Matter?. Business Strategy & Development, 8(1), e70094. https://doi.org/10.1002/bsd2.70094
40. Hasan, E. F., Alzuod, M. A., Al Jasimee, K. H., Alshdaifat, S. M., Hijazin, A. F., & Khrais, L. T. (2025). The Role of Organizational Culture in Digital Transformation and Modern Accounting Practices Among Jordanian SMEs. Journal of Risk and Financial Management, 18(3), 147. https://doi.org/10.3390/jrfm18030147
41. Al Rob, M. A., Nor, M. N. M., Alshdaifat, S. M., & Salleh, Z. (2025). Impact of competition and client size on big data analytics adoption: A TAM study of auditors. Qubahan Academic Journal, 5(1), 278-294. https://doi.org/10.48161/qaj.v5n1a1129
42. Ahmad, A. Y. B. (2024, May). CS Challenge in Creating AI-Integrated System. In 2024 4th International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE) (pp. 1515-1520). IEEE.
43. Ahmad, A. Y. B., Hannoon, A., Al-Daoud, K. I., Abu-Alsondos, I. A., & Al-Qaisieh, M. S. (2023). Assessment of Cloud Based Accounting Technology Adoption and Business Performance. Kurdish Studies, 11(3).
44. Ahmad, A. Y. B., Kumari, D. K., Shukla, A., Deepak, A., Chandnani, M., Pundir, S., & Shrivastava, A. (2024). Framework for Cloud Based Document Management System with Institutional Schema of Database. International Journal of Intelligent Systems and Applications in Engineering, 12(3s), 672-678.
45. Ahmad, A. Y. B., Tiwari, A., Nayeem, M. A., Biswal, B. K., Satapathy, D. P., Kulshreshtha, K., & Bordoloi, D. (2024). Artificial Intelligence Perspective Framework of the Smart Finance and Accounting Management Model. International Journal of Intelligent Systems and Applications in Engineering, 12(4s), 586-594.
46. Ahmad, A., Abusaimeh, H., Rababah, A., Alqsass, M., Al-Olima, N., & Hamdan, M. (2024). Assessment of effects in advances of accounting technologies on quality financial reports in Jordanian public sector. Uncertain Supply Chain Management, 12(1), 133-142.
47. Ahmad, A. (2024). Ethical implications of artificial intelligence in accounting: A framework for responsible ai adoption in multinational corporations in Jordan. International Journal of Data and Network Science, 8(1), 401-414.

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

48. Ahmad Y. A. Bani Ahmad, "Firm Determinants that Influences Implementation of Accounting Technologies in Business Organizations," WSEAS Transactions on Business and Economics, vol. 21, pp. 1-11, 2024

49. Ahmad, A. Y. B., William, P., Uike, D., Murgai, A., Bajaj, K. K., Deepak, A., & Shrivastava, A. (2024). Framework for Sustainable Energy Management using Smart Grid Panels Integrated with Machine Learning and IOT based Approach. International Journal of Intelligent Systems and Applications in Engineering, 12(2s), 581-590.

50. Ahmad, A. Y. Bani ahmad , (2019). Empirical Analysis on Accounting Information System Usage in Banking Sector in Jordan. Academy of Accounting and Financial Studies Journal, 23(5), 1-9.

51. Ahmad, A. Y. B., Gongada, T. N., Shrivastava, G., Gabbi, R. S., Islam, S., & Nagaraju, K. (2023). E-Commerce Trend Analysis and Management for Industry 5.0 using User Data Analysis. International Journal of Intelligent Systems and Applications in Engineering, 11(11s), 135-150.

52. Alhawamdeh, H., Al-Saad, S. A., Almasarweh, M. S., Al-Hamad, A. A.-S. A., Bani Ahmad, A. Y. A. B., & Ayasrah, F. T. M. (2023). The Role of Energy Management Practices in Sustainable Tourism Development: A Case Study of Jerash, Jordan. International Journal of Energy Economics and Policy, 13(6), 321–333. https://doi.org/10.32479/ijeep.14724

53. Allahham, M., & Ahmad, A. (2024). AI-induced anxiety in the assessment of factors influencing the adoption of mobile payment services in supply chain firms: A mental accounting perspective. International Journal of Data and Network Science, 8(1), 505-514.

54. Y. A. B. Ahmad, S. S. Kumari, M. S, S. K. Guha, A. Gehlot and B. Pant, "Blockchain Implementation in Financial Sector and Cyber Security System," 2023 International Conference on Artificial Intelligence and Smart Communication (AISC), Greater Noida, India, 2023, pp. 586-590, https://doi.org/10.1109/AISC56616.2023.10085045

55. Ahmad, A. Y. B., Atta, A. A. B., Shehadeh, M. A. H. A., Baniata, H. M. A., & Hani, L. Y. B. (2023). Fund family performance: Evidence from emerging countries. WSEAS Trans. Bus. Econ, 20, 951-964.

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

56. Alhawamdeh, H. M., & Alsmairat, M. A. (2019). Strategic decision making and organization performance: A literature review. International review of management and marketing, 9(4), 95.
57. Alhawamdeh, H., Al-Saad, S. A., Almasarweh, M. S., Al-Hamad, A. A. S., Ahmad, A. Y., & Ayasrah, F. T. M. (2023). The role of energy management practices in sustainable tourism development: a case study of Jerash, Jordan. International Journal of Energy Economics and Policy, 13(6), 321-333.
58. Alkhawaldeh, B., Alhawamdeh, H., Al-Afeef, M., Al-Smadi, A., Almarshad, M., Fraihat, B., ... & Alaa, A. (2023). The effect of financial technology on financial performance in Jordanian SMEs: The role of financial satisfaction. Uncertain Supply Chain Management, 11(3), 1019-1030.
59. Ali, O., Al-Duleemi, K., Al-Afeef, D. J., & Al-hawamdah, D. H. (2019). The Impact of the Decisions of the COBIT 5 Committee on the Effectiveness of the Internal Control Systems in the Jordanian Industrial Joint Stock Companies. The Journal of Social Sciences Research, 5(11), 1587-1599.
60. Al-Hawamdeh, H. M. (2020). The Intermediate Role of Organizational Flexibility in the Impact of Using Information Technology on the Efficiency of the Application of IT Governance in Jordanian Industrial Companies. Modern Applied Science, 14(7).
61. Al-Afeef, M., Fraihat, B., Alhawamdeh, H., Hijazi, H., AL-Afeef, M., Nawasr, M., & Rabi, A. (2023). Factors affecting middle eastern countries' intention to use financial technology. International Journal of Data and Network Science, 7(3), 1179-1192.
62. Alkhawaldeh, B. Y. S., Alhawamdeh, H., Almarshad, M., Fraihat, B. A. M., Abu-Alhija, S. M. M., Alhawamdeh, A. M., & Ismaeel, B. (2023). The effect of macroeconomic policy uncertainty on environmental quality in Jordan: Evidence from the novel dynamic simulations approach. Jordan Journal of Economic Sciences, 10(2), 116-131.among Faculty Members in Public and Private Universities in Jordan
63. Badawi, M., Alofan, F., Allahham, M., Sabra, S., Abubaker, N. M., & Ahmad, A. Y. B. (2024). The Impact of Supply Chain Agility on Operationalizing Sustainable Procurement the Mediating Role of System and Process Integration in the Pharmaceutical Sector in Saudi Arabia. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 1632-1650.

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

64. Allahham, M. A. H. M. O. U. D., Sharabati, A. A. A., Hatamlah, H. E. B. A., Ahmad, A. Y. B., Sabra, S., & Daoud, M. K. (2023). Big data analytics and AI for green supply chain integration and sustainability in hospitals. WSEAS Transactions on Environment and Development, 19, 1218-1230
65. Alkhawaldeh, A., Al-Shaer, B., Aleissa, T. Y. A., Abubaker, J. Y., Alwahshat, Z. M., Bani Ahmad, A. Y., & Dahbour, S. A. (2024). The Role of the Belt and Road Initiative in Increasing China's Influence in the World (2013-2023). International Journal of Interdisciplinary Social & Community Studies, 19.(2)
66. Almestarihi, R., Ahmad, A. Y. A. B., Frangieh, R., Abu-AlSondos, I., Nser, K., & Ziani, A. (2024). Measuring the ROI of paid advertising campaigns in digital marketing and its effect on business profitability. Uncertain Supply Chain Management, 12(2), 1275-1284.
67. Fraihat, B. A. M., Alhawamdeh, H., Younis, B., Alkhawaldeh, A. M. A., & Al Shaban, A. (2023). The Effect of Organizational Structure on Employee Creativity: The Moderating Role of Communication Flow: A Survey Study
68. Selvasundaram, K., Jayaraman, S., Chinthamani, S. A. M., Nethravathi, K., Ahmad, A. Y. B., & Ravichand, M. (2024). Evaluating the Use of Blockchain in Property Management for Security and Transparency. In Recent Technological Advances in Engineering and Management (pp. 193-197). CRC Press.
69. Ramadan, A., Maali, B., Morshed, A., Baker, A. A. R., Dahbour, S., & Ahmad, A. B. (2024). Optimizing working capital management strategies for enhanced profitability in the UK furniture industry: Evidence and implications. Journal of Infrastructure, Policy and Development, 8(9), 6302.
70. Fouzdar, A. S., Yamini, S., Biswas, R., Jindal, G., Ahmad, A. Y. B., & Dawar, R. (2024). Considering the Use of Blockchain for Supply Chain Authentication Management in a Secure and Transparent Way. In Recent Technological Advances in Engineering and Management (pp. 259-264). CRC Press.
71. Feng, Y., Ahmad, S. F., Chen, W., Al-Razgan, M., Awwad, E. M., Ayassrah, A. Y. B. A., & Chi, F. (2024). Design, analysis, and environmental assessment of an innovative municipal solid waste-based multigeneration system integrating LNG cold utilization and seawater desalination. Desalination, 117848.

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

72. Zhang, L., Ahmad, S. F., Cui, Z., Al Razgan, M., Awwad, E. M., Ayassrah, A. Y. B. A., & Shi, K. (2024). Energy, exergy, hermoeconomic analysis of a novel multi-generation system based on geothermal, kalina, double effect absorption chiller, and LNG regasification. Desalination, 117830.
73. Iqbal, S., Tian, H., Muneer, S., Tripathi, A., & Ahmad, A. Y. B. (2024). Mineral resource rents, fintech technological innovation, digital transformation, and environmental quality in BRI countries: An insight using panel NL-ARDL. Resources Policy, 93, 105074.
74. Geetha, B. T., Gnanaprasuna, E., Ahmad, A. Y. B., Rai, S. K., Rana, P., & Kapila, N. (2024, March). Novel Metrics Introduced to Quantify the Level of Circularity in Business Models Enabled by Open Innovation. In 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies (pp. 1-6). IEEE.
75. Sharabati, A. A. A., Allahham, M., AbuSaimeh, H., Ahmad, A. Y. B., Sabra, S., & Daoud, M. K. (2023). Effects of artificial integration and big data analysis on economic viability of solar microgrids: mediating role of cost benefit analysis. Operational Research in Engineering Sciences: Theory and Applications, 6(3).
76. Ahmad, A. Y. B., Allahham, M., Almajali, W. I., Ayasrah, F. T., & Sabra, S. (2024, December). Smart Logistics Services: How Artificial Intelligence Transforms Decision-Making. In 2024 25th International Arab Conference on Information Technology (ACIT) (pp. 1-4). IEEE.
77. Naved, M., Kole, I. B., Bhope, A., Gautam, C. S., Ahmad, A. Y. B., & Lourens, M. (2024, March). Managing Financial Operations in the Blockchain Revolution to Enhance Precision and Safety. In 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies (pp. 1-6). IEEE.
78. Geetha, B. T., Kafila, K., Ram, S. T., Narkhede, A. P., Ahmad, A. Y. B., & Tiwari, M. (2024, March). Creating Resilient Digital Asset Management Frameworks in Financial Operations Using Blockchain Technology. In 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies (pp. 1-7). IEEE.
79. Y. A. B. Ahmad, N. Verma, N. M. Sarhan, E. M. Awwad, A. Arora and V. O. Nyangaresi, "An IoT and Blockchain-Based Secure and Transparent Supply Chain Management Framework in Smart Cities Using Optimal Queue Model," in IEEE Access, vol. 12, pp. 51752-51771, 2024, doi:10.1109/ACCESS.2024.3376605

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

80. Bani Ahmad, A. Y., Fraihat, B. A. M., Hamdan, M. N., Ayasrah, F. T. M., Alhawamdeh, M. M., & Al-Shakri, K. S. (2024). Examining the mediating role of organizational trust in the relationship between organizational learning and innovation performance: A study of information systems and computer science service firms.
81. Almarshad, M. N., Alwaely, S. A., Alkhawaldeh, B. Y., Al Qaryouti, M. Q. H., & Bani Ahmad, A. Y. (2024). The Mediating Role of Energy Efficiency Measures in Enhancing Organizational Performance: Evidence from the Manufacturing Sector in Jordan.
82. AlKhawaldeh, B. Y. S., Al-Smadi, A. W., Ahmad, A. Y., El-Dalahmeh, S. M., Alsuwais, N., & Almarshad, M. N. (2024). Macroeconomic determinants of renewable energy production in Jordan. International Journal of Energy Economics and Policy, 14(3), 473-481.
83. Ahmad, A. Y., Jain, V., Verma, C., Chauhan, A., Singh, A., Gupta, A., & Pramanik, S. (2024). CSR Objectives and Public Institute Management in the Republic of Slovenia. In Ethical Quandaries in Business Practices: Exploring Morality and Social Responsibility (pp. 183-202). IGI Global
84. Mahafzah, A. H., & Abusaimeh, H. (2018). Optimizing power-based indoor tracking system for wireless sensor networks using ZigBee. International Journal of Advanced Computer Science and Applications, 9(12).
85. Bani Atta, A. A., Ali Mustafa, J., Al-Qudah, S. S., Massad, E., & Ahmad, A. B. (2023). The effect of macroprudential regulation on banks' profitability during financial crises [Specialissue]. Corporate Governance and Organizational Behavior Review, 7(2), 245-258.
86. Cheng, Congbin, Sayed Fayaz Ahmad, Muhammad Irshad, Ghadeer Alsanie, Yasser Khan, Ahmad Y. A. Bani Ahmad (Ayassrah), and Abdu Rahman Aleemi. 2023. "Impact of Green Process Innovation and Productivity on Sustainability: The Moderating Role of Environmental Awareness" Sustainability 15, no. 17: 12945. https://doi.org/10.3390/su151712945
87. Atta, A., Baniata, H., Othman, O., Ali, B., Abughaush, S., Aljundi, N., & Ahmad, A. (2024). The impact of computer assisted auditing techniques in the audit process: an assessment of performance and effort expectancy. International Journal of Data and Network Science, 8(2), 977-988.

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

88. ALLAHHAM, M., SHARABATI, A. A. A., HATAMLAH, H., AHMAD, A. Y. B., SABRA, S., & DAOUD, M. K. Big Data Analytics and AI for Green Supply Chain Integration and Sustainability in Hospitals.Magboul, I., Jebreel, M., Dweiri, M., Qabajeh, M., Al-Shorafa, A., & Ahmad, A. (2024). Antecedents and outcomes of green information technology Adoption: Insights from an oil industry. International Journal of Data and Network Science, 8(2), 921-934.

89. Daoud, M. K., Al-Qeed, M., Ahmad, A. Y. B., & Al-Gasawneh, J. A. (2023). Mobile Marketing: Exploring the Efficacy of User-Centric Strategies for Enhanced Consumer Engagement and Conversion Rates. International Journal of Membrane Science and Technology, 10(2), 1252-1262.

90. Daoud, M., Taha, S., Al-Qeed, M., Alsafadi, Y., Ahmad, A., & Allahham, M. (2024). EcoConnect: Guiding environmental awareness via digital marketing approaches. International Journal of Data and Network Science, 8(1), 235-242.

91. Fraihat, B. A. M., Ahmad, A. Y. B., Alaa, A. A., Alhawamdeh, A. M., Soumadi, M. M., Aln'emi, E. A. S., & Alkhawaldeh, B. Y. S. (2023). Evaluating Technology Improvement in Sustainable Development Goals by Analysing Financial Development and Energy Consumption in Jordan. International Journal of Energy Economics and Policy, 13(4), 348

92. Al-Dweiri, M., Ramadan, B., Rawshdeh, A., Nassoura, A., Al-Hamad, A., & Ahmad, A. (2024). The mediating role of lean operations on the relationship between supply chain integration and operational performance. Uncertain Supply Chain Management, 12(2), 1163-1174.

93. Lin, C., Ahmad, S. F., Ayassrah, A. Y. B. A., Irshad, M., Telba, A. A., Awwad, E. M., & Majid, M. I. (2023). Green production and green technology for sustainability: The mediating role of waste reduction and energy use. Heliyon, e22496.

94. K. Daoud, D. . Alqudah, M. . Al-Qeed, B. A. . Al Qaied, and A. Y. A. B. . Ahmad, "The Relationship Between Mobile Marketing and Customer Perceptions in Jordanian Commercial Banks: The Electronic Quality as A Mediator Variable", ijmst, vol. 10, no. 2, pp. 1360-1371, Jun. 2023

95. Mohammad Jebreel, Mohammad Alnaimat, Amjad Al-Shorafa, Majed Qabajeh, Mohammad Alqsass, & Ahmad Bani Ahmad. (2023). The Impact of Activity Ratios on Change in Earnings (Case Study:Based on Jordanian Food Companies). Kurdish

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

Studies, 11(2), 4551–4560. Retrieved from https://kurdishstudies.net/menu-script/index.php/KS/article/view/1044

96. Mohammad Alqsass, Munir Al-Hakim, Qais Al Kilani, Lina Warrad, Majed Qabajeh, Ahmad Y. A.Bani Ahmad, & Adnan qubbaja. (2023). The Impact of Operating Cash Flow on Earnings Per Share (Case Study Based on Jordanian Banks). Kurdish Studies, 11(2), 2718–2729. Retrieved from https://kurdishstudies.net/menu-script/index.php/KS/article/view/831
97. Mohammad Alqsass, Munir Al-Haki, Mohammad Dweiri, Majed Qabajeh, Dmaithan almajali, Ahmad Bani Ahmad, & Adnan Qubbaja. (2023). The Impact of Current Ratio on Net Profit Margin (Case Study: Based on Jordanian Banks). Kurdish Studies, 11(2), 2894–2903. Retrieved from https://kurdishstudies.net/menu-script/index.php/KS/article/view/834
98. Mustafa, J. A., ATTA, A. A. B., AHMAD, A. Y. B., SHEHADEH, M., & Agustina, R. (2023). Spillover Effect in Islamic and Conventional Fund Family: Evidence from Emerging Countries. WSEAS Transactions on Business and Economics, 20, 1042-1058.
99. Mohsin, H. J., Hani, L. Y. B., Atta, A. A. B., Al-Alawnh, N. A. K., Ahmad, A. B., & Samara, H. H. (2023). THE IMPACT OF DIGITAL FINANCIAL TECHNOLOGIES ON THE DEVELOPMENT OF ENTREPRENEURSHIP: EVIDENCE FROM COMMERCIAL BANKS IN THE EMERGING MARKETS.
100. Ni, L., Ahmad, S. F., Alshammari, T. O., Liang, H., Alsanie, G., Irshad, M., ... & Ayassrah, A. Y. B. A. (2023). The role of environmental regulation and green human capital towards sustainable development: The mediating role of green innovation and industry upgradation. Journal of Cleaner Production, 138497.
101. Peng, Yixuan, Sayed Fayaz Ahmad, Ahmad Y. A. Bani Ahmad, Mustafa S. Al Shaikh, Mohammad Khalaf Daoud, and Fuad Mohammed Hussein Alhamdi. 2023. "Riding the Waves of Artificial Intelligence in Advancing Accounting and Its Implications for Sustainable Development Goals" Sustainability 15, no. 19: 14165. https://doi.org/10.3390/su151914165
102. Peiran Liang, Yulu Guo, Sohaib Tahir Chauhdary, Manoj Kumar Agrawal, Sayed Fayaz Ahmad, Ahmad Yahiya Ahmad Bani Ahmad, Ahmad A. Ifseisi, Tiancheng ,Ji,2024" Sustainable development and multi-aspect analysis of a novel polygeneration

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

,system using biogas upgrading and LNG regasification processes, producing power ,heating, fresh water and liquid CO2",Process Safety and Environmental Protection

103. ,Peiran Liang, Yulu Guo, Tirumala Uday Kumar Nutakki, Manoj Kumar Agrawal ,Taseer Muhammad, Sayed Fayaz Ahmad, Ahmad Yahiya Ahmad Bani Ahmad ,Muxing Qin 2024. " Comprehensive assessment and sustainability improvement of a natural gas power plant utilizing an environmentally friendly combined cooling heating and power-desalination arrangement" Journal of Cleaner Production,Volume, ,436,,140387
104. Y. A. Bani Ahmad, Y. M. A. Tarshany, F. T. M. Ayasrah, F. S. Mohamad, S. I. A. Saany and B. Pandey, "The Role of Cybersecurity in E-Commerce to Achieve the Maqasid of Money," 2023 International Conference on Computer Science and Emerging Technologies (CSET), Bangalore, India, 2023, pp. 1-8, doi: 10.1109/CSET58993.2023.10346972.
105. Rumman, G., Alkhazali, A., Barnat, S., Alzoubi, S., AlZagheer, H., Dalbouh, M., ... & Darawsheh, S. (2024). The contemporary management accounting practices adoption in the public industry: Evidence from Jordan. International Journal of Data and Network Science, 8(2), 1237-1246.
106. Singh, R., Gupta, N. R., & Ahmad, A. Y. (2024). An Empirical Study on Challenges of Working From Home During COVID-19 on Work-Life Domains in the Education Sector in Bengaluru. In S. Singh, S. Rajest, S. Hadoussa, A. Obaid, & R. Regin (Eds.), Data-Driven Intelligent Business Sustainability (pp. 111-121). IGI Global. https://doi.org/10.4018/979-8-3693-0049-7.ch008
107. William, P., Ahmad, A. Y. B., Deepak, A., Gupta, R., Bajaj, K. K., & Deshmukh, R. (2024). Sustainable Implementation of Artificial Intelligence Based Decision Support System for Irrigation Projects in the Development of Rural Settlements. International Journal of Intelligent Systems and Applications in Engineering, 12(3s), 48-56.
108. Wang, C., Ahmad, S. F., Ayassrah, A. Y. B. A., Awwad, E. M., Irshad, M., Ali, Y. A., ... & Han, H. (2023). An empirical evaluation of technology acceptance model for Artificial Intelligence in E-commerce. Heliyon, 9(8).
109. Yahiya Ahmad Bani Ahmad (Ayassrah), Ahmad; Ahmad Mahmoud Bani Atta, Anas; Ali Alawawdeh, Hanan; Abdallah Aljundi, Nawaf; Morshed, Amer; and Amin Dahbour, Saleh (2023) "The Effect of System Quality and User Quality of

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

Information Technology on Internal Audit Effectiveness in Jordan, And the Moderating Effect of Management Support," Applied Mathematics & Information Sciences: Vol. 17: Iss. 5, Article 12. DOI: https://dx.doi.org/10.18576/amis/170512

110. Zhan, Y., Ahmad, S. F., Irshad, M., Al-Razgan, M., Awwad, E. M., Ali, Y. A., & Ayassrah, A. Y. B. A. (2024). Investigating the role of Cybersecurity's perceived threats in the adoption of health information systems. Heliyon, 10(1).
111. Raza, A., Al Nasar, M. R., Hanandeh, E. S., Zitar, R. A., Nasereddin, A. Y., & Abualigah, L. (2023). A Novel Methodology for Human Kinematics Motion Detection Based on Smartphones Sensor Data Using
112. Wu, J., Ahmad**, S. F., Ali, Y. A., Al-Razgan, M., Awwad, E. M., & Ayassrah, A. Y. B. A. (2024). Investigating the role of green behavior and perceived benefits in shaping green car buying behavior with environmental awareness as a moderator. Heliyon, 10(9).**
113. **Yahiya, A., & Ahmad, B. (2024). Automated debt recovery systems: Harnessing AI for enhanced performance. Journal of Infrastructure, Policy and Development, 8(7), 4893.**
114. **Al-Waely, D., Fraihat, B. A. M., Al Hawamdeh, H., Al-Taee, H., & Al-Kadhimi, A. M. M. N. (2021). Competitive Intelligence Dimensions as a Tool for Reducing the Business Environment Gaps: An Empirical Study on the Travel Agencies in Jordan. Journal of Hunan University Natural Sciences, 48(11).**
115. **Zhao, T., Ahmad, S. F., Agrawal, M. K., Ahmad, A. Y. A. B., Ghfar, A. A., Valsalan, P., ... & Gao, X. (2024). Design and thermo-e**nviro-economic analyses of a novel thermal design process for a CCHP-desalination application using LNG regasification integrated with a gas turbine power plant. Energy, 295, 131003.
116. Wu, J., Ahmad, S. F., Ali, Y. A., Al-Razgan, M., Awwad, E. M., & Ayassrah, A. Y. B. A. (2024). Investigating the role of green behavior and perceived benefits in shaping green car buying behavior with environmental awareness as a moderator. Heliyon, 10(9).
117. Wang, M., Ahmad, S. F., Agrawal, M. K., Ahmad, A. Y. A. B., Awan, A. B., Usmani, Y. S., ... & Han, W. (2025). Thermodynamic, economic, and environmental footprint

Received: August 11, 2025

Volume 38 No. 9s, 2025

ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

assessments and optimization of an innovative biogas-driven heat integration network, producing power, cooling, and heating. *Energy*, *322*, 135379.

118. William, P., Ahmad, A. Y. B., Deepak, A., Gupta, R., Bajaj, K. K., & Deshmukh, R. (2024). Sustainable Implementation of Artificial Intelligence Based Decision Support System for Irrigation Projects in the Development of Rural Settlements. International Journal of Intelligent Systems and Applications in Engineering, 12(3s), 48-56.
119. Badwan, N., Al-Khazaleh, S., Qubbaj, I., & Bani Ahmad, A. Y. (2025). Dependence structure of the US dollar index and crude oil prices: a regime-switching copula approach. *Journal of Financial Economic Policy*.
120. Ni, L., Fayaz Ahmad, S., Alsanie, G., Lan, N., Irshad, M., Bin Saeed, R. H., ... & Khan, Y. (2024). Investigating the role of green curriculum in shaping pro-environmental behaviors and environmental values orientation for sustainability. *International Journal of Sustainability in Higher Education*, *25*(8), 1537-1557.
121. Zhao, T., Ahmad, S. F., Agrawal, M. K., Ahmad, A. Y. A. B., Ghfar, A. A., Valsalan, P., ... & Gao, X. (2024). Design and thermo-enviro-economic analyses of a novel thermal design process for a CCHP-desalination application using LNG regasification integrated with a gas turbine power plant. Energy, 295, 131003.
122. Ahmad, A. Y. B. (2024, May). CS Challenge in Creating AI-Integrated System. In 2024 4th International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE) (pp. 1515-1520). IEEE.
123. Yahiya, A., & Ahmad, B. (2024). Automated debt recovery systems: Harnessing AI for enhanced performance. Journal of Infrastructure, Policy and Development, 8(7), 4893.
124. Singh, R., Gupta, N. R., & Ahmad, A. Y. (2024). An Empirical Study on Challenges of Working From Home During COVID-19 on Work-Life Domains in the Education Sector in Bengaluru. In S. Singh, S. Rajest, S. Hadoussa, A. Obaid, & R. Regin (Eds.), Data-Driven Intelligent Business Sustainability (pp. 111-121). IGI Global. https://doi.org/10.4018/979-8-3693-0049-7.ch008
125. Cheng, Congbin, Sayed Fayaz Ahmad, Muhammad Irshad, Ghadeer Alsanie, Yasser Khan, Ahmad Y. A. Bani Ahmad (Ayassrah), and Abdu Rahman Aleemi. 2023. "Impact of Green Process Innovation and Productivity on Sustainability: The Moderating Role of Environmental Awareness" Sustainability 15, no. 17: 12945. https://doi.org/10.3390/su151712945

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

126. Bani Ahmad, A. Y., Fraihat, B. A. M., Hamdan, M. N., Ayasrah, F. T. M., Alhawamdeh, M. M., & Al-Shakri, K. S. (2024). Examining the mediating role of organizational trust in the relationship between organizational learning and innovation performance: A study of information systems and computer science service firms.
127. Almarshad, M. N., Alwaely, S. A., Alkhawaldeh, B. Y., Al Qaryouti, M. Q. H., & Bani Ahmad, A. Y. (2024). The Mediating Role of Energy Efficiency Measures in Enhancing Organizational Performance: Evidence from the Manufacturing Sector in Jordan.
128. AlKhawaldeh, B. Y. S., Al-Smadi, A. W., Ahmad, A. Y., El-Dalahmeh, S. M., Alsuwais, N., & Almarshad, M. N. (2024). Macroeconomic determinants of renewable energy production in Jordan. International Journal of Energy Economics and Policy, 14(3), 473-481.
129. Ahmad, A. Y. Bani ahmad , (2019). Empirical Analysis on Accounting Information System Usage in Banking Sector in Jordan. Academy of Accounting and Financial Studies Journal, 23(5), 1-9.
130. Feng, Y., Ahmad, S. F., Chen, W., Al-Razgan, M., Awwad, E. M., Ayassrah, A. Y. B. A., & Chi, F. (2024). Design, analysis, and environmental assessment of an innovative municipal solid waste-based multigeneration system integrating LNG cold utilization and seawater desalination. Desalination, 117848.
131. Ahmad, A. Y. A. B. (2024, April). The Changing Role of Accountants in the AI Era: Evolving Skill Sets and Career Pathways. In 2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS) (Vol. 1, pp. 1-5). IEEE..
132. Zhang, L., Ahmad, S. F., Cui, Z., Al Razgan, M., Awwad, E. M., Ayassrah, A. Y. B. A., & Shi, K. (2024). Energy, exergy, hermoeconomic analysis of a novel multi-generation system based on geothermal, kalina, double effect absorption chiller, and LNG regasification. Desalination, 117830.
133. Almestarihi, R., Ahmad, A. Y. A. B., Frangieh, R., Abu-AlSondos, I., Nser, K., & Ziani, A. (2024). Measuring the ROI of paid advertising campaigns in digital marketing and its effect on business profitability. Uncertain Supply Chain Management, 12(2), 1275-1284.

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

134. Fraihat, B. A. M., Alhawamdeh, H., Younis, B., Alkhawaldeh, A. M. A., & Al Shaban, A. (2023). The Effect of Organizational Structure on Employee Creativity: The Moderating Role of Communication Flow: A Survey Study
135. Iqbal, S., Tian, H., Muneer, S., Tripathi, A., & Ahmad, A. Y. B. (2024). Mineral resource rents, fintech technological innovation, digital transformation, and environmental quality in BRI countries: An insight using panel NL-ARDL. Resources Policy, 93, 105074.
136. Geetha, B. T., Gnanaprasuna, E., Ahmad, A. Y. B., Rai, S. K., Rana, P., & Kapila, N. (2024, March). Novel Metrics Introduced to Quantify the Level of Circularity in Business Models Enabled by Open Innovation. In 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies (pp. 1-6). IEEE.
137. Geetha, B. T., Kafila, K., Ram, S. T., Narkhede, A. P., Ahmad, A. Y. B., & Tiwari, M. (2024, March). Creating Resilient Digital Asset Management Frameworks in Financial Operations Using Blockchain Technology. In 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies (pp. 1-7). IEEE.
138. Perano, M., Cammarano, A., Varriale, V., Del Regno, C., Michelino, F., & Caputo, M. (2023). Embracing supply chain digitalization and unphysicalization to enhance supply chain performance: A conceptual framework. International Journal of Physical Distribution and Logistics Management, 53(5–6), 501–523. https://doi.org/10.1108/IJPDLM-06-2022-0201
139. Sharabati, A. A. A., Rehman, S. U., Malik, M. H., Sabra, S., Al-Sager, M., & Allahham, M. (2024). Is AI biased? Evidence from fintech-based innovation in supply chain management companies. International Journal of Data and Network Science, 8(3), 1839–1852. https://doi.org/10.5267/j.ijdns.2024.2.005
140. Sharabati, A. A., Ali, A., Ali, A., Allahham, M. I., Hussein, A. A., Alheet, A. F., & Mohammad, A. S. (2024). The impact of digital marketing on the performance of SMEs: An analytical study in light of modern digital transformations. Sustainability, 16(19), 8667. https://doi.org/10.3390/su16198667
141. Shehadeh, H., Shajrawi, A., Zoubi, M., & Daoud, M. (2024). The mediating role of ICT on the impact of supply chain management on organizational performance: A field study in pharmaceutical companies in Jordan. Uncertain Supply Chain Management, 12(2), 1251–1266. https://doi.org/10.5267/j.uscm.2023.11.011

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

142. Al-Ayyaf, Abdulrahman Ibrahim., and Al-Nsour, Iyad Abdel Fattah. (2024). Effect of innovation in communication message on financial customer relationships: New evidence from Saudi Arabia. Journal of Asian Business Strategy, Asian Economic and Social Society, 14(1), 61-69. https://doi.org/10.55493/5006.v14i1.5054
143. Al-Nsour , Iyad A. (2013). Examine the Relationship between Internal Marketing & Internal Service Quality in Saudi Public Hospitals. Research on Humanities and Social Sciences, 3 (19), 27-41.
144. Al-Nsour Iyad A, Hasnin, Eman Abdelhameed.m Almurad, Hussein Mohamad., and Allahham, Mahmoud Izzat. (2024).Journal of Information Systems Engineering & Management, 10 (54s), 1012-1029.
145. Al-Nsour, A. I., and Aiaf, A.A. (2024). Effect of Innovation in Communication Message on Financial Customer Relationships: New Evidence from Saudi Arabia. Journal of Asian Business Strategy, 14(1), 61–69. https://doi.org/10.55493/5006.v14i1.5054.
146. Al-Nsour, I, (2020). Effect of Brand Enhancement on Buying Behavior Towards the Sport Sponsorship Companies in Riyadh, KSA. International Journal of Business, Economics and Management, 7(2), 110-119.
147. Al-Nsour, I, (2023). The Impact of Social-media Celebrity on Buying Behavior of Retailer Customers in Riyadh, KSA. Jordan Journal of Business Administration, 20(1). https://doi.org/10.35516/jjba.v19i4.1719
148. Al-Nsour, I, A., Tarfoder, A, K., and Mhd Yusak, Nurul Aqilah. (2023). Impact of Social Media Marketing on the Buying Intention of Fashion Products. Res Militaris, 3 (13),617 – 632.
149. Al-Nsour, I. (2019). The Role of Sports Sponsorship in Improving Brand Equity: A Study on The Saudi Fans in Riyadh. Science Arena Publications. International Journal of Business Management, 4 (4), 97-113.
150. Al-Nsour, I. (2020). Effect of Brand Enhancement on Buying Behavior Towards the Sport Sponsorship Companies in Riyadh, KSA. International Journal of Business, Economics and Management, 7(2), 110-119.
151. Alnsour, I. (2022). The impact of the use of electronic social platforms on the pre-behavior of the Saudi buyer during the coronavirus pandemic. Journal of Administrative and Economic Sciences, Qassim University, 15(1), 102–132.

Received: August 11, 2025

Volume 38 No. 9s, 2025

ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

152. Al-Nsour, I. (2023). The Impact of Social Media Celebrity on Buying Behavior of Retailer Customers in Riyadh, KSA. Jordan Journal of Business Administration, 20(1). https://doi.org/10.35516/jjba.v19i4.1719.
153. Al-Nsour, I. (2024). Impact of Social-media Engagement and Entertainment on the Buying Intention from Online Fashion Stores in Jordan. Jordan Journal of Business Administration, 20(3). https://doi.org/10.35516/jjba.v20i3.1014.
154. Al-Nsour, I. A. (2017). WOM Effectiveness in Improving the Purchasing Behavior: Comparative Study on the Private Hospitals Inpatients in Jordan and Saudi Arabia. Arab Economic and Business Journal, 12(1), 13-28. https://doi.org/10.1016/j.aebj.2017.04.003.
155. Al-Nsour, I. A. (2022). The Effect of Sports Sponsorship Activities on the Brand Equity: A Study on Sports Clubs and Their Fans in Jordan. Jordan Journal of Business Administration, 18(1), 123-144.
156. Al-Nsour, I. A. (2024). Building a Model for E-Interaction Via Facebook Platform: "The IN-IMSIU Model for E-Interaction". Journal of Management World, 2024(5), 348-362. https://doi.org/10.53935/jomw.v2024i4.1120.
157. Al-Nsour, I. A. . . (2023). Impact of Political Marketing Mix on Voting to the Parliamentary Candidate: A Study on the Jordanian Public Trends towards the Voting of the 19th Parliament. Jordan Journal of Business Administration, 19(1). https://doi.org/10.35516/jjba.v19i1.742.
158. Al-Nsour, I. A. A. (2023). The Impact of Social-media Celebrity on Buying Behavior of Retailer Customers in Riyadh, KSA. Jordan Journal of Business Administration, 20(1). https://doi.org/10.35516/jjba.v19i4.1719.
159. Al-Nsour, I. A. A., & Al-Saleh, N. H. (2025). Impact of Humor Communication Message Elements on Brand Equity Mediator for Customer Relationships A Study on Fast Food Restaurant Customers via the X Platform in Saudi Arabia. Arab Journal of Administration, (), 1-24. doi: 10.21608/aja.2025.356476.1791.
160. AL-Nsour, I. A., & Al-Sahli, S. A. (2022). Effects of Cash and Non-Cash Communications on Brand Awareness: An Empirical Evidence from Saudi Arabia. The Journal of Asian Finance, Economics and Business, 9(5), 507–518. https://doi.org/10.13106/JAFEB.2022.VOL9.NO5.0507.

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

161. Al-Nsour, I. A., & Hasnin, E. A. H. (2024). Leveraging Humor Content in Effective Communications for the Saudi Food Industry. Journal of Management World, 2024(3), 170-184. https://doi.org/10.53935/jomw.v2024i4.1103.
162. Al-Nsour, I. A., Al-Nsour, I. R., & Al-Otoum, F. J. (2021). Enhancing Customers' Satisfaction Using Loyalty Rewards Programs: Evidence from Jordanian Banks. The Journal of Asian Finance, Economics and Business, 8(11), 297–305. https://doi.org/10.13106/JAFEB.2021.VOL8.NO11.0297.
163. Al-Nsour, I. A., and A. K. Tarofder. (2022). Impact of social media entertainment on the online purchase decision study on youth buyers of Luxury products via Facebook. EPRA International Journal of Economics, Business and Management Studies (EBMS) 9 (9),10-17.
164. Al-Nsour, I. A., and Al-Sahli, S. A. (2022). Effects of Cash and Non-Cash Communications on Brand Awareness: An Empirical Evidence from Saudi Arabia. The Journal of Asian Finance, Economics and Business, 9(5), 507–518.
165. Al-Nsour, I., & Alsahli, S. (2025). The Brand Involvement as a Mediator Between Sports Sponsorship and Jordanian Audience Behavior: Psychological-Communication Analysis. Arab Journal of Administration, (), 1-32. doi: 10.21608/aja.2025.404536.1897.
166. Al-Nsour, I., (2019). The Role of Sports Sponsorship in Improving Brand Equity: A Study on the Saudi Fans in Riyadh. Science Arena Publications. International Journal of Business Management, 4 (4),97-113.
167. Al-Nsour, I., and Al-Shaibani, M.F. (2024). Effect of Social Media Involvement on Buyer Behavior: Evidence from Jordan Fashion Market via Facebook Platform. Journal of International Crisis and Risk Communication Research, 7(S12), 341–359.
168. Al-Nsour, I., Somili, H., and Allahham, M., (2021). Impact of Social Networks Safety on Marketing Information Quality in the COVID-19 Pandemic in Saudi Arabia. Journal of Asian Finance, Economics and Business, 8 (12), 0223–0231.
169. Alnsour, Ibrahim Radwan., Al-Nsour, Iyad A. , Malkawi, Eyad Mohammad., and Allahham, Mahmoud Izzat. (2025). The Role of Internet of Things in Fintech Adoption Within Banking Sector: The Moderating Role of Digital Transformation Capability. Lex Localis - Journal of Local Self-Government, 23(S4), 2486-2510. https://doi.org/10.52152/k4pew155.

Received: August 11, 2025

Volume 38 No. 9s, 2025

ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

170. Alnsour, Ibrahim Radwan., Al-Nsour, Iyad A., Malkawi, Eyad Mohammad., Allahham, Mahmoud Izzat. (2025). The Role of Internet of Things in Fintech Adoption Within Banking Sector: The Moderating Role of Digital Transformation Capability. (2025). Lex Localis - Journal of Local Self-Government, 23(S4), 2486-2510. https://doi.org/10.52152/k4pew155.
171. Al-Nsour, Iyad (2018). Involvement Degree of Women in the Buying Decision of Saudi Family. Arab Journal of Administration, 38 (4), 231-252. doi: 10.21608/aja.2018.22445.
172. Al-Nsour, Iyad A. (2017). Effect of Applying the Marketing Intelligence on Enhancing Innovation: Comparative Study between Productive & Service Sectors in Jordan. Arab Journal of Administration, 37(2), 219-246.
173. Al-Nsour, Iyad A., (2018). Involvement Degree of Women in the Buying Decision of the Saudi Family. Arab Journal of Administration, 38(4), 231-252. doi: 10.21608/aja.2018.22445.
174. Al-Nsour, Iyad A., Athaydi, Raed A., and Al Tamim, Mohammad J. (2023).The Effects of Sports Sponsorship on Buying Response for Jordanian Fans. Journal of Media & Management, 5(4), 1-9.
175. Al-Nsour, Iyad A., Hasnin, Eman Abdelhameed., Almurad, Hussein Mohamad., and Allahham, Mahmoud Izzat.(2024).The Relationship Between Social Media Trust and Purchase Decision in the Fashion Industry. ournal of Information Systems Engineering & Management, 10(54s), 1012-1029.
176. Al-Nsour, Iyad Abed Al-Fattah., Hasnin., Eman Abdel Hameed & Al-Johani, Moayad Ali AL-Johani. (2024). Using Artificial Intelligence to Enhance Customer Commuication at Major Sausi Companies, 4 (1), 619-636.
177. Al-Nsour, Iyad. (2019). Planning of Marketing Communication Activities in Jordanian Pharmaceutical Companies Using the Balanced Scorecard. New Media and Mass Communication,77, 80.
178. Al-Nsour, Iyad. (2020). Effect of Sales Promotion Programs On Purchasing Behavior at Hypermarkets In Riyadh, KSA. EPRA International Journal of Economic and Business Review, 9 (5), 507–518.

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

179. Al-Nsour, Iyad. (2022). Measuring the Interaction among Jordanians via Facebook Network "AProposed Model for Bridging the E-Interaction Gaps "IN Model". Turkish Journal of Computer and Mathematics Education, 14 (12), 1078 – 1101.
180. Al-Nsour, Iyad., and Al-Sahli, Saud Abdullah (2024). Impact of Value on Customer Retention of Fast Food Restaurants in Saudi Arabia. Arab Journal of Administration, 44 (3), 305-328. doi: 10.21608/aja.2023.202772.1420
181. Al-Nsour., Iyad. (2019). Planning of Marketing Communication Activities in Jordanian Pharmaceutical Companies Using the Balanced Scorecard .New Media and Mass Communication,77,63-80.
182. Al-Qahtani1,Mai Abdel Aziz., and Al-Nsour, Iyad A. (2025).Leverage Digital Advertising to Gain a Competitive Advantage for the Beauty Care Centers in Riyadh. Pakistan Journal of Life and Social Sciences,23 (1),1026-1046.
183. Al-Sahli S., and Al-Nsour, I. (2022). Effects of Cash and Non-Cash Communications on Brand Awareness: An Empirical Evidence from Saudi Arabia. Journal of Asian Finance, Economics and Business, 9 (5), 507–518.
184. Bin Khunin, Laila Khaled, and Al-Nsour, Iyad Abed Al-Fattah Al-Nsour (2024). 2024. Impact of Digital Advertising Strategies on the Competitive Advantage of SMEs in KSA. European Journal of Business and Management Research, 9, 2 (Apr. 2024), 91–98.
185. Iyad A. Al-Nsour , Majed Fahad Alshaibani. (2024). Effect of Social Media Involvement on Buyer Behavior Evidence from Jordan Fashion Market via FacebookPlatform. Journal of International Crisis and Risk Communication Research , 341–359. https://doi.org/10.63278/jicrcr.vi.998
186. Al-Nsour, I. A. . . (2023). Impact of Political Marketing Mix on Voting to the Parliamentary Candidate: A Study on the Jordanian Public Trends towards the Voting of the 19th Parliament. Jordan Journal of Business Administration, 19(1). https://doi.org/10.35516/jjba.v19i1.742
187. Moodhi Raid, Iyad A. Al-Nsour, Moyad Ali Al-Johani, Wafa Hamad AlJarba. (2024). Effect of Artificial Intelligence on Customer Relationship Marketing in Saudi Context. Journal of International Crisis and Risk Communication Research , 360–376. https://doi.org/10.63278/jicrcr.vi.999

Received: August 11, 2025

Volume 38 No. 9s, 2025
ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

188. Moodhi Raid, Iyad Abed Al-Fattah Al-Nsour, & Ibrahim Radwan Al-Nsour. (2024). The Causal Relationship between Returned Cheques and Economic Prosperity in Jordan. Educational Administration: Theory and Practice, 30(5). https://doi.org/10.53555/kuey.v30i5.3739.
189. Al-Nsour, I., & Alsahli, S. (2025). The Brand Involvement as a Mediator Between Sports Sponsorship and Jordanian Audience Behavior: Psychological-Communication Analysis. Arab Journal of Administration, (), 1-32. doi: 10.21608/aja.2025.404536.1897.
190. Al-Nsour, I. A. A., & Al-Saleh, N. H. (2025). Impact of Humor Communication Message Elements on Brand Equity Mediator for Customer Relationships A Study on Fast Food Restaurant Customers via the X Platform in Saudi Arabia. Arab Journal of Administration, (), 1-24. doi: 10.21608/aja.2025.356476.1791
191. Albashtawi, Zain., Alnsour., Ibrahim Radwan , Al-Nsour, Iyad A., Allahham, Mahmoud Izzat., and JAWABREH, Omar. (2025). THE ROLE OF BIG DATA ANALYTICS IN DEVELOPING LOGISTICS WITHIN RENEWABLE ENERGY SYSTEMS:THE MODERATING ROLE OF ENGINEERING SOLUTIONS. (2025). Lex Localis - Journal of Local Self-Government, 23(S2), 273-293. https://doi.org/10.52152/
192. Malkawi, Eyad Mohammad., AL-Malahmeh, Zaid Akram., Al-Nsour, Iyad A., and Allahham , Mahmoud. (2025).THE IMPACT OF DIGITAL MARKETING ON TOURIST ENGAGEMENT: EXPLORING SUSTAINABLE DEVELOPMENT IN JORDAN. (2025). Lex Localis - Journal of Local Self-Government, 23(S2), 294-314. https://doi.org/10.52152/800331
193. Alawneh, O.M.; Allahham, M.; Habeeb, A.F.H.; Almajali, W.; Al-Nsour, I.A.; Jawabreh, O. EVALUATING HOW BIG DATA ANALYSIS MEDIATES THE IMPACT OF DIGITAL MARKETING STRATEGIES ON TOURISM DEVELOPMENT IN JORDAN. Geoj. Tour. Geosites 2025, 62, 2053–2062, https://doi.org/10.30892/gtg.62405-1571.
194. Naqrash, Omar Mohammed Ali, Riad, Moodhi., and Al-Nsour , Iyad A. (2025). IMPACT OF SOCIAL MEDIA ON SAUDI BUYER BEHAVIOR IN THE FASHION MARKET. (2025). Lex Localis - Journal of Local Self-Government, 23(S5), 1876-1901. https://doi.org/10.52152/801499.

Received: August 11, 2025

Volume 38 No. 9s, 2025

ISSN: 1311-1728 (printed version); ISSN: 1314-8060 (on-line version)

195. Naqrash, Omar Mohammed Ali., Alsahli , Saud Abdulla., Al-Nsour, Iyad A., and Hasnin, Eman Abdelhameed. (2025). THE EFFECT OF FUNNY E-COMMUNICATIONS ON BRAND EQUITY: A STUDY ON SAUDI HOUSEHOLDS IN THE ELECTRICAL APPLIANCES MARKET. (2025). Lex Localis - Journal of Local Self-Government, 23(S4), 3749-3769. https://doi.org/10.52152/801138
196. Alsahli, Saud Abdulla., Al-Nsour, Iyad , A., and Allahham , Mahmoud Izzat. (2025). IMPROVING VISITOR AWARENESS THROUGH MARKETING LITERACY DURING RIYADH SEASON EVENTS. (2025). Lex Localis - Journal of Local Self-Government, 23(S4), 2511-2540. https://doi.org/10.52152/srvtb662
197. Technology, P. (2023). From stagnation to success: How business process reengineering can drive growth and innovation in business. International Journal of Innovative Technology and Exploring Engineering, 23(2), 4949–4966. https://www.journals.gaftim.com/index.php/ijtim/article/view/477
198. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509-533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7%3C509::AID-SMJ882%3E3.0.CO;2-Z
199. Vial, G. (2019). Understanding digital transformation: A review and a research agenda. The Journal of Strategic Information Systems,28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003
200. Wihelmina Afua Addy, Onyeka Chrisanctus Ofodile, Omotoya Bukola Adeoye, Adedoyin Tolulope Oyewole, Chinwe Chinazo Okoye, Olubusola Odeyemi, & Yinka James Ololade. (2024). Data-driven sustainability: How fintech innovations are supporting green finance. Engineering Science and Technology Journal, 5(3), 760–773. https://doi.org/10.51594/estj.v5i3.871
201. Zhang, X., Zhao, Y., & Liu, X. (2024). Can fintech promote environmental investment in heavily polluting enterprises? Evidence from China. Frontiers in Environmental Science, 12, 1373685. https://doi.org/10.3389/fenvs.2024.1373685

Received: August 11, 2025