World Journal of Advanced Research and Reviews
eISSN: 2581-9615 CODEN (USA): WJARAI
Cross Ref DOI: 10.30574/wjarr
Journal homepage: https://wjarr.com/

(RESEARCH ARTICLE)

Check for updates

Re-engineering finance: Strategic transformation through cloud, AI and intelligent design

Rahul Bhatia *

SAP S/4 Hana cloud solution architect, HCL Technologies, United Kingdom, Senior Member, IEEE.

World Journal of Advanced Research and Reviews, 2025, 26(02), 3200-3210

Publication history: Received on 11 April 2025; revised on 19 May 2025; accepted on 21 May 2025

Article DOI: https://doi.org/10.30574/wjarr.2025.26.2.1984

Abstract

This study examines financial sector reengineering using Cloud technology, AI, and intelligent design. This research aims to aid strategic transformation. It examined the shift to digital accounting or finance, intelligent financial architecture, and financial system modernisation. Cloud-based ERP platforms like SAP S/4HANA were highlighted. The study focused on real-time reporting, fraud detection, and financial automation. Ultimately, the goal was to eliminate human contact inefficiencies. Corporations that used these technologies experienced faster billing, improved collection rates, and better decision-making. However, Cloud-based infrastructures ensure scalability and regulatory compliance, while AI-powered analytics improved prediction accuracy. Data security, coordination of systems, and compliance with laws were issues throughout the process. The findings showed that Cloud Computing, AI, and intelligent design can revolutionise nimble financial infrastructures. In order to maintain innovation, forthcoming studies should address cybersecurity, AI ethics, and Adaptive Cloud infrastructures. These technologies may be used to create more intelligent and resilient financial systems that can meet modern corporate needs.

Keywords: Digital Finance Transformation; Intelligent Financial Architecture; Finance Reengineering; Cloud ERP; SAP S/4HANA; Artificial Intelligence in Finance; Cloud-Based Finance Systems; Strategic Finance Transformation; Intelligent Enterprise Architecture; Financial System Modernization

1. Introduction

The reengineering of finance through Cloud technologies, Artificial Intelligence (AI) and intelligent design is a fundamental change in how financial systems in the organization are structured and executed. At the time of digital technologies' rapid developments, finance is going through a strategic change, which puts the focus on agility, scalability and intelligence. Digital finance transformation unites new technologies to modernize old processes, shorten processes, and enable real-time intelligence. The intelligent financial architecture leverages AI-based analytics, automation, and prediction capabilities to enhance accuracy and reduce manual intervention as much as possible to achieve business goals.

The core of this evolution is Cloud ERP systems, especially platforms such as SAP S/4HANA. Because finance functions require alignment data without limits while also allowing for continuous innovation and process simplification, they need a flexible, scalable foundation [1]. It helps the shift of financial operations into intelligent enterprise architecture which is deeply interrelated with the organization's business strategies.

AI gives these systems greater capacity like automated forecasting, anomaly detection and cognitive analytics to make management of the financials smarter. Strategic finance transformation aims to align a standard set of actions with overall organisational vision, value creation, risk management and performance optimisation. Finance reengineering

* Corresponding author: Rahul Bhatia

involves creating processes that can adapt to the digital-first environment to make them efficient and innovative [2]. This transformation enabled by Cloud-based finance systems gives insights in real-time, efficiency and better collaboration. Intelligently designed financial system modernization enables organizations to respond to changes in the market, regulatory requirements and the customer's expectations.

The article covers the gaps in outdated finance systems. It studies digital finance and system modernization. It examines intelligent design in the enterprise architecture. This article discusses Cloud ERP and SAP S/4HANA roles. It assesses the usefulness of AI in reengineering finance in Cloud-based systems. Findings and evaluation of results will support strategic transformation.

2. Problem statement

Financial systems were therefore added: Cloud Computing, Artificial Intelligence (AI) and other such technologies that have developed so much more rapidly than financial technologies. The convergence of goals is to enhance operational efficiency, decision making and customer experience. Nevertheless, there are some challenges and gaps impeding the efficient use and use of these technologies in financial operations. A challenge is that AI-driven automation cannot be easily plugged into existing Enterprise Resource Planning (ERP) systems such as SAP S/4HANA [3]. Intelligent automation using AI can change financial processes entirely, but there are obstacles that prevent these technologies from being applied in a proper way in organisations. It includes challenges in data integration, system compatibility, and obtaining sufficient automation without disrupting them.

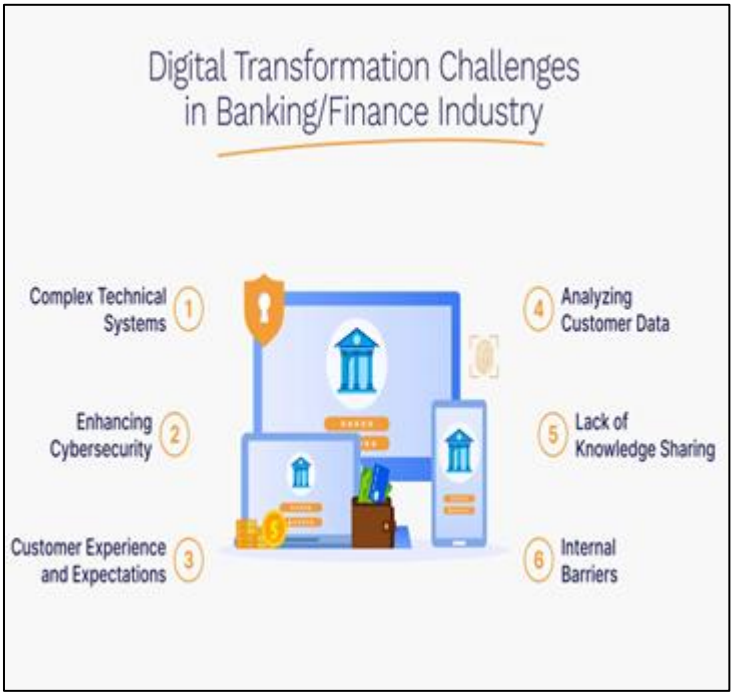


Figure 1 Digital Transformation Issues in the Financial Sector [3]

There are six key digital transformation challenges of the banking and finance industry that are showcased in the figure, ranging from susceptibility to complex technical systems and cybersecurity, customer expectation changes, unsatisfactory customer data analysis, lack of knowledge sharing, and internal organization barriers [4]. These challenges impede the beneficial transfer of financial systems into the Cloud, Artificial Intelligence, and intelligent design, and punic into the path of strategic transformation and modernization. Reaching this sort of seamless, secure and customer-facing digital finance architecture requires overcoming these barriers.

One of the major issues is data security and privacy. Due to the adoption of Cloud financial systems and AI, there is a huge volume and sensitive financial data that needs to be handled. There is no denial to this fact, security measures against cyber threats and unauthorized access should also be effective.

In addition, there continues need to comply with all regulatory standards as well as address the ethical consideration of the usage of data. Such AI and Industry 4.0 technologies are also not easily scalable or adaptable for financial services. It is imperative for financial institutions to guarantee they can satisfy running higher data volumes and adjust to converging the technological universe. It consists of incorporating cutting-edge technologies such as the Internet of Things (IoT) and Blockchain for better data exchange and transparency in real time [5].

Additionally, the integration of AI agents into the finance system brings in a new paradigm of traditional finance with the addition of AI agents. In order to attain touchless operations and predictive insights, the transformation it needs has to be carried out in a cohesive, integrated solution on a SaaS-native ERP platform.

Nevertheless, organizations find it difficult to adopt such platforms and smoothly integrate them with their current systems. A comprehensive approach to integrating Cloud Computing, AI, and intelligent design in financial systems is needed to address these gaps and requires the development of models and frameworks [6].

An ideal framework should cater to making the system compatible, and secure from data, the ones that are compliant, scalable and that can give a clear implementation strategy for moving the financial operations in a better way.

3. Methods

3.1. Digital Finance Transformation and Financial System Modernization

In Digital Finance Transformation and Financial System Modernization, a methodology in the form of model and framework assessment was needed to study the latest trends. In order to evaluate changes in strategic shifts in financial services, the implementation process relied on the use of a number of data collection techniques, theoretical models, and analytical frameworks. Next, the key methods used in this are outlined in the following sections.

DFRA (Digital Finance Reference Architecture) addresses this gap by offering a modular, standards-aligned, and industry-compliant architecture that enables organizations to:

- Transition from legacy ERP systems to SAP S/4HANA Cloud using fit-to-standard methodology
- Embed compliance controls and audit-readiness into the architecture
- Enable real-time analytics and predictive finance using SAP Analytics Cloud and Universal Journal integration
- Standardize finance operations across regions, currencies, tax codes, and regulatory frameworks
- Integrate SAP BTP and Signavio for process intelligence and extensibility
- Accelerate time-to-value through phased implementation and digital core modularity
- Enhance ESG (Environmental, Social, and Governance) tracking by aligning financial data with sustainability metrics
- Support AI-driven scenario modeling and intelligent forecasting using embedded SAC capabilities
- Promote global consistency while allowing for localized compliance and policy variations

3.1.1. Framework Components:

- Core Digital Finance Model – Aligns SAP S/4HANA core components (FI, CO, AA, TRM) with business objectives
- Compliance Layer – Embedded controls for SOX, IFRS, GAAP, and multi-jurisdictional tax handling
- Data & Analytics Layer – Real-time reporting architecture leveraging ACDOCA, SAC, and predictive tools
- Process Optimization – Integration with SAP Signavio for harmonized, insight driven business process redesign
- Cloud Integration Layer – Uses SAP BTP and API-led connectivity to external platforms and legacy systems
- Sustainability & ESG Module – Built-in architecture to align financial operations with sustainability KPIs and compliance with global ESG standards (e.g., CSRD, SASB, GRI)
- AI & Automation Layer – Leverages SAP AI Core and SAP Intelligent Robotic Process Automation (IRPA) to deliver adaptive financial forecasting, anomaly detection, and intelligent document processing

Impact and Adoption: DFRA has been successfully adopted in multiple global transformation programs across Europe and North America, with measurable outcomes: • 40–60% reduction in implementation time • 30–50% cost savings through process standardization and automation • Enhanced audit and compliance capabilities recognized by internal and external auditors • Improved financial agility and real-time visibility for C-suite decision-making • Increased operational resilience through modular, scalable architecture that supports future cloud innovations • Improved ESG reporting maturity and alignment with investor-grade sustainability disclosure requirements

In order to gain all the information about digital transformation in finance, a multi-source data collection strategy was adopted. The semi-structured interviews with industry experts including executives, managers and tech specialists from financial institutions were used to acquire the primary data [7].

These interviews dealt with how organizations can manage financial systems, how organizations adapt to technological changes and how to tackle the challenge of modernizing financial systems. For the purposes of creating conductivity in-depth discussions on AI, Cloud Computing, Blockchain and customer-centric digital solutions, were permitted open-ended questions.

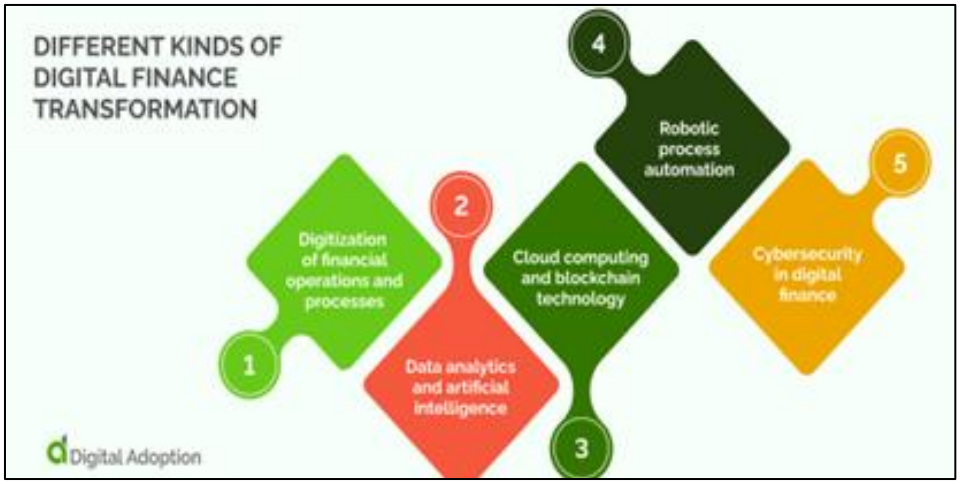


Figure 2 Various Kinds of Digital Finance Transformation [5]

The above Figure depicts 5 major types of digital adoption of financing to enhance advanced banking technology. A wider audience, including financial sector professionals and customers, received official surveys. The quantitative information was collected on digital adoption, customer satisfaction, efficiency gains, and financial system benefits.

Several theoretical frameworks and models were utilised to examine how digital transformation has affected financial services. These models give an objective structure for learning about technology acceptability, competitiveness, and institutional effects. The Technology Acceptance Model, or TAM, assessed consumers' digital financial product adoption behaviour using a perceived utility (PU) in conjunction with perceived ease of use (PEOU) [8].

Secondary data sources supported the main findings. Academic, regulatory, and industry articles on financial technology advancements were secondary data sources. Triangle data innovation may help comprehend Integrated Finance Transformation and its implications on financial ecosystems. The relationship was particularly defined as:

$$\text{Behavioral Intention (BI)} = \beta 1\text{PU} + \beta 2\text{PEOU} + \epsilon$$

Where,
BI = Likelihood of adopting digital finance solutions
PU = Perceived benefits of the technology
PEOU = Perceived simplicity of implementation
$\beta 1, \beta 2$ = Regression coefficients
ϵ = Error term

Resource-Based View (RBV) was used to study how financial organisations leverage technological resources including AI-driven statistics, Cloud Computing facilities, and protection [9]. The RBV method emphasises the company's internal strengths above market forces.

This highlighted the role of intellectual advances in financial system modernisation. Digital evolution rates across financial organisations were examined using the Diffusion of Innovation Model [10]. Early adopters accepted Cloud solutions, the majority welcomed technical advances, the second quarter waited for official help, and laggards refused change. Innovators explored Blockchain and cognitive intelligence, those who embraced chose Cloud-based offerings, while laggards refused change.

The notion highlighted the obstacles of modernising the financial system, as well as market competition and regulatory constraints. Traditional equipment and risk minimisation are witnesses to these difficulties. It also revealed adoption trends in banking, insurance, and investment [11]. The institutional theory framework was utilised to examine how regulations, industry norms, and regulatory requirements affect digital transformation operations. This study examines all external elements that affect Integrated Finance Revolution in insurance, banking, finance, and development.

3.2. Intelligent Financial Architecture and Enterprise Design

In transformative movements, the integration of Intelligence Financial Architecture (IFA) with Smart Enterprise Architecture is essential for the reorganisation of financial activities [12]. This combination enhances fiscal decision-making, profitability, and mobility.

Contemporary technology such as Cloud-based backups and Artificial Intelligence provides this. A cohesive data model was created to combine financial data from many sources. This ensured the model's data was accurate and consistent. This model employed the equation:

$$D_{integrated} = \sum_{i=1}^{n} D_{sourse_i}$$

Where,
Dintegrated represents the integrated financial dataset.
Dsourcei denotes individual data sources.
n is the total number of data sources.

AI-driven programs evaluated combined financial data. This provided predictive analytics and quick observations. The Artificial Neural Networks (ANN) was a key model, and its properties include:

$$y = f(\sum_{i=1}^{n} w_i x_i + b$$

Where,
y is the output of the network.
wi represents the weights applied to inputs.
xi denotes the input values.
b is the bias term.
f is the activation function.

Cloud Computing was used to host accounting software for expansion along with safe connectivity to finance data and resources. The equation utilised to improve those systems was:

$$P_{cloud} = \frac{R_{cloud}}{C_{cloud}}$$

Where,
Pcloud represents the performance ratio.
Rcloud is the resource availability.
Ccloud denotes the cost of cloud services.

Financial data was collected from instantaneous market updates, public databases, and internal corporate systems. The partnership used Zachman as well as TOGAF to achieve enterprise architecture. The technique of predictive analytics also employed AI models like Decision Trees as well as Support Vector Machines [13]. A mixed-methods strategy, which combined qualitative assessments through investigations and conversations with professionals in the field with quantitative data analysis, helped the analysis understand the integration's consequences.

Models and frameworks enabled Intelligent Financial Architecture and Intelligent Enterprise Architecture integration. TOGAF the Open Group Architecture Framework was used to define organisational layers and link finance operations with company strategy [14]. Using the Zachman model, participants may communicate more efficiently. The framework provides a full view of the architectural parts. Decision Trees streamlined rule-based economic hazard classification,

while Support Vector Machines improved financial transaction abnormality detection. A pair of models were created to simplify financial risk management.

CRISP-DM simplified data mining initiatives by separating the adoption of Artificial Intelligence into organisational comprehension, data preparation, simulation, evaluation, and deployment [15]. These models offered adaptability, portability, and plan integrity across all financial institution improvements.

3.3. Cloud ERP And Sap S/4Hana In Strategic Finance Transformation

Different methodologies were involved to optimize financial operations and improve decision-making capabilities in strategic finance transformation of integrating Cloud ERP systems to SAP S/4HANA. A vision for the transformation of the finance organization was developed that would guide the transformation process.

An implementation roadmap that not only was compelling and flexible, but also defined the functional scope, the technical landscape, timeline option, user and business partner engagement, global locations, deployment approach, and governance structure [16]. Based on the development of an intelligent data framework, stressed accurate data value and the amount of effort required to acquire it. This helped to formalize a data strategy to develop an understanding of the organization's data value and use it to create actionable insights.

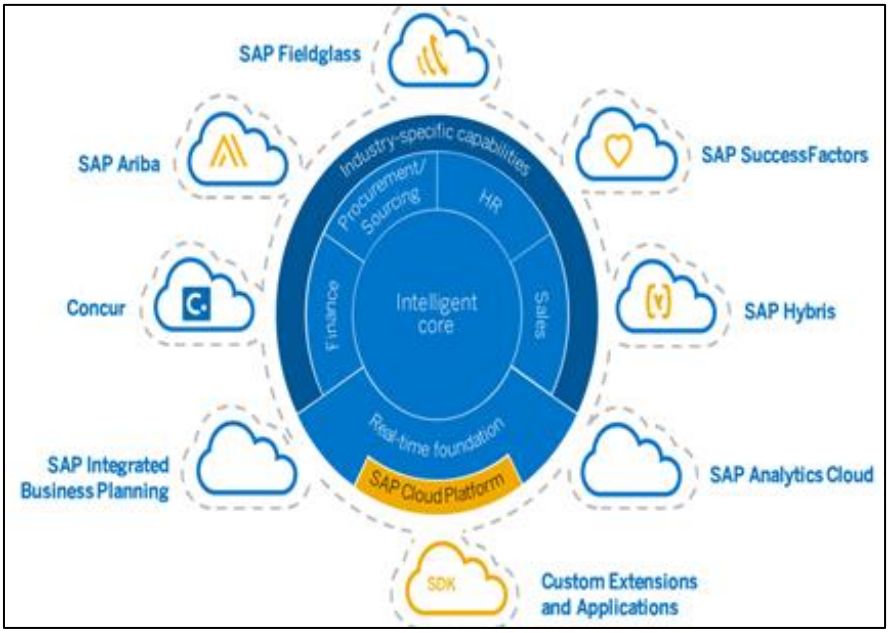


Figure 3 Cloud ERP with SAP S/4HANA [4]

Integration of SAP S/4HANA within a Cloud-based ERP ecosystem for strategy finance transformation is shown in the Figure. At its core, it is an intelligent suite powered by SAP Cloud Platform with real-time data and business processes. Surrounding components such as SAP Ariba, Concur, SuccessFactors, and Analytics Cloud support functions like finance, procurement, HR, and sales [18]. With such an integrated framework, custom extensions, seamless collaborations and intelligent automation enable the reengineering of financial operations based on scalability, flexibility and data-driven decisions to an enterprise.

The program embedded innovation at the heart of it by enhancing Artificial Intelligence and Machine Learning in relevant processes in SAP S/4HANA. By taking this approach the processing was accelerated, the data was more accurate, there were no longer reconciliations, and real-time allocations were possible while maintaining continuous global regulatory compliance and risk mitigation. The determination, documentation, and socialization of definitions of global and local requirements were used to try and manage global and local complexities. "Global" elements were understood to normally refer to common components or processes, whereas "local" referred to national and/or local legal and statutory requirements, as well as contractual, industry regulatory or local business requirements [19].

Effective decision-making was created with strong governance to control the scope of transformation and also to be aligned with the original vision. Among them were phases such as Discover, Prepare, Explore, Realize, Deploy and Run

using the SAP Activate methodology. It allowed for a structured and efficient process at implementation [20]. There was the provision of real-time financial reporting capacities for the immediate access of financial data and promptly enable informed decision-making. A set of financial trends was forecasted with advanced predictive analytics for proactively adjusting the strategy. Within a unified platform, budgeting, forecasting and financial analysis were integrated financial planning and analysis.

3.4. Artificial Intelligence and Finance Reengineering in Cloud-Based Systems

Several methodologies were used that made it possible to integrate Artificial Intelligence (AI) into Cloud-based financial systems for strategic transformation. Extensive datasets were analyzed by Machine Learning (ML) algorithms to identify patterns and trends to be able to make financial forecasts and risk assessments. The interpretation of unstructured financial documents was facilitated using Natural Language Processing (NLP) techniques thus automating the extraction of data and minimising the errors that usually come with manual processing of documents [21]. Reinforcement Learning was used to model optimized financial strategies such as suggesting appropriate outcomes arising from different scenario options of decision-making.

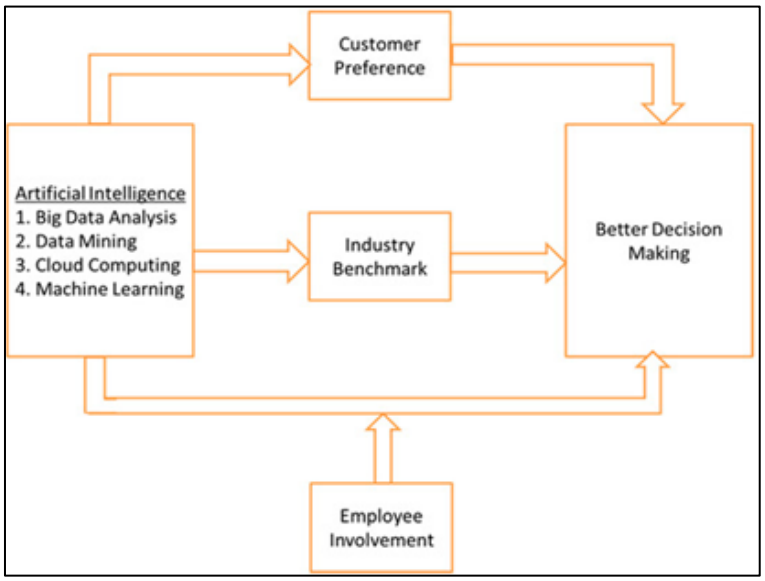


Figure 4 AI-based Cloud Technology Strategic Finance Transformation [27]

Big Data Analysis, Data Mining, Cloud Computing and other works together are called Artificial Intelligence (AI) and these were integrated with finance reengineering as shown in the Figure. Industry benchmarks are informed by AI, which, in turn, is driven by customer preferences and affects employee involvement to make better decisions. This Cloud-based ecosystem with a continuous feedback loop is continuous support for strategic transformation through aligning operational insights with newer financial goals [22].

Entire routine financial operations such as transaction processing and compliance checks have been automated using process automation tools for the sake of improved efficiency and accuracy. A use of predictive analytics based on historical data was to predict future financial events which could be used for proactive decision making and strategic planning.

Real-time responses, and personalized financial advice were given with the help of a virtual assistant and chatbot deployed to enhance customer interactions. The use of the technical architecture was a large scalable Cloud infrastructure for processing and storing real-time data. State-of-the-art security protocols can be used to incorporate data integrity as well as compliance with regulatory benchmarks [23]. AI modules were integrated to allow smooth communication with existing financial systems, to integrate, allowing seamless use of AI and keeping existing systems from breaking.

The performance optimization techniques e.g. parallel processing and load balancing were used to handle the computational demands of AI algorithms. Using continuous monitoring and updating of AI models, these models were adaptable to the changes in the financial landscape and also maintained the accuracy of the predictions and analyses

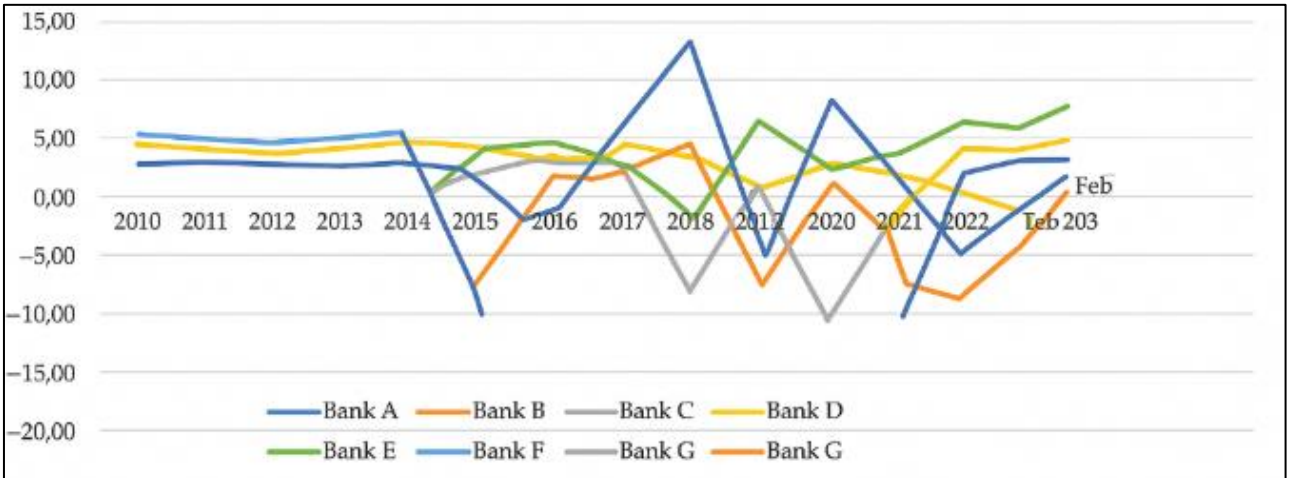
[24]. Such platforms were set up to promote knowledge sharing and coordination among stakeholders as they contribute to an environment of innovation and continuous improvement in financial management practices.

4. Results and discussion

Table 1 Solutions Achieved through Strategic Finance Transformation via Cloud, AI, and Intelligent Design

Strategy	Solutions
Digital Finance Transformation	Improved billing efficiency, reduced processing time, enhanced collection rates, and accurate forecasting
Intelligent Financial Architecture	Streamlined transaction workflows, improved fraud detection, enhanced forecasting with AI models
Cloud ERP and SAP S/4HANA Integration	Real-time reporting, global compliance management, unified data governance, and seamless integration
Artificial Intelligence in Cloud-Based Finance	Automated customer service, scalable AI infrastructure, intelligent decision support, reduced manual errors

The above Table determines the key solutions the implementing strategic finance transformation by using different digital methodologies. Measurable operational improvements were achieved through digitisation, namely addressing processes to speed it up and enhance financial accuracy. With the help of AI-powered Analytics, an Intelligent Financial Architecture enabled prediction of financial operations as well as more secure and consistent data models.



ROA	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2022	2021	Feb 2023
Bank A	3,70	3,70	3,22	3,22	3,00	1,89	1,61	2,13	0,85	1,01	1,98	1,66	3,70
Bank B	0,32	1,49	1,44	1,40	1,19	−0,15	0,66	−1,22	0,16	1,28	1,92	0,16	2,59
Bank C	2,62	0,95	−0,62	−0,61	−2,12	−0,38	−0,51	−1,93	−1,31	0,71	0,24	0,24	0,24
Bank D	0,15	0,20	−0,41	−0,45	−1,51	−1,28	−1,19	−3,20	−6,57	1,01	2,60	1,66	0,24
Bank E	1,22	1,80	−0,84	−0,82	−1,92	−0,87	−0,21	−0,12	−0,57	1,98	0,16	0,21	0,21
Bank F	0,16	1,43	−1,81	−1,19	−1,12	−1,90	−2,06	−1,00	2,08	0,16	1,98	0,21	0,68
Bank G	0,16	1,61	−0,16	−1,22	−1,88	−0,16	−0,41	−0,23	1,98	0,41	0,21	0,28	5,38
Bank F	2,08	2,67	1,39	1,38	1,41	1,83	1,98	1,88	1,46	2,50	1,15	1,93	5,38
Bank G	0,42	0,83	1,67	1,21	1,77	1,96	2,08	1,58	1,97	0,16	0,41	0,21	2,54

Figure 5 Line Graph of Digital Finance Transformation through Cloud, AI and Intelligent Design

From 2010 to February 2023, the graph depicts the Return on Assets (ROA) performance of 7 banks as a result of the digital finance transformation by Cloud, AI and intelligent design. In the post-2016 period, after the modernization transitional period, several banks like Bank A, Bank F and Bank G had tremendous volatility in ROA.

In 2020, it is noticed that at least ROA will stay stable or even improve at Bank G, which is quite a recovery trend. Such outcomes imply that strategic finance reengineering like automation, real-time analytics, and improved forecasting will have positive impacts. It corroborated that the Cloud and AI integration leads to improved financial outcomes and ease of system efficiency as time passes.

In terms of Intelligent Financial Architecture and Enterprise Design, there has been great advancement in the fusion of Machine Learning on top of SAP S/4HANA. However, forecasting accuracy of financial operations has improved, and the transactions have been streamlined and more easily detectable frauds [25]. Returns of cost savings and time efficiencies have ensued, while systems continued to perform with high performance in the face of varying Cloud service capacity. Accurate, real-time reporting and analytics have been enabled by Accenture's deployment of SAP S/4HANA for Cloud ERP and SAP S/4HANA in Strategic Finance Transformation. This has evolved the company to be able to support different business operations and more than 100 countries with integration with 360 downstream systems for better business insights and business-making decisions [26].

This strongly underlines the ability of Cloud technologies and AI to seamlessly and effectively bring about transformation within financial systems with an outcome of reduced cost and time increased operational efficiency and better decision-making in the wide knowledge of sectors.

5. Conclusion

The paper evaluated the reengineering of finance through Cloud technologies, AI and intelligent design by carrying out digital finance transformation, intelligent financial architecture, and strategic modernization. Real-time reporting, global compliance, and data governance were demonstrated as key findings of Cloud ERP systems, such as SAP S/4HANA. Forecasts became more accurate, fraud was detected better, and more financial processes were automated with AI integration, eliminating the work of the cumbersome manual process and ineffective operational inefficiencies.

When organizations took these technologies, gains were significant too: faster billing, better collection rates and better decision-making. With the help of intelligent enterprise architecture, the article seamlessly integrated data, while financial operations were made scalable and predictive through AI-driven analytics. Although breakthroughs, data security, seamless integration of systems, and compliance with rules remained issues. Financial organisations struggled to maximise AI and Cloud-based system possibilities.

These difficulties stemmed from integration issues and technological security concerns. In accordance with the study, adaptable frameworks are needed to maintain the confidentiality of information and ensure system rollout.

Future measures must also involve strict cybersecurity regulations and ethical usage of computational intelligence in banking systems. Further study may examine connecting advanced cryptography with the Internet of Things (IoT) for real-time financial transaction monitoring to ensure transaction security. Transparent Artificial Intelligence (AI) and regulatory compliance may build trust in computerised financial decision-making. Sustainable Cloud architectures must adapt to manage growing data quantities and market needs. Using unique innovative design components to preserve timeliness and profitability throughout the electronic commerce revolution is crucial.

The findings demonstrated the enormous possibilities of distributed computing, AI, and intelligent design. These improvements may make it easier to build creative and successful financial communities.

Compliance with ethical standards

Acknowledgment

The preferred spelling of the word "acknowledgment" in American English is without an "e" after the "g." Use the singular heading even if you have many acknowledgments. Avoid expressions such as "One of us (S.B.A.) would like to thank ... ." Instead, write "F. A. Author thanks ... ." Sponsor and financial support acknowledgments are placed in the unnumbered footnote on the first page, not here.

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

[1] O. Werth, C. Schwarzbach, D. Rodríguez Cardona, M. H. Breitner, and J.-M. Graf von der Schulenburg, "Influencing factors for the digital transformation in the financial services sector," *Zeitschrift für die gesamte Versicherungswissenschaft*, vol. 109, no. 2–4, pp. 155–179, 2020, doi: https://doi.org/10.1007/s12297-020-00486-6.

[2] J. Hwang, "Digital transformation strategies in the financial services sector," *International Journal of Science and Research Archive*, vol. 13, no. 2, pp. 1407–1415, 2024, doi: https://doi.org/10.30574/ijsra.2024.13.2.1939.

[3] Biz Technology Solutions, "Finance's Digital Transformation Challenges," *biztechnologysolutions.com*, 2023. https://biztechnologysolutions.com/digital-transformation-challenges-in-finance-industry/ (accessed 2025).

[4] CorporateServe, "SAP S/4HANA ERP Software- CorporateServe," *www.corporateserve.com*, 2021. https://www.corporateserve.com/erp/sap-s-4hana/ (accessed 2025).

[5] J. Sultan, "Digital finance transformation: From paper to pixels," *www.digital-adoption.com*, 2023. https://www.digital-adoption.com/digital-finance-transformation/ (accessed 2025).

[6] S. Kraus, S. Durst, J. J. Ferreira, P. Veiga, N. Kailer, and A. Weinmann, "Digital Transformation in Business and Management research: an Overview of the Current Status Quo," *International Journal of Information Management*, vol. 63, no. 4, p. 102466, 2022, doi: https://doi.org/10.1016/j.ijinfomgt.2021.102466.

[7] R. Naeem, M. Kohtamäki, and V. Parida, "Artificial intelligence enabled product–service innovation: past achievements and future directions," *Review of managerial science*, pp. 1–25, 2024, doi: https://doi.org/10.1007/s11846-024-00757-x.

[8] R. M. Visconti, S. C. Rambaud, and J. L. Pascual, "Artificial intelligence-driven scalability and its impact on the sustainability and valuation of traditional firms," *Humanities and Social Sciences Communications*, vol. 10, no. 1, pp. 1–20, 2023, doi: https://doi.org/10.1057/s41599-023-02214-8.

[9] K. Ekuma, "Artificial Intelligence and Automation in Human Resource Development: A Systematic Review," *Human Resource Development Review*, vol. 23, no. 2, pp. 1552–6712, 2023, doi: https://doi.org/10.1177/15344843231224009.

[10] S. Akter, K. Michael, M. R. Uddin, G. McCarthy, and M. Rahman, "Transforming Business Using Digital innovations: the Application of AI, blockchain, Cloud and Data Analytics," *Annals of Operations Research*, vol. 308, no. 1, pp. 1–10, 2020, doi: https://doi.org/10.1007/s10479-020-03620-w.

[11] R. Biloslavo, D. Edgar, E. Aydin, and C. Bulut, "Artificial intelligence (AI) and strategic planning process within VUCA environments: a research agenda and guidelines," *Management decision*, pp. 1–17, 2024, doi: https://doi.org/10.1108/md-10-2023-1944.

[12] M. M. El Khatib, A. Al-Nakeeb, and G. Ahmed, "Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study," *iBusiness*, vol. 11, no. 01, pp. 1–10, 2019, doi: https://doi.org/10.4236/ib.2019.111001.

[13] J. Dąbrowska *et al.*, "Digital transformation, for better or worse: a critical multi-level research agenda," *R&D Management*, vol. 52, no. 5, pp. 930–954, 2022, doi: https://doi.org/10.1111/radm.12531.

[14] R. K. Putri and M. Athoillah, "Artificial Intelligence and Machine Learning in Digital Transformation: Exploring the Role of AI and ML in Reshaping Businesses and Information Systems," *www.intechopen.com*, 2024. https://www.intechopen.com/chapters/1173615 (accessed 2025).

[15] Z. V. Veldhoven and J. Vanthienen, "Digital transformation as an interaction-driven perspective between business, society, and technology," *Electronic Markets*, vol. 32, pp. 629–644, 2021, doi: https://doi.org/10.1007/s12525-21-00464-5.

[16] M. U. Tariq, M. Poulin, and A. A. Abonamah, "Achieving Operational Excellence Through Artificial Intelligence: Driving Forces and Barriers," *Frontiers in Psychology*, vol. 12, no. 12, p. 686624, 2021, doi: https://doi.org/10.3389/fpsyg.2021.686624.

[17] F. Brunetti, D. T. Matt, A. Bonfanti, A. De Longhi, G. Pedrini, and G. Orzes, "Digital transformation challenges: strategies emerging from a multi-stakeholder approach," *The TQM Journal*, vol. 32, no. 4, pp. 697–724, 2020, doi: https://doi.org/10.1108/tqm-12-2019-0309.

[18] Q. He, M. Meadows, D. Angwin, E. Gomes, and J. Child, "Strategic alliance research in the era of digital transformation: Perspectives on future research," *British Journal of Management*, vol. 31, no. 3, pp. 589–617, 2020, doi: https://doi.org/doi/10.1111/1467-8551.12406.

[19] S. Mishra and A. R. Tripathi, "AI business model: an integrative business approach," *Journal of Innovation and Entrepreneurship*, vol. 10, no. 1, pp. 1–21, 2021, doi: https://doi.org/10.1186/s13731-021-00157-5.

[20] J. Reis and N. Melão, "Digital transformation: A meta-review and guidelines for future research," *Heliyon*, vol. 9, no. 1, p. e12834, 2023, doi: https://doi.org/10.1016/j.heliyon.2023.e12834.

[21] S. Mishra and P. Mishra, "AI Business Models and Its Impact on Business Strategic Framework," *International Journal of Financial Engineering*, pp. 1–17, 2023, doi: https://doi.org/10.1142/s2424786323500019.

[22] P. Parne, "Digital Transformation of Financial Services using Artificial Intelligence, Machine Learning, and Cloud Computing," *International Journal of Artificial Intelligence & Applications*, vol. 12, no. 06, pp. 27–35, 2021, doi: https://doi.org/10.5121/ijaia.2021.12603.

[23] A. Aldoseri, K. N. Al-Khalifa, and A. M. Hamouda, "AI-Powered Innovation in Digital Transformation: Key Pillars and Industry Impact," *Sustainability*, vol. 16, no. 5, p. 1790, 2024, doi: https://doi.org/10.3390/su16051790.

[24] H. Guo and P. Polak, "Finance centralization—research on enterprise intelligence," *Humanities and Social Sciences Communications*, vol. 11, no. 1, pp. 1–25, 2024, doi: https://doi.org/10.1057/s41599-024-04098-8.

[25] M. Kavak and L. Rusu, "Challenges and Opportunities of Artificial Intelligence in Digital Transformation: A Systematic Literature Review," *Procedia Computer Science*, vol. 256, pp. 369–377, 2025, doi: https://doi.org/10.1016/j.procs.2025.02.132.

[26] E. Omol, "Organizational digital transformation: from evolution to future trends," *Digital Transformation and Society*, vol. 3, no. 3, pp. 240–256, 2023, doi: https://doi.org/10.1108/dts-08-2023-0061.

[27] G. Amoako, P. Omari, D. K. Kumi, G. C. Agbemabiase, and G. Asamoah, "Conceptual Framework—Artificial Intelligence and Better Entrepreneurial Decision-Making: The Influence of Customer Preference, Industry Benchmark, and Employee Involvement in an Emerging Market," *Journal of Risk and Financial Management*, vol. 14, no. 12, p. 604, 2021, doi: https://doi.org/10.3390/jrfm14120604.