Integrating Financial Management with Intelligent Technologies: Financial Services Companies Case Study

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Abstract:

Purpose: The goal of the research is to investigate the role of intelligent technologies, including Artificial Intelligence, Machine Learning, and Big Data analytics, in enhancing financial management practices within banking and non-banking institutions. The study aims to identify how technology adoption influences operational and economic efficiency, financial stability and resilience, competitiveness, and strategic decision-making, while also addressing the challenges of digital transformation in the financial services sector.

Design/Methodology/Approach: The research methodology is based on a case study approach that analyzes the integration of intelligent technologies into financial management practices in digital-only, traditional, and hybrid financial institutions. The case study integrates qualitative insights from interviews and structured questionnaires with quantitative assessments of financial performance indicators. To evaluate the research results and to provide a comprehensive perspective on the impact of intelligent technologies on the effectiveness of financial management practices, SWOT analysis and weighted evaluation models were applied.

Findings: The findings suggest that intelligent technologies enhance financial management through optimized operational efficiency, economic performance and financial stability, increased customer base and competitiveness, improved risk management, inclusivity and institutional resilience. Digital-only financial institutions demonstrate rapid innovation and strong customer engagement, while traditional maintain stability through a focus on customer satisfaction with comprehensive service offerings and their trust, but with relatively slower technology adoption. Hybrid models leverage the combination of physical and digital channels to strengthen service delivery and expand presence on regional financial markets. Challenges related to cybersecurity and regulatory changes, increasing competition from agile fintech companies, investment requirements in innovative technologies and workforce training, highlight the importance of adaptive strategies to digitally driven global financial market.

Practical Implications: The research results demonstrate that strategic integration of intelligent technologies can improve operational efficiency, financial resilience, customer satisfaction,, while also supporting financial inclusion. Financial institutions that effectively adopt AI and analytics are better equipped to respond to market dynamics, enhance

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competitiveness, and sustain long-term growth. Key enablers include investment in technology and talent, regulatory monitoring, and fostering an innovation-driven culture. Originality/Value: The study demonstrates that intelligent technologies are critical for modern financial management and competitive positioning. By comparing digital, traditional, and hybrid institutions, the research provides practical and theoretical insights into how technology adoption reshapes financial performance, strategic decision-making, and customer engagement, offering guidance for institutions navigating digital transformation.

Keywords: Financial management, financial companies, financial stability, competitiveness, Artificial Intelligence, Intelligent Technologies, Fintech, Machine Learning, Chatbots.

JEL Codes: G32, G21, O33, C83.

Paper Type: Research article.

1. Introduction

The financial management practices of contemporary financial institutions are experiencing a fundamental transformation driven by intelligent technologies such as Artificial Intelligence (AI), Machine Learning (ML), Big Data, Robotics, chatbots, the Internet of Things (IoT), and advanced analytics. These innovations are not merely tools for automation; they are reshaping how financial institutions operate, enabling greater efficiency, stability, and data-driven decision-making.

The impact of AI-driven financial management is particularly notable in operational performance. Early adopters of these technologies can achieve up to 20% higher profitability compared to traditional institutions (McKinsey & Co., 2024). By automating routine tasks such as data aggregation and transaction processing, financial companies can optimize resource allocation, reduce operational costs, and mitigate risks, thereby strengthening overall financial stability.

Alongside operational improvements, intelligent technologies enhance customer experience and foster innovation. AI-powered fraud detection systems provide real-time protection, while chatbots and personalized analytics deliver continuous, tailored support. These advances not only improve service quality but also build trust and long-term customer loyalty, which are critical in a competitive financial landscape.

Beyond efficiency and customer benefits, AI and ML contribute to strategic agility. Institutions leveraging these technologies are better positioned to anticipate market trends, accelerate innovation cycles, and expand financial inclusion through

accessible and low-cost digital services (Giovine and Lerner, 2024). Such capabilities are increasingly vital in a volatile global economy, where rapid adaptation can determine market leadership.

However, integrating intelligent technologies into traditional financial systems remains a complex challenge. Legacy infrastructures, regulatory constraints, and institutional resistance can slow digital transformation and limit the potential benefits. Understanding how different financial institutions navigate these challenges is therefore essential for assessing the true impact of technology on financial management.

2. Literature Review

Scientific research on the application of intelligent technologies in finance originates from early studies in artificial intelligence (AI) and financial management theory. Foundational concepts in decision-making theory, risk assessment, and behavioral finance laid the groundwork for developing AI-driven financial models.

McCarthy's pioneering works on automated decision-making provided the conceptual basis for algorithmic trading, automated credit scoring, and data-driven financial systems (McCarthy, 1989; 1990). Contributions by Shiller (2020) and Kahneman (2017) in behavioral finance deepened the understanding of cognitive biases and prospect theory, influencing the development of AI-based predictive analytics and risk management in finance.

Likewise, classical financial theories such as the Modigliani-Miller theorem and the Capital Asset Pricing Model (CAPM) have evolved through the integration of AI, enabling more accurate forecasting, enhanced risk mitigation, and greater automation in financial decision-making (Alieva, 2023).

Contemporary research increasingly focuses on the practical implementation of AI in banking, investment management, and financial regulation. One of the most significant applications is in fraud detection and risk management. As noted by Dong (2018), AI systems employing pattern recognition, anomaly detection, and predictive modeling can identify fraudulent transactions in real time. Moreover, AI-based compliance and risk management tools facilitate adherence to Basel III and related regulatory frameworks, thereby reducing institutional exposure.

The adoption of AI-powered chatbots and virtual assistants has also transformed customer interaction in the financial sector. Studies by Pratolo and Fadilah (2022) and Lu *et al.* (2024) demonstrate that chatbots and robo-advisors leveraging natural language processing (NLP) and machine learning enhance personalization, accelerate service delivery, and reduce operational costs by up to 80%. These technologies have become integral to improving customer experience and overall operational efficiency.

The emergence of FinTech and RegTech has further accelerated digital transformation across the financial sector. Artificial intelligence now underpins financial advisory services, blockchain-based transactions, and automated investment strategies (Galazova and Magomajeva, 2019; Zhang, 2023). Within regulatory technology, AI-driven solutions streamline compliance reporting, detect and prevent money laundering, and enhance transparency by reducing the risk of human error.

Moreover, AI plays an increasingly crucial role in financial forecasting and stock market analysis. According to Mukhamedov et al. (2020), algorithmic trading systems employ AI to analyze historical data, identify patterns, and execute high-frequency trades within milliseconds, thereby improving asset allocation efficiency and predictive accuracy.

Despite notable progress, further research is required to evaluate the integration of intelligent technologies across both banking and non-banking financial subsectors. particularly regarding their impact on operational efficiency, financial resilience, and customer inclusiveness. A deeper understanding of these interrelations will enable more effective implementation of AI-driven financial management practices.

3. Research Methodology

The study aims to examine the impact of intelligent technologies (AI and ML) on financial management practices and performance in the financial services industry. It seeks to identify key benefits and challenges of technology integration and assess how digital transformation affects financial stability, operational efficiency, competitiveness, and risk management in banking and non-banking institutions.

Accordingly, the study seeks to answer the following core questions:

- How do intelligent technologies shape financial management practices in the banking and non-banking sectors?
- How do online, traditional and hybrid financial companies adapt to and benefit from intelligent technologies?
- What are the main benefits, challenges, and customer preferences regarding technology-based versus traditional financial services?

To address these questions, the research employs a case study methodology, enabling an in-depth comparison of different institutional models and their approaches to digital transformation. Three financial institutions were selected as representative examples: Revolut Bank (Revolut) (online-only), JPMorgan Chase & Co (JPMorgan) (traditional), and AL Ansari Financial Services (AAFS) (hybrid).

Revolut operates entirely through digital platforms, employing AI in fraud detection, chatbot-based customer support, and real-time transaction analytics. Its model

illustrates how fully digital institutions optimize intelligent technologies to enhance both customer experience and financial performance.

JPMorgan exemplifies a traditional banking structure with a large network of physical branches, integrating AI tools for risk management and digital banking services. This case demonstrates how conventional banks embed new technologies within legacy systems while maintaining regulatory compliance.

AAFS, combining digital and physical service delivery, represents a hybrid model that leverages AI-powered chatbots, mobile banking, and digital payment systems alongside traditional in-person services.

This approach highlights how hybrid institutions balance technological innovation with personalized customer interaction.

Together, these cases provide a comprehensive understanding of diverse technological strategies and their impact on performance, decision-making, and customer relations across financial business models.

3.1 Research Stages

To achieve a well-rounded analysis, the study adopts a mixed-method approach, integrating both quantitative and qualitative techniques. The research process comprises two main stages.

Stage 1: Primary Research. This stage focuses on document and financial data analysis based on annual reports of the selected institutions. The assessment covers financial performance, market strategies, risk management, and customer acquisition. These indicators form the basis for evaluating how intelligent technologies affect profitability, financial stability, and resilience to external risks.

Stage 2: Secondary Research. At this stage, questionnaires were distributed among financial companies – particularly AAFS – targeting decision-makers and technology managers. The survey investigates the scope, drivers, and challenges of AI implementation, the effects on operational efficiency and employment, and future development perspectives.

Both stages combine quantitative and qualitative analyses. Quantitative evaluation applies financial indicators such as ROA, ROE, and solvency ratios over a three-year period to measure the impact of technology adoption on cost efficiency and profitability.

Qualitative analysis includes thematic interpretation of survey responses and content analysis of company reports, identifying trends in intelligent technology adoption and strategic adaptation.

To synthesize and compare results, two complementary analytical tools were employed:

- the Weighted Scoring Model, ranking companies by financial stability, level of technological integration, customer satisfaction, and market growth;
- the SWOT Analysis, identifying each institution's strengths, weaknesses, opportunities, and threats in relation to technological advancement and competitiveness.

This integrated methodological framework combines empirical evidence with contextual interpretation, offering a holistic perspective on how intelligent technologies transform financial management and enhance customer experience in both traditional and digitally driven institutions. The general concept and algorithm of the methodological foundations of the study are shown in Figure 1.

Figure 1. Research Conception and Methodology

 Research adopts a case study methodology, integrating quantitative and qualitative research methods to thoroughly analyze the impact of intelligent technologies on financial management practices across different financial models. Approach Case selection - financial institutions are categorized into three types depending on the use of intelligent technologies in their financial activities into "online-only financial companies", "traditional financial companies", and "hybrid financial companies". Case Selection •Sampling Strategy combines purposive sampling for qualitative insights from financial experts and random sampling for quantitative surveys to ensure diverse and representative data. Strategy Primary research - centers on document analysis and detailed financial data review from annual reports of selected financial companies: Secondary research - questionnaires for financial companies representatives Methods and Stages Integrates thematic and content analysis for qualitative data; performs analysis of financial indicators and quantitative data. Utilizes a weighted scoring model and SWOT analysis to evaluate and compare financial stability, technological integration, and market growth among companies. Making Methods

Source: Authors' own elaboration.

Ultimately, this methodological approach ensures a multifaceted evaluation of how intelligent technologies reshape financial management, not only improving operational performance and decision-making efficiency but also strengthening risk

management systems and promoting higher levels of financial inclusion and trust in digital financial ecosystems.

4. Research Results

4.1 Analysis of Financial Performance and Market Competitiveness of Selected Financial Companies

According to the chosen research methodology, the first stage involves an analysis of the financial indicators of selected companies. This assessment applies the IMF Financial Soundness Indicators (IMF, 2023), focusing on capital adequacy, liquidity, profitability, and risk management.

The evaluation of revenue, net profit, debt-to-equity ratio, ROA, ROE, and liquidity practices provides an integrated view of financial performance and risk exposure under digital transformation. Such analysis helps reveal how the adoption of intelligent technologies influences financial management efficiency and overall corporate stability.

The analysis begins with Revolut Bank, which demonstrates dynamic growth through global expansion and product diversification, positioning itself as a leading financial super app. Between 2021 and 2023, Revolut entered Brazil, Mexico, Japan, and the Asia-Pacific region, while the number of active SMEs increased by 66%.

This strategic growth translated into a sharp rise in profitability: net profit climbed from 5.8 m GBP in 2022 to 344 m GBP in 2023, accompanied by increases in ROA (from 0.041% to 1.98%) and ROE (from 0.5% to 22.05%). A lower debt-to-equity ratio (10.13) further indicates enhanced financial soundness and operational efficiency (Table 1).

Table 1. Financial Performance of the Selected Companies During 2021 – 2023

	Revolut GBP			JPMorgan Chase & Co			ALAnsari Financial Services		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
Revenue	638	0.92	1.80	121,649	128,695	158,104	1002	1170	1162
S	m GBP	bn GBP	bn GBP	m USD	m USD	m USD	m AED	m AED	m AED
Profit	39	25	438	59,562	46,166	61,612	592	431	465
before	n GBP	m GBP	m GBP	m	m USD	m USD	m AED	m AED	m AED
Tax				USD					
Net		5.8	344	48,334	37,676	49,552	491	595	495
Profit	GBP	m GBP	m GBP	m	m USD	m USD	m AED	m AED	m AED
				USD					
ROA	0.31%	0.041%	1.98%	1.30%	0.98%	1.30%	14.64%	21.29%	16.80%
ROE	2.45%	0.50%	22.05%	19%	14%	17%	19.45%	36.63%	29.10%
Adm.	367,4 m	506	610	71,343	76,140	87,172	-	100	116.4
Expense	GBP	m GBP	m GBP	m USD	m USD	m USD		m AED	m AED
s									

Debt-to-	7.01	11.01	10.13	11.73	11.54	10.82	0.33	0.72	0.73
Equity									
Ratio									

Source: Authors' calculations based on the companies' annual financial reports.

Building on this comparison, JPMorgan represents a model of strategic consistency within the global financial services industry. Through a combination of acquisitions and regional expansion, the bank has strengthened its position and customer base.

The 2023 acquisition of First Republic Bank added more than 500,000 clients, while expansion into five new U.S. states and broader operations in Europe confirmed its focus on sustainable scaling. Financially, JPMorgan's net profit grew to 49.6 bn USD in 2023 (+32% year-over-year), with ROA rising to 1.30% and the debt-to-equity ratio decreasing from 11.73 to 10.82, highlighting effective financial governance and resilience (Table 1).

In contrast, AAFS has concentrated on regional outreach and physical presence, targeting low-income expatriate clients who prefer face-to-face financial services. By 2023, AAFS operated 256 branches in the UAE and expanded into Kuwait and Oman. Although profitability declined slightly (net profit fell from 595 m AED in 2022 to 495 m AED in 2023), the company maintained financial stability through a very low debt-to-equity ratio (0.73). However, the drop in ROA and ROE – to 16.8% and 29.1%, respectively – indicates the limitations of its traditional branch-based model in the context of digital transformation (Table 1).

Overall, the findings confirm that the integration of intelligent technologies is a decisive factor in enhancing financial efficiency and competitiveness, as clearly exemplified by Revolut's performance.

The impact of these technologies is also visible in customer acquisition dynamics (Table 2), which provide an additional measure of market competitiveness.

Table 2. Numbers of Attracting New Customers of the Selected Companies

Company	Attraction new customers (2022)	Attraction new customers (2023)	Total customers base
Revolut	9.8 million (m)	11.8 m	40 m and over 500k business customers globally
JPMorgan Chase	1 m	3.6 m	10 m and over 654,000 small business customers
ALAnsari Financial Services	n/a	1.2 m	more than 3 m customers monthly

Source: Authors' calculations based on the companies' annual financial reports.

As Table 2 illustrates, Revolut has expanded its customer base at an exceptional pace, reaching 50 million users across 38 countries by 2024—a 60% year-on-year

increase driven by AI-powered solutions and a global digital banking model. JPMorgan Chase, leveraging its strong brand reputation and customer-oriented policies, attracted 3.6 million new customers in 2023 and maintained high satisfaction rates. Meanwhile, AAFS grew its client base by 1.2 million through its mobile application and wide branch network, balancing innovation with accessibility for diverse consumer groups.

In summary, the three analyzed companies represent distinct yet complementary strategic approaches. Revolut exemplifies rapid digital scaling, JPMorgan Chase balances innovation with traditional strengths, and AAFS integrates digital and physical channels to meet regional demands. Despite these differences, all must remain adaptive and financially resilient amid accelerating technological transformation and evolving market risks.

4.2 Analysis of Financial Stability Indicators and Risk Management Strategies in Selected Financial Companies

This study assesses the financial stability of the analyzed institutions using key financial soundness indicators (FSIs) aligned with the IMF framework (IMF, 2023). These metrics reflect the management of capital, liquidity, profitability, risk exposure, and leverage, supporting the study's focus on intelligent technologies in financial management (Table 3).

Table 3. Financial Stability Indicators (available) for Selected Banks

	Indicators Used	Revolut	JPMorgan Chase	AL Ansari Financial Services
	Common Equity Tier 1 ratio (required for banking institutions)	23.63%	34.85%	-
Capital Adequacy	Capital conservation buffer requirement (required for banking institutions)	2,5%	2,5%	-
	Countercyclical buffer requirement (required for banking institutions)	0,81%	n/a	-
	Leverage ratio (required for banking institutions)	4.29%	6.10%	-
Liquidity	Liquidity coverage ratio	183.78	221.41	-
	Liquidity Management Practices	Advanced (AI- driven)	Strong Framework	Regional Focus

Market	Foreign Exchange &	AI-	Derivatives &	Traditional
Risk	Risk Monitoring	powered	Committees	& Digital
Sensitivity				Tools

Source: Author's calculations based on the companies' annual financial reports.

Compliance with international capital adequacy standards under the Basel framework is a key initial step in evaluating financial stability. Both Revolut and JPMorgan meet these requirements, with Common Equity Tier 1 ratios (23.63% and 34.85%) and Capital Conservation Buffers (2.5%) exceeding minimum thresholds, while leverage ratios (4.29% and 6.10%) surpass the 3% standard. Similarly, their Liquidity Coverage Ratios (183.78% and 221.41%) indicate strong liquidity management, ensuring preparedness for potential stress scenarios. Data for AAFS are not available as it is not a banking institution.

Meeting these financial stability metrics requires effective risk management. Revolut's approach combines oversight from its Executive Committee, a Three Lines of Defense model, liquidity buffers, ICAAP/ILAAP assessments, and strengthened cybersecurity, ensuring stability in its digital-first business model. Building on this, JPMorgan applies derivatives, governance through Firmwide Risk and Control Committees, and liquidity strategies including share repurchase suspensions and participation in the Paycheck Protection Program. Meanwhile, AAFS mitigates risks through credit assessments, currency monitoring, internal controls, IT audits, and promotion of digital transactions, maintaining continuity and customer satisfaction during the pandemic.

Overall, the diverse risk management strategies across these institutions demonstrate how intelligent approaches to identifying, mitigating, and monitoring financial, operational and market risks enhance overall stability, resilience, and sustainable growth in modern financial companies.

4.3 Strengthening Financial Management through Intelligent Technologies: Key Benefits and Challenges

To explore the benefits and challenges of integrating intelligent technologies into financial management, a qualitative study was conducted using a structured questionnaire with decision-makers and technology managers at AAFS. The survey assessed the extent of technology deployment, realized benefits, challenges, and future development plans. Complementing this, an in-depth interview with a team manager highlighted AAFS's five-year digital transformation, which included mobile banking applications, AI-powered chatbots, automated response systems, and digital branches.

The expert assessments revealed three primary objectives guiding technology adoption, rated on a five-point scale: enhancing financial management and strategic decision-making (4.8), improving service quality and competitiveness (4.3) and

increasing operational efficiency and reducing costs (3.5) (Figure 2). These objectives frame how intelligent technologies contribute both strategically and operationally to the company's performance.

Figure 2. The weighted significance of the reasons for implementing intelligent technologies in a financial company (five-point scale)



Source: Author's elaboration based on an expert survey.

The expert assessment revealed that the implementation of intelligent technologies at AAFS is primarily driven by the strategic objective of strengthening financial management (Figure 3).

Figure 3. Key benefits of implementing intelligent technologies in a financial financial company



Source: Author's own elaboration.

Intelligent solutions have fundamentally transformed financial practices by enhancing analytical accuracy, risk monitoring, and decision-making quality. Aldriven forecasting, automated reporting, and Big Data analytics support precise liquidity planning, effective allocation of financial resources, and compliance with regulatory requirements. As a result, financial management has become more transparent, data-driven, and adaptive to changing market conditions, laying the foundation for more efficient and resilient financial operations.

Building on these advancements, intelligent technologies now serve as a key driver of operational efficiency. Automation across accounting, reporting, and core business processes has minimized repetitive tasks, optimized resource utilization, and reduced administrative costs.

By streamlining workflows and accelerating service delivery, AI-based systems have improved both the quality and timeliness of financial operations, thereby reducing internal inefficiencies and strengthening the company's ability to achieve strategic goals.

This enhanced operational efficiency has, in turn, strengthened AAFS's market competitiveness. The integration of digital platforms and AI-enabled customer solutions has expanded the client base, particularly among younger, technology-oriented consumers, while maintaining accessibility for traditional customers.

Furthermore, the use of Big Data analytics for strategic forecasting and customer insights has reinforced market positioning, brand reputation, and the ability to create long-term corporate value. Consequently, intelligent technologies have become central to sustaining growth and maintaining market leadership.

The transformative impact of these technologies becomes especially evident during crises, as demonstrated during the COVID-19 pandemic. Digital solutions ensured business continuity and operational resilience through remote service delivery via mobile applications and chatbots, supporting liquidity flows and maintaining customer trust despite physical restrictions. This example illustrates that intelligent technologies not only optimize routine operations but also help safeguard financial stability in times of external shocks.

Beyond operational and economic benefits, the integration of intelligent technologies also advances broader social objectives by promoting financial inclusion. Mobile and online platforms expand access to financial services, reduce transaction costs, and reach underserved populations, contributing to a more equitable and inclusive financial ecosystem.

Despite these successes, implementation was not without challenges. Key obstacles included technical complexities, substantial upfront costs, employee adaptation to new systems, regulatory constraints, and slow adoption of digital solutions among

certain customer segments. AAFS addressed these challenges through phased implementation, comprehensive staff training, and strategic partnerships with technology providers and clients.

Looking forward, the company plans to further expand its mobile and chatbot platforms while introducing more advanced AI and analytics tools. These forthcoming innovations are expected to further strengthen financial management, enhance risk controls, deliver personalized customer experiences, and support sustainable growth by anticipating market trends and identifying new opportunities.

5. Discussion: Traditional vs. Intelligent Technologies in Financial Management of financial companies

A structured approach combining SWOT analysis and the weighted scoring model was applied to assess the integration of intelligent technologies into financial management in selected companies. SWOT systematically identifies internal strengths and weaknesses, as well as external opportunities and threats, while weighted scoring quantifies their relative importance.

This method evaluates critical aspects such as financial stability, technological integration, risk resilience, customer satisfaction, and market growth, supporting evidence-based strategic conclusions.

The analysis highlights both strategic advantages and limitations of intelligent technologies and allows for a nuanced comparison of their impact across companies operating under different models (Table 5).

Table 5. SWOT Analysis of Intellectual Technologies' Impact on Financial Management Practices

Company	Strengths	Weakness	Opportunities	Threats
Revolut "Intelligent Technology Banking Model"	Robust technological integration, significant market growth, and high customer satisfaction driven by innovative use of AI and other advanced tech.	Potential issues as it rapidly expands like regulatory challenges, security risks, and issues with customer service.	Potential for global expansion and the development of enhanced financial products leveraging AI. Potential partnerships with traditional banks to leverage their infrastructures.	Intense competition from other fintech firms and ongoing challenges related to cybersecurity and regulatory changes. Threats posed by changing international regulations
JPMorgan	Strong financial	Comparatively	Opportunities to	Competition
Chase	stability,	slower in	expand digital	from agile

"Traditional Banking Model with Technologica 1 Integration"	established trust with comprehensive service offerings, focus on customer satisfaction. Use of AI and ML technologies enhance operational efficiency and risk management – key aspects that were demonstrated during COVID-19 through robust support measures for customers.	technological integration than pure fintech competitors, with high operational costs and reliance on an extensive physical branch network.	services by the potential revenue from new fintech partnerships, pursue strategic acquisitions, and further integrate advanced technologies into core business processes.	fintech companies, evolving regulatory landscapes, and potential disruptions from technological innovations.
ALAnsari Financial Services "Hybrid Non- Banking Model"	Financial stability, strong regional market presence, effective integration of intelligent technologies such as mobile apps for enhanced customer interaction and facilitating financial services.	Limited technological capabilities compared to sector leaders like Revolut, with growth primarily focused in regional markets.	Potential to expand within the Gulf region and enhance digital services, with opportunities to form strategic partnerships to boost technological capabilities. the possibility of adopting blockchain technologies for secure and efficient crossborder transactions in the remittance market.	Market saturation, evolving regulatory frameworks, and heightened competition from both traditional banks and emerging fintech platforms.

Source: Author's own elaboration.

The SWOT analysis reveals that Revolut's competitive strength lies in cutting-edge technological integration and global expansion potential, though regulatory and cybersecurity risks remain significant. JPMorgan excels in financial stability and customer trust but faces challenges from high costs and a slower digital transition. AAFS benefits from regional dominance and steady financial performance but lags

behind in technological capacity and global reach. Common opportunities include AI-driven services, blockchain, and strategic partnerships, while threats include regulatory changes and fintech competition.

It is important to note, that global economic trend, such as interest rate changes or economic downturns, could impact the strengths and weaknesses of each company. Technological advancements like AI and blockchain can be opportunities or threats, depending on each company's ability to adopt these technologies.

The Weighted Scoring Model provides a structured quantitative framework for ranking the selected companies. Key criteria were assigned relative weights reflecting strategic importance: Financial Stability (35%), Technological Integration (25%), Customer Attraction & Satisfaction (20%), and Market Growth (20%). Each company was evaluated on a 1–10 scale (Table 6).

Table 6. Evaluation Scores for Selected Financial Companies

Company	Financial Stability (Score)	Technological Integration	Customer Attraction &	Market Growth (Score)
		(Score)	Satisfaction (Score)	
Revolut	Significant profitability growth; rising net profit, improved ROA & ROE in 2023 (8)	Advanced AI and cutting-edge technology fully integrated across operations (10)	Over 40 million customers globally; high app ratings (9)	Strong global expansion into Brazil, Mexico, Japan, Singapore (9)
JPMorgan Chase	Consistent financial performance; slight ROE decline but strong stability (9)	Heavy AI/ML investments, though less extensive than Revolut (7)	High customer satisfaction and steady customer base growth (8)	Expanded through strategic acquisitions (e.g., First Republic Bank, 2023) (8)
AL Ansari	Low debt-to- equity ratio; some ROA/ROE decline in 2023 (7)	Significant progress in digital services and intelligent tech adoption (8)	customers but	Expanded branch network regionally with moderate growth (7)

Source: Author's own elaboration.

Based on score ranking, weighted scores are calculated using the formula:

$$Weighted Score_i = \sum_{j=1}^{n} (Score_{ij} \times Weight_j)$$

where i denotes the company, j the criterion, and n = 4. The sum of all weights equals 1, ensuring comparability across companies. Table 7 present resulting weighted scores.

Integrating SWOT findings with weighted scoring provides a clearer view of competitive positioning. Revolut leads overall (8.9), reflecting strong technological integration, rapid market expansion, and high customer satisfaction. SWOT confirms that these strengths, along with opportunities for global partnerships and AI-driven product development, outweigh regulatory and cybersecurity risks.

JPMorgan ranks second (8.1), with financial stability as its main asset. Its slower digital transformation, identified as a SWOT weakness, limits technological performance but does not undermine market resilience or customer trust. AL Ansari Financial Services holds a niche hybrid position (7.25), leveraging regional dominance and intelligent technology adoption, though limited global expansion and technological capacity constrain overall competitiveness.

Table 7. Weighted Scoring Results for Selected Financial Companies

Financial Company	Financial stability	Technologi cal Integration	Customer Attraction & Satisfaction	Market Growth	Total Weighte d Score
Revolut	2.8	2.5	1.8	1.8	8.9
JPMorgan Chase	3.15	1.75	1.6	1.6	8.1
AL Ansari	2.45	2.0	1.4	1.4	7.25

Source: Author's own elaboration.

These results suggest that while traditional banks maintain financial strength, technology-driven innovation is increasingly decisive for achieving market leadership. Based on this analysis, financial companies should adopt strategic measures to integrate intelligent technologies effectively, including:

- ➤ Investing in advanced technologies and talent: support AI, blockchain, and Big Data initiatives with skilled personnel and a culture oriented toward innovation.
- Monitoring and adapting to regulatory changes: ensure compliance with evolving regulations while implementing proactive risk management.
- ➤ Fostering an innovation-oriented culture: leverage robust data governance, pilot testing, and continuous improvement to align AI adoption with strategic objectives.
- ➤ Collaborating with fintechs: transform competition into partnership through strategic alliances or acquisitions.
- Enhancing customer interaction: implement secure, user-friendly chatbots and voice assistants to improve service quality.

Specifically, traditional banks such as JPMorgan should prioritize deeper technology integration, fintech companies like Revolut should continue global expansion while reinforcing cybersecurity, and hybrid models such as AL Ansari can strengthen regional advantages by expanding digital capabilities and exploring blockchain solutions.

These strategies enable financial companies to harness the full potential of AI and drive sustainable, innovation-led financial management. By implementing these measures, they can balance operational resilience with technological agility, positioning themselves for sustained growth and market leadership in an increasingly digital financial landscape.

6. Limitations of the Study

While this study provides valuable insights into the integration of intelligent technologies in financial management, several limitations should be noted. The primary survey and expert interviews were conducted exclusively with managers at AL Ansari, which may limit the generalizability of the qualitative findings.

Additionally, the analysis focuses on three selected institutions representing onlineonly, traditional, and hybrid models. Although these cases offer comparative insights, they do not fully capture the diversity of financial institutions worldwide.

The research is further constrained by the time frame of 2021–2023, while rapid technological developments and market changes may affect the relevance of the results in the near future. Data availability also posed challenges, particularly for AL Ansari, as some financial and operational indicators were limited or not reported, restricting comprehensive comparisons. External factors, including macroeconomic trends, regulatory changes, and evolving market conditions, may have influenced company performance and the observed impact of intelligent technologies.

Moreover, the study primarily focuses on AI, ML, Big Data, and digital customer service tools, with other emerging technologies considered only selectively. Finally, qualitative findings derived from expert opinions and survey responses may reflect personal perspectives, potentially affecting objectivity. Despite these limitations, the study offers meaningful insights while highlighting opportunities for further research across broader institutional, regional, and technological contexts.

7. Conclusions

The conducted research demonstrates that the integration of intelligent technologies, including AI, ML, Big Data analytics, and automated customer service tools, has a profound impact on financial management practices within banking and non-banking financial institutions. These technologies significantly enhance operational

efficiency, financial stability, and market competitiveness, while fostering innovation and improving customer experience.

Analysis of financial performance revealed that technology-driven financial institutions, such as Revolut, achieve remarkable growth in profitability and operational metrics, including ROA and ROE, as a direct result of comprehensive AI integration across operations. Traditional banks like JPMorgan maintain robust financial stability and client trust, yet exhibit a slower pace of technological adoption.

Hybrid institutions, exemplified by AAFS, benefit from the combination of physical and digital channels, leveraging regional market knowledge and digital platforms, though their growth and technological adoption remain moderate compared to fully digital competitors. These observations underscore how different operational models adapt to intelligent technologies, with digital-first approaches showing the highest returns in efficiency, scalability, and customer acquisition.

Intelligent technologies have enabled measurable improvements in financial management, including optimized resource allocation, enhanced risk management, automated reporting, and more accurate forecasting, which collectively strengthen institutional resilience.

AI-driven tools have expanded access to financial services, promoting financial inclusion and facilitating remote customer engagement, particularly during crises such as the COVID-19 pandemic. Implementation challenges, including technical complexity, regulatory constraints, upfront investment costs, and workforce adaptation, were mitigated through phased adoption, staff training, and strategic partnerships with technology providers.

SWOT analysis and weighted scoring highlight that technological integration is now a decisive factor in establishing competitive advantage. Institutions that effectively combine advanced technology with strategic management not only enhance operational efficiency and profitability but also increase customer satisfaction and long-term market growth potential.

Digital-first models excel in rapid market expansion and innovation, traditional banks demonstrate stability and trust, and hybrid models optimize the synergy between physical presence and digital services.

Looking forward, the financial sector is expected to undergo further transformation driven by advanced AI. Machine learning will continue to improve fraud detection, document processing, and data accuracy, while deep learning models will enable real-time financial forecasting to predict market trends and customer behaviors more effectively. Global market opportunities are expanding as regulatory and operational

constraints ease, emphasizing that AI and ML adoption is both a technological and strategic imperative for financial institutions seeking sustained competitiveness.

Future research should focus on regulatory and ethical considerations, including transparency, fairness, and accountability in AI-driven financial services, as well as long-term impacts on employment, workforce adaptation, and algorithmic biases. Additionally, cybersecurity advancements will be critical to mitigate emerging threats and maintain customer trust, while comparative studies across global markets can reveal the influence of regulatory, cultural, and economic factors on technology adoption.

In conclusion, the financial services industry has reached a pivotal point where intelligent technologies are no longer optional but essential for future growth and competitiveness. Strategic investment in AI and ML will enable financial institutions to optimize service delivery, expand customer reach, enhance operational efficiency, and manage risks more effectively, thereby securing sustainable profitability and long-term leadership in a rapidly evolving, digitally driven global market.

References:

- Alieva, S.S. 2023. Theoretical Foundations of Financial Management Under Conditions of Ensuring Stability of Economic Development. Best Journal of Innovation in Science, Research and Development, 2(6), 512-518.
- Al Ansaria Financial Services. Financial Statements. https://aafs.ae/financial-statements/.
- AlMomani, A.A., Alomari, K.F. 2021. Financial Technology (FinTech) and its Role in Supporting the Financial and Banking Services Sector. International Journal of Academic Research in Business and Social Sciences, 11(8). https://doi.org/10.6007/ijarbss/v11-i8/10625.
- Antal-Vaida, C. 2022. A review of Artificial Intelligence and Machine Learning adoption in banks, during the COVID-19 outbreak. In: Proceedings of the International Conference on Business Excellence, Vol. 16, No. 1, 1316-1328. Sciendo.
- Daniel, K. 2017. Thinking, fast and slow. Farrar, Straus and Giroux / New York.
- Dong, J. 2018. Application research of artificial intelligence technology in enterprise financial management. In: Proceedings of the 2018 International Conference on Economics, Finance and Business Development (ICEFBD).
- Galazova, S.S., Magomaeva, L.R. 2019. The transformation of traditional banking activity in digital. International Journal of Economics and Business Administration, 7(Special Issue 2).
- Giovine, C., Lerner, L. 2024. One year in: Lessons learned in scaling up generative AI for financial services. McKinsey & Company. https://www.mckinsey.com/industries/financial-services/our-insights/banking-matters/one-year-in-lessons-learned-in-scaling-up-generative-ai-for-financial-services. https://doi.org/10.23925/2179-3565.2022v13i3p25-38.
- JP Morgan Chase. Annual Report & Proxy. https://www.jpmorganchase.com/ir/annual-report.
- Kecerdasan Buatan, D., Hidayat, M., Yulia Defitri, S., Hilman STIE Persada Bunda, H., Mahaputra Muhammad Yamin, U. 2024. The Impact of Artificial Intelligence on

- Financial Management. Management Studies and Business Journal (Productivity) (Vol. 1, Issue 1). https://journal.ppipbr.com/index.php/productivity/index.
- Lu, H., Peng, Y., Ding, J., Fu, Z. 2024. Integration and transformation: The impact and applications of artificial intelligence in the financial sector. Applied and Computational Engineering, 42(1), 140-146. https://doi.org/10.54254/2755-2721/42/20230769.
- Mate, R., Khan, M.H., Tambade, M.S., Trainer, B. 2023. Role of artificial intelligence in financial management process. The Online Journal of Distance Education and e-Learning, 11(2).
- McCarthy, J. 1989. Artificial Intelligence, Logic and Formalizing Common Sense. In: Thomson, R., editor, Philosophical Logic and Artificial Intelligence. Kluver Academic.
- McCarthy, J. 1990. Formalizing Common Sense: Papers by John McCarthy. Ablex Publishing Corporation.
- Mogaji, E., Nguyen, N.P. 2022. Managers' understanding of artificial intelligence in relation to marketing financial services: insights from a cross-country study. International Journal of Bank Marketing, 40(6), 1272-1298.
- Mukhamedov, F., Maramygin, M., Mokeeva, N., Rodicheva, V. 2020. Peculiarities of online banking in the framework of ensuring sustainable development of the economy. E3S Web of Conferences, 208. https://doi.org/10.1051/e3sconf/202020803027.
- Oneshko, S., Ostropolska, Y., Pomazun, O., Hrynchyshyn, Y., Rak, R.M. 2022.

 Development of Digital Innovations in Company Financial Management. Review of Economics and Finance (Vol. 20). https://orcid.org/0000-0003-2313-3984.
- Polireddi, N.S.A. 2024. An effective role of artificial intelligence and machine learning in banking sector. Measurement: Sensors, 33, 101135. https://doi.org/10.1016/j.measen.2024.101135.
- Pratolo, S., Fadilah, A.G. 2022. The Effects of Human Resources and Information Technology Utilization toward Transparency of Village Financial Management with Organizational Commitment as a Moderated Variable (Empirical Study in Bantul Regency). International Conference on Sustainable Innovation Track Accounting and Management Sciences (ICOSIAMS 2021), 276-283. Atlantis Press.
- Rasiwala, F., Kohli, B. 2021. Artificial intelligence in fintech. International Journal of Business Intelligence Research, 12(1), 48-65. https://doi.org/10.4018/ijbir.20210101.oa3.
- Revolut. Financial Statements. https://www.revolut.com/financial-statements/.
- Safaee, L., Yadegari, R. 2022. Enhancing financial performance by applying knowledge management and new financial technologies in the banking industry. Journal on Innovation and Sustainability, RISUS, 13(3), 25-38.
- Shiller, R.J. 2020. Narrative economics: How stories go viral and drive major economic events. Princeton University Press.
- Singla, A., Sukharevsky, A., Yee, L., Chui, M., Hall, B. 2024. The state of AI in early 2024. McKinsey & Company. https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai.
- Zhang, Y. 2023. Fintech: Exploring the Digital Transformation of Banking & Financial Services. BCP Business & Management, 46(1), 85-91.
- Zhang, Y., Hao, S. 2023. Construction of intelligent financial platform for colleges and universities in the era of big data. Second International Conference on Digital Society and Intelligent Systems, Vol. 12599, 186-191.