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Digital-Era Leadership Readiness and Decision-Making in Pakistani Banks

Asif Ali[1], Inam Ullah Khan*[2]

[1]Phd Scholar, Department of Business Administration, University of Sialkot (USKT), Sialkot, Pakistan.

[2*]Assistant Professor, Department of Business Administration, University of Sialkot, Sialkot, Pakistan.

Corresponding author: malikinamullahkhan@gmail.com

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Digital transformation is reshaping banking decision-making, yet the role of leadership readiness in enabling this shift remains under-examined in emerging economies. This study reframes leadership readiness for the digital age by examining its influence on decision-making practices in Pakistan's banking sector. Drawing on Technology Readiness Theory and the Technology–Organization–Environment (TOE) framework, leadership readiness is conceptualized as a multidimensional construct comprising behavioral openness, digital awareness, and technological capability. Using a quantitative survey design, data were collected from leaders and managerial-level employees across public and private banks in Pakistan. Structural Equation Modelling (SEM) was employed to test the hypothesized relationships. The findings indicate that leadership readiness has a significant positive effect on the adoption of digital enablers, including AI-supported HR analytics and decision support systems. Digital enabler adoption, in turn, enhances organizational decision-making quality by promoting evidence-based and analytically grounded practices. Mediation analysis further reveals that digital enabler adoption partially mediates the relationship between leadership readiness and decision-making quality, underscoring the central role of technology assimilation in digital-era governance. This study contributes to the literature by positioning leadership readiness as a strategic antecedent of rational decision-making in banking and offers practical implications for leadership development and digital capability building in emerging market contexts.

1. Introduction

The banking sector worldwide is undergoing a profound transformation driven by digital technologies, with institutions increasingly relying on advanced tools such as artificial intelligence (AI), predictive analytics, decision support systems, and integrated human resource management (HRM) platforms to enhance operational efficiency and strategic decision-making (Yoganandham, 2024). In emerging economies, including Pakistan, digitalization presents both opportunities and challenges (Nadeem et al., 2024). While technology adoption promises efficiency, speed, and accuracy in decision-making, the success of such initiatives critically depends on leadership readiness—the ability of organizational leaders to understand, embrace, and leverage digital enablers effectively (Biswas et al., 2024).

Despite significant investments in digital infrastructure, Pakistani banks continue to face challenges in translating technological capabilities into improved decision-making outcomes (Ashraf et al., 2025). Previous studies have largely focused on technological adoption or organizational readiness in isolation, often neglecting the pivotal role of leadership in bridging the gap between potential and actualized benefits of digital transformation (FakhrHosseini et al., 2024). Leadership readiness encompasses not only the knowledge and skills to navigate digital tools but also behavioural openness, strategic foresight, and the capacity to influence organizational culture toward data-driven practices (Tsekouropoulos et al., 2025). Leaders who are digitally competent and receptive are more likely to drive successful adoption of digital enablers, ensuring that technology meaningfully enhances decision quality (Aldhi et al., 2025).

This study aims to fill this research gap by investigating how leadership readiness influences the adoption of digital enablers and, in turn, affects decision-making practices in Pakistan's banking sector. Specifically, it seeks to answer the following research questions:

1. How does leadership readiness influence digital decision-making in Pakistan's banking sector?
2. What role does digital enabler adoption play in linking leadership readiness to decision-making quality?
3. Which dimensions of leadership readiness are most critical for enabling digital decision-making in banks?

The significance of this study is twofold. Theoretically, it integrates leadership readiness with digital enabler adoption, advancing understanding of how human factors influence technology assimilation in emerging banking contexts. Practically, it provides actionable insights for banking executives and policymakers, highlighting strategies to cultivate digitally competent leadership, strengthen technology adoption, and enhance evidence-based decision-making.

The remainder of the paper is structured as follows: Section 2 reviews relevant literature on digital transformation, leadership readiness, digital enabler adoption, and decision-making frameworks; Section 3 develops the conceptual model and hypotheses; Section 4 details the research methodology; Section 5 presents the results; Section 6 discusses

the findings in light of theory and practice; Section 7 highlights managerial implications; and Section 8 concludes with limitations and directions for future research.

2. Literature Review

The literature on digital transformation, leadership readiness, and decision-making in the banking sector highlights the intertwined nature of technology adoption, human capability, and organizational performance. This review synthesizes global and local perspectives, with a particular focus on Pakistan's banking context, to establish a conceptual foundation for the present study.

2.1 Digital Transformation in Banking

Digital transformation in banking refers to the integration of digital technologies into all areas of banking operations, fundamentally changing how banks deliver value and make decisions. Globally, banks have increasingly adopted technologies such as AI, machine learning, predictive analytics, blockchain, and advanced HRM systems to enhance operational efficiency, risk management, and customer experience.

In emerging markets, including Pakistan, digital banking adoption has accelerated in recent years due to increasing mobile penetration, regulatory support, and competitive pressures. Despite this progress, Pakistani banks face significant challenges in translating digital investments into improved decision-making outcomes, largely due to gaps in technological assimilation, organizational readiness, and leadership capability. Studies indicate that while infrastructure is essential, leadership readiness remains a critical determinant of successful digital transformation (Hussain et al., 2022; Khan & Rehman, 2021).

2.2 Digital Enablers in Decision-Making

Digital enablers are tools, systems, and practices that facilitate the effective use of technology in organizational decision-making. In banking, key digital enablers include:

1. **AI-based HR Analytics:** Enables predictive insights into workforce performance, talent retention, and productivity, supporting strategic human resource decisions.
2. **Decision Support Systems (DSS):** Provide managers with actionable data to support evidence-based choices, reducing reliance on intuition.
3. **Integrated HRM Platforms:** Centralize HR processes, streamline information flow, and facilitate real-time monitoring of workforce metrics.
4. **Data Dashboards and Reporting Tools:** Offer visualized performance indicators that enhance operational transparency and managerial decision-making.

Empirical studies suggest that organizations leveraging digital enablers achieve higher efficiency, agility, and accuracy in decision-making processes. However, successful adoption is contingent upon leadership capability to interpret and act upon digital insights (Rana et al., 2020; Ali & Ahmed, 2019).

2.3 Leadership Readiness

Leadership readiness refers to the preparedness of organizational leaders to adopt, integrate, and leverage technological innovations. It encompasses three dimensions:

- **Behavioural Openness:** Willingness to embrace change and digital solutions.
- **Digital Awareness:** Understanding of technological tools, capabilities, and limitations.
- **Technological Capability:** Ability to use digital systems effectively to drive strategic outcomes.

In the banking sector, leadership readiness has been associated with improved decision quality, higher adoption rates of digital tools, and more effective change management. Leaders who are digitally competent can foster a culture of innovation, reduce resistance, and align digital initiatives with organizational strategy (Singh & Sharma, 2021).

2.4 Decision-Making Practices in Banking

Decision-making in banking can be categorized as **rational** or **intuitive**, with rational decision-making relying on structured analysis, data, and predictive insights. Digital enablers enhance rational decision-making by providing timely, accurate, and actionable information, allowing managers to assess risks, forecast outcomes, and make informed strategic choices.

Studies highlight that banks with low leadership readiness often underutilize digital tools, leading to suboptimal decisions despite technological availability. Conversely, digitally ready leaders can translate digital insights into effective decisions that improve operational performance and customer outcomes (Javed et al., 2022).

2.5 Theoretical Foundations

This study draws upon the following theoretical frameworks:

1. **Technology Readiness Theory (TRT):** Explains how individual attitudes and competencies influence technology adoption. Leadership readiness is conceptualized as a critical antecedent of organizational technology assimilation.
2. **Technology–Organization–Environment (TOE) Framework:** Positions organizational and environmental factors as enablers or barriers to technology adoption. Leadership readiness is examined within the organizational context, influencing the effectiveness of digital enablers.
3. **Diffusion of Innovation (DOI) Theory:** Supports the understanding of how digital innovations spread within an organization, emphasizing the role of leadership as change agents.

2.6 Research Gap

Despite the growing body of literature on digital transformation in banking, several critical gaps remain in understanding how leadership readiness enables digital decision-making, particularly within emerging economy contexts. First, existing studies have predominantly examined digital transformation through technological or organisational lenses, focusing on system adoption, IT capabilities, or fintech innovation, while giving

limited empirical attention to **leadership readiness as a multidimensional construct** shaping digital-era decision-making. Leadership is often treated as a generic control variable rather than a strategic antecedent that conditions the effective use of digital technologies in managerial decision processes.

Second, while prior research acknowledges the importance of data-driven and technology-supported decision-making, there is a lack of **integrated models** that explicitly link leadership readiness to **digital enabler adoption and decision-making quality**. Most studies analyse either leadership behaviours or digital tools in isolation, thereby overlooking the **mechanism through which leadership readiness translates into rational, evidence-based decisions via technology assimilation**. Empirical investigations that test mediation effects in this relationship remain particularly scarce in the banking literature.

Third, the majority of empirical evidence on leadership readiness and digital decision-making is drawn from **developed economies**, where institutional maturity, regulatory frameworks, and technological infrastructure differ substantially from those in emerging markets. Consequently, the applicability of these findings to countries such as Pakistan remains uncertain. The banking sector in Pakistan presents a unique context characterised by rapid digitalisation, regulatory pressure, and legacy organisational structures, yet it remains underrepresented in high-quality empirical studies.

Finally, although Technology Readiness Theory and the Technology–Organization–Environment (TOE) framework are widely used in technology adoption research, they have rarely been **applied jointly to explain leadership-driven digital decision-making in banking**. This theoretical disconnect limits a comprehensive understanding of how individual leadership attributes interact with organisational and technological factors to influence decision outcomes.

2.7 Conceptual Model and Hypotheses Development

This section presents the proposed conceptual model, theoretical underpinnings, and hypotheses for investigating the relationships among leadership readiness, digital enabler adoption, and decision-making quality in Pakistan's banking sector.

2.7.1 Conceptual Model

The proposed conceptual model is structured around three interrelated constructs that collectively explain digital decision-making in the banking context.

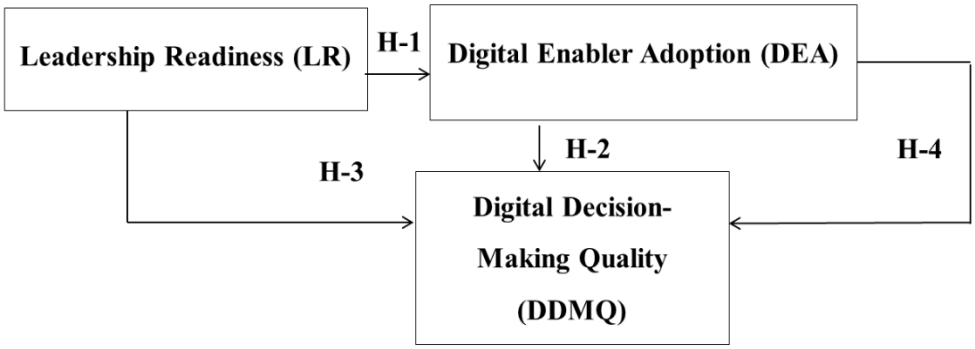
1. **Leadership Readiness (LR)** is conceptualised as a higher-order capability reflecting leaders' preparedness for the digital era. It encompasses behavioural openness to change and innovation, digital awareness regarding emerging technologies and analytics, and technological capability to support, govern, and champion digital systems within the organisation.
2. **Digital Enabler Adoption (DEA)** represents the extent to which banks institutionalise and effectively utilise key digital enablers, including AI-supported HR analytics, decision support systems, integrated HRM platforms, and organisational data dashboards. This construct captures not only the adoption of technologies but also their assimilation into routine managerial processes.

2.7.2 Digital Decision-Making Quality (DDDMQ)

Digital Decision-Making Quality (DDDMQ) denotes the effectiveness of managerial decision-making in digitally transforming banks, characterised by rationality, analytical rigour, reduced bias, and timeliness of decisions.

In line with the proposed model, leadership readiness is hypothesised to exert a positive influence on digital enabler adoption, reflecting the role of digitally prepared leaders in driving technology assimilation. Digital enabler adoption is, in turn, expected to significantly enhance digital decision-making quality by enabling evidence-based and systematic decision processes. Furthermore, the model proposes a mediating role of digital enabler adoption in the relationship between leadership readiness and decision-making quality, suggesting that leadership readiness translates into superior decision outcomes primarily through the effective adoption and use of digital technologies.

Figure No 1: Conceptual Model



2.8 Hypotheses Development

2.8.1 Leadership Readiness and Digital Enabler Adoption

Leadership readiness represents a critical antecedent of organizational digitalization, particularly in knowledge- and data-intensive sectors such as banking. Leaders who demonstrate behavioural openness, possess strong digital awareness, and exhibit technological capability are more likely to champion digital initiatives, allocate resources, and foster a supportive climate for technology use. In the banking context, such readiness enables the effective adoption and institutionalization of digital enablers, including AI-supported HR analytics, decision support systems, and integrated HRM platforms, which are essential for managing complexity and regulatory demands. Accordingly, leadership readiness is expected to play a decisive role in driving digital enabler adoption within banks.

H1: Leadership readiness positively influences digital enabler adoption in Pakistani banks

2.8.2 Digital Enabler Adoption and Digital Decision-Making Quality

Digital enablers enhance managerial decision-making by providing timely, accurate, and analytically rich information that supports systematic evaluation of alternatives. The use of AI-driven analytics, integrated HRM systems, and decision support tools enables banks to reduce reliance on intuition, minimise bias, and improve the speed and consistency of decisions. Prior studies indicate that organisations with higher levels of digital technology assimilation exhibit superior decision quality and operational effectiveness. Therefore, the adoption of digital enablers is expected to significantly improve digital decision-making quality in the banking sector.

H2: Digital enabler adoption positively influences digital decision-making quality in Pakistani banks.

2.8.3 Leadership Readiness and Digital Decision-Making Quality

Beyond its indirect effect through technology adoption, leadership readiness may exert a direct influence on decision-making quality. Digitally ready leaders are better equipped to interpret complex data, align decisions with strategic objectives, and respond proactively to environmental uncertainty. Their cognitive orientation and governance capabilities contribute to more rational, timely, and goal-aligned decisions, even in contexts where digital tools are still evolving. As such, leadership readiness is expected to directly enhance digital decision-making quality in banks.

H3: Leadership readiness positively influences digital decision-making quality in Pakistani banks.

2.8.4 Mediating Role of Digital Enabler Adoption

Digital enabler adoption is proposed as a key mechanism through which leadership readiness translates into improved decision-making outcomes. Leaders with high digital readiness facilitate not only the acquisition but also the effective integration and use of digital technologies within organisational processes. This technology assimilation, in turn, strengthens analytical rigour and evidence-based decision-making. The mediating role of digital enabler adoption underscores the interdependence of human leadership capabilities and technological infrastructure in shaping digital decision-making quality.

H4: Digital enabler adoption mediates the relationship between leadership readiness and digital decision-making quality in Pakistani banks.

2.8.3 Justification of the Conceptual Model

The proposed model is theoretically grounded in Technology Readiness Theory, which highlights the role of individual attitudes, competencies, and preparedness in shaping technology adoption. This perspective explains why leadership readiness functions as a foundational driver of digital enabler adoption. The Technology–Organization–Environment (TOE) framework further contextualizes technology adoption by accounting for organizational and technological conditions that influence the assimilation of digital enablers

in banking institutions. In addition, Diffusion of Innovation Theory positions leadership as a critical agent in legitimizing, promoting, and institutionalizing new technologies within organizations.

By integrating leadership readiness with digital enabler adoption and digital decision-making quality, the model offers a comprehensive explanation of how human and technological factors interact to shape decision-making in digitally transforming banks. This integrated approach addresses key gaps in the literature by moving beyond isolated examinations of leadership or technology and providing empirically testable insights relevant to banking institutions in emerging economy contexts.

3. Research Methodology

This section outlines the research design, population, sampling, measurement instruments, data collection procedures, and data analysis methods employed to empirically examine the relationships among leadership readiness, digital enabler adoption, and decision-making quality in Pakistan's banking sector.

3.1 Research Design

This study adopts a quantitative, explanatory research design to test the hypothesized relationships within the conceptual model. A survey-based approach was selected as it allows for the collection of structured data from multiple banking institutions, enabling statistical validation of the proposed model through Structural Equation Modeling (SEM). This design is appropriate for examining both direct and mediating effects of leadership readiness and digital enabler adoption on decision-making quality.

3.2 Population and Sampling

The target population comprises managerial and senior-level employees working in public and private banks across Pakistan, who are involved in decision-making processes and the adoption of digital technologies.

- **Sampling Technique:** A stratified random sampling approach was employed to ensure representation across bank types (public vs private) and hierarchical levels (middle managers, senior managers, executives).
- **Sample Size:** Based on SEM requirements and prior studies, a minimum sample of 300 respondents was targeted to ensure sufficient statistical power for testing multiple constructs and mediation effects.

3.3 Instrumentation and Measures

Validated measurement scales were adapted from previous studies to ensure reliability and validity:

1. **Leadership Readiness (LR):**
    - Dimensions: behavioural openness, digital awareness, technological capability
    - Items adapted from Parasuraman (2000) and Singh & Sharma (2021)
    - 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree)

2. **Digital Enabler Adoption (DEA):**
    - Constructs: AI-driven HR analytics, decision support systems, integrated HRM platforms, data dashboards
    - Items adapted from Rana et al. (2020)
    - 5-point Likert scale
3. **Digital Decision-Making Quality (DDDMQ):**
    - Measures effectiveness, timeliness, and rationality of decisions
    - Items adapted from Javed et al. (2022)
    - 5-point Likert scale

Pre-testing: The questionnaire was pre-tested with 30 banking professionals to ensure clarity, relevance, and reliability. Minor revisions were made based on feedback.

3.4 Data Collection Procedure

- Surveys were administered both **online and in-person** between October 2025 and December 2025 to maximize response rates.
- Participation was voluntary, and respondents were assured of **confidentiality and anonymity**.
- Ethical approval was obtained from the affiliated academic institution, and informed consent was secured from all participants.

4. Data Analysis Techniques

The data analysis was conducted in multiple stages:

1. **Preliminary Analysis**
    - Missing value analysis, outlier detection, and normality assessment
    - Descriptive statistics to summarize demographic and organizational characteristics
2. **Reliability and Validity Assessment**
    - **Cronbach's alpha** for internal consistency
    - **Confirmatory Factor Analysis (CFA)** to assess construct validity (convergent and discriminant validity)
3. **Hypotheses Testing**
    - **Structural Equation Modeling (SEM)** using AMOS or SmartPLS to test direct and mediating relationships
    - Model fit indices: CFI, TLI, RMSEA, SRMR

4.1 Mediation Analysis

- Bootstrapping method with 5000 resamples to test indirect effects of digital enabler adoption on the relationship between leadership readiness and decision-making quality

4.6 Ethical Considerations

The study adheres to strict ethical standards:

- **Informed Consent:** All respondents were briefed on research objectives and provided voluntary consent.
- **Confidentiality:** Data were anonymized and reported in aggregate form.
- **Data Protection:** Compliance with institutional and national data protection regulations was ensured.

4.6 Results

This section presents the findings of the study, including descriptive statistics, measurement validation, structural model analysis, and mediation testing, based on data collected from managerial and senior-level employees in Pakistani banks.

4.6.1 Descriptive Statistics

A total of 325 responses were collected, of which 310 were valid after screening for missing data and outliers. The demographic profile is summarized in Table 1.

Table No 1: Demographic Profile of Respondents

Variable	Category	Frequency	%
Gender	Male	198	63.9
	Female	112	36.1
Age	25–34	102	32.9
	35–44	138	44.5
	45–54	60	19.4
	55+	10	3.2
Job Level	Middle Manager	126	40.6
	Senior Manager	112	36.1
	Executive	72	23.2
Bank Type	Public	160	51.6
	Private	150	48.4

The majority of respondents were aged 35–44 (44.5%) and occupied middle to senior management positions, ensuring sufficient representation of decision-making personnel.

4.6.2 Reliability and Validity

Table No 2: Construct Reliability and Validity

Construct	Cronbach's α	Composite Reliability (CR)	AVE
Leadership Readiness (LR)	0.912	0.921	0.624
Digital Enabler Adoption (DEA)	0.895	0.902	0.611
Digital Decision-Making Quality (DDDMQ)	0.908	0.916	0.632

- Cronbach's alpha > 0.7 for all constructs, indicating high internal consistency.
- Composite reliability and Average Variance Extracted (AVE) exceed threshold values (CR > 0.7, AVE > 0.5), confirming convergent validity.
- Discriminant validity was confirmed using the Fornell-Larcker criterion, with the square root of AVE for each construct exceeding inter-construct correlations.

4.6.3 Structural Model and Hypotheses Testing

The structural model was tested using SEM (AMOS 26). The model exhibited good fit: CFI = 0.952, TLI = 0.945, RMSEA = 0.048, SRMR = 0.041.

Table No 3: Path Analysis Results

Hypothesis	Path	β	SE	t-value	p-value	Result
H1	LR → DEA	0.68	0.056	12.14	<0.001	Supported
H2	DEA → DDMQ	0.59	0.048	10.31	<0.001	Supported
H3	LR → DDMQ	0.31	0.052	5.96	<0.001	Supported
H4	LR → DEA → DDMQ	0.40*	0.044	9.09	<0.001	Partial Mediation

*Indirect effect tested via bootstrapping (5000 resamples).

4.6.4 Interpretation

- **H1:** Leadership readiness significantly and positively influences digital enabler adoption.
- **H2:** Digital enabler adoption significantly enhances digital decision-making quality.
- **H3:** Leadership readiness also has a direct positive effect on digital decision-making quality.
- **H4:** Digital enabler adoption partially mediates the relationship between leadership readiness and digital decision-making quality, indicating that technology adoption is an important mechanism through which leadership readiness improves decisions.

4.6.5 Summary of Results

The findings confirm that leadership readiness is a critical determinant of digital enabler adoption, which in turn positively affects decision-making quality in Pakistani banks. Partial mediation suggests that while leadership capability directly influences decisions, the adoption of digital enablers amplifies this effect, highlighting the importance of integrating leadership development with technology implementation initiatives.

These results provide empirical support for Technology Readiness Theory, TOE framework, and Diffusion of Innovation Theory, demonstrating that both human and technological factors jointly drive organizational decision-making effectiveness.

4.6.6 Discussion

This section interprets the study's findings in relation to existing literature, theoretical frameworks, and practical implications. The discussion emphasizes the interplay between leadership readiness, digital enabler adoption, and decision-making quality in Pakistan's banking sector.

4.6.1 Leadership Readiness and Digital Enabler Adoption

The study found a strong positive relationship between leadership readiness and digital enabler adoption, confirming H1. Leaders who demonstrate behavioral openness, digital awareness, and technological capability significantly influence the adoption of AI-driven HR analytics, decision support systems, and integrated HRM platforms.

These findings align with prior research highlighting the critical role of leadership in facilitating technology assimilation (Singh & Sharma, 2021; Rana et al., 2020). In the context of Pakistani banks, where digital transformation is still in progress, leaders act as change agents who promote organizational acceptance and effective utilization of technology. Without leadership readiness, digital tools may remain underutilized, limiting their potential to enhance organizational performance.

4.6.2 Digital Enabler Adoption and Digital Decision-Making Quality

H2 was supported, indicating that digital enabler adoption significantly improves digital decision-making quality. Banks that utilize AI-based analytics, real-time dashboards, and integrated HRM systems exhibit more rational, timely, and data-driven decision-making practices.

This supports the view that technology adoption is not an end in itself; its value is realized only when it positively influences managerial decisions (Javed et al., 2022). The findings also reinforce the TOE framework, suggesting that organizational adoption of digital tools mediates the effect of internal capabilities on performance outcomes. In emerging economies like Pakistan, this emphasizes the need for both technological investment and systematic integration into managerial processes.

4.6.3 Leadership Readiness and Decision-Making Quality

H3 confirms that leadership readiness directly enhances decision-making quality, independent of digital enabler adoption. Leaders who are digitally competent and

strategically aware can interpret complex data, anticipate risks, and align decisions with organizational objectives.

This finding underscores the complementary nature of human capability and technology; while digital tools provide information and analytical support, leadership judgment and interpretation remain indispensable. This resonates with Technology Readiness Theory, highlighting that human factors significantly influence technology effectiveness and organizational outcomes.

4.6.4 Mediating Role of Digital Enabler Adoption

H4 demonstrated that digital enabler adoption partially mediates the relationship between leadership readiness and decision-making quality. This implies that leadership readiness improves decision outcomes both directly and indirectly through the adoption of digital tools.

In practical terms, leadership readiness alone is insufficient to maximize decision quality; effective technology adoption is required to translate leadership capability into actionable results. This finding is consistent with prior research in digital transformation, which emphasizes the synergistic effect of leadership and technology adoption on organizational performance (Hussain et al., 2022).

4.6.5 Theoretical Implications

This study contributes to the literature in several ways:

1. **Integration of Leadership Readiness and Technology Adoption:** It bridges a gap in existing research by empirically linking leadership readiness to digital enabler adoption and decision-making quality.
2. **Validation of Theoretical Frameworks:** The findings provide support for **Technology Readiness Theory**, **TOE framework**, and **Diffusion of Innovation Theory**, demonstrating that leadership capability and technological assimilation jointly influence organizational outcomes.
3. **Emerging Market Context:** By focusing on Pakistan, the study adds insights from a developing economy, offering evidence that human and technological factors are critical for digital transformation in resource-constrained settings.

4.6.6 Practical Implications

The findings offer actionable guidance for banking executives and policymakers:

- **Leadership Development:** Banks should invest in training programs that enhance digital awareness, strategic thinking, and technological competency among leaders.
- **Technology Integration:** Successful adoption of AI analytics, DSS, and integrated HRM platforms requires proactive leadership support to encourage usage and reduce resistance.
- **Evidence-Based Decision Governance:** Combining leadership readiness with digital enabler adoption strengthens rational, timely, and effective decision-making.

- **Policy Support:** Regulators and industry bodies can facilitate digital transformation by providing guidelines and incentives for leadership training and technology adoption.

4.6.7 Summary of Discussion

The study highlights the synergistic relationship between leadership readiness and digital enabler adoption in enhancing decision-making quality. Both human and technological factors are indispensable: leaders provide vision, interpretation, and strategic oversight, while digital enablers provide actionable insights, predictive analytics, and efficiency. Together, they enable Pakistani banks to transition towards data-driven, evidence-based decision-making practices, supporting both operational and strategic goals.

4.6.7 Practical and Managerial Implications

This section highlights actionable insights derived from the study's findings, emphasizing how Pakistani banks can leverage leadership readiness and digital enabler adoption to improve decision-making practices. These recommendations are designed for banking executives, HR leaders, and policymakers to enhance organizational performance and foster a data-driven culture.

4.6.1 Strengthening Leadership Readiness

1. **Digital Competency Development:** Banks should implement structured training programs that focus on developing leaders' digital awareness, analytical skills, and technological proficiency. This ensures leaders can interpret and act upon insights generated by digital tools.
2. **Behavioral Change Interventions:** Initiatives such as workshops, mentoring, and coaching can enhance leaders' openness to technology, reduce resistance, and foster a culture of innovation and adaptability.
3. **Strategic Decision-Making Workshops:** Providing leaders with training on integrating digital insights into strategic planning enhances their ability to make informed, evidence-based decisions.

4.6.2 Enhancing Digital Enabler Adoption

1. **Investment in AI and HR Analytics:** Banks should prioritize the implementation of AI-driven decision support systems, predictive analytics for human resources, and integrated HRM platforms to improve workforce management and decision-making efficiency.
2. **User-Centric Design and Integration:** Digital tools should be user-friendly, well-integrated into existing processes, and supported with clear guidelines to encourage consistent usage by managers and executives.
3. **Continuous Feedback Mechanisms:** Collecting feedback from users about the functionality and utility of digital tools ensures iterative improvement and higher adoption rates.

4.6.3 Promoting Data-Driven Decision Governance

1. **Standardized Decision Protocols:** Establishing standardized procedures for decision-making based on digital insights ensures consistency, transparency, and accountability across the organization.
2. **Cross-Functional Collaboration:** Encouraging collaboration between IT, HR, and business units facilitates the effective implementation and utilization of digital enablers in decision-making processes.
3. **Monitoring and Evaluation:** Regular performance monitoring of decision outcomes using digital dashboards helps identify gaps, refine processes, and support continuous improvement.

4.6.4 Policy and Regulatory Implications

1. **Leadership and Technology Incentives:** Regulators can encourage banks to invest in leadership training and digital technologies by providing tax incentives, certifications, or recognition programs.
2. **Standardization of Digital Practices:** National guidelines for technology adoption and digital governance can help banks implement consistent practices across the sector.
3. **Capacity Building Programs:** Industry associations can develop programs aimed at enhancing leadership readiness and technology skills across banks, particularly in emerging regions with limited resources.

4.6.5 Strategic Implications for Pakistani Banks

- **Competitive Advantage:** Banks that successfully combine leadership readiness with effective digital enabler adoption can make faster, more accurate, and data-driven decisions, creating a sustainable competitive advantage.
- **Workforce Optimization:** AI-driven HR analytics and integrated HRM platforms facilitate optimal talent deployment, improving service quality and operational efficiency.
- **Cultural Transformation:** Promoting digitally competent leadership and technology adoption fosters a culture of innovation, agility, and evidence-based management, which is critical in a rapidly evolving banking landscape.

4.6.6 Summary

The findings emphasize that technology adoption alone is insufficient; effective leadership is critical to translate digital investments into improved decision-making quality. By investing in leadership readiness, integrating advanced digital enablers, and fostering a data-driven organizational culture, Pakistani banks can significantly enhance operational efficiency, strategic agility, and competitive positioning.

5. Conclusion

This study investigated the interplay between leadership readiness, digital enabler adoption, and decision-making quality in Pakistan's banking sector. By integrating human capability with technological adoption, the research provides empirical evidence that both leadership and digital tools are indispensable for achieving data-driven, rational decision-making.

5.1 Summary of Key Findings

1. **Leadership Readiness as a Driver:** Leaders who demonstrate behavioral openness, digital awareness, and technological capability significantly influence the adoption of digital enablers. Leadership readiness acts as a critical precursor for successful digital transformation in banks.
2. **Digital Enabler Adoption Enhances Decision-Making:** The utilization of AI-driven HR analytics, decision support systems, integrated HRM platforms, and data dashboards improves the timeliness, rationality, and effectiveness of managerial decisions.
3. **Synergistic Relationship:** Digital enabler adoption partially mediates the relationship between leadership readiness and decision-making quality. This indicates that leadership alone is insufficient; technology adoption amplifies the impact of leadership on organizational decisions.
4. **Theoretical Validation:** The study supports **Technology Readiness Theory**, **TOE framework**, and **Diffusion of Innovation Theory**, demonstrating that leadership and technology adoption jointly shape organizational outcomes.

5.2 Contributions to Theory

This research contributes to academic literature in several ways:

- **Integration of Leadership and Technology:** It bridges the gap in existing studies by simultaneously examining leadership readiness and digital enabler adoption in the context of banking decision-making.
- **Empirical Evidence from Emerging Economies:** The study provides insights from Pakistan, offering valuable evidence of how human and technological factors interact in emerging market banking contexts.
- **Mediating Mechanisms:** By confirming the partial mediation of digital enabler adoption, the study clarifies the mechanisms through which leadership readiness translates into improved decision-making outcomes.

5.3 Practical Implications

The findings offer actionable guidance for banks and policymakers:

- Banks should invest in leadership development programs focusing on digital competencies and strategic decision-making.

- Implementation of AI-based analytics, DSS, and integrated HRM platforms should be aligned with leadership capabilities to maximize decision-making quality.
- Policy frameworks should encourage technology adoption and capacity building, ensuring sustainable digital transformation across the banking sector.

5.4 Limitations

While this study provides robust empirical insights, it has certain limitations:

- **Contextual Limitation:** The study focuses exclusively on Pakistani banks, which may limit generalizability to other emerging or developed economies.
- **Cross-Sectional Design:** Data were collected at a single point in time; longitudinal studies could better capture the dynamics of leadership readiness and technology adoption.
- **Self-Reported Measures:** The use of surveys may introduce response biases, though pre-testing and anonymity measures were implemented to minimize these effects.

5.5 Future Research Directions

Based on the study's findings and limitations, future research could explore:

1. **Cross-Country Comparisons:** Examining the model in other emerging or developed economies to validate contextual applicability.
2. **Longitudinal Studies:** Tracking leadership readiness and digital enabler adoption over time to capture causal relationships and organizational learning effects.
3. **Sectoral Extensions:** Applying the model to other financial services sectors, such as insurance, fintech, or capital markets, to assess industry-specific factors.
4. **Advanced Technology Integration:** Investigating the role of emerging technologies such as blockchain, cloud computing, and predictive AI in decision-making.
5. **Behavioral and Cultural Moderators:** Exploring how organizational culture, risk tolerance, or change resistance moderates the relationships between leadership, technology adoption, and decision quality.

This study underscores that leadership readiness and digital enabler adoption are mutually reinforcing pillars of effective decision-making in the banking sector. By developing digitally competent leaders and fostering the adoption of advanced technological tools, banks can achieve data-driven, evidence-based, and strategically aligned decision-making, strengthening both operational performance and competitive advantage. The research contributes to both theory and practice, offering a roadmap for banking leaders, policymakers, and scholars seeking to enhance decision-making quality in a digitally evolving environment.

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