



SUGUNA

COLLEGE OF ARTS & SCIENCE

Department of Commerce | Business Administration & Research

In Association with

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA (ICMAI)

Coimbatore Chapter

Organizes

International Conference on

AI-Driven Finance 2025: Unlocking Business Growth and Cost Optimization

(ICAIDF'25)

27 | SEP | 2025

Chief Editor

Dr. R. Rajkumar

Editors

Dr. M. Meenakshi Saratha

Dr. P. Sri Padma Abirami

AI-Driven Finance 2025: Unlocking Business Growth and Cost Optimization (ICAIDF'25)

(International Seminar Proceedings)

Finance 2025: Unlocking Business Growth and Cost Optimization (ICAIDF'25)

(International Seminar Proceedings)

Chief Editor

Dr. R. Rajkumar

Principal

Suguna College of Arts & Science

Coimbatore

Editors

Dr. M. Meenakshi Saratha

Head, Department of Commerce

& Business Administration,

Suguna College of Arts & Science

Coimbatore

Dr. P. Sri Padma Ablrami

Assistant Professor,

Department of Commerce

Suguna College of Arts & Science

Coimbatore



SRI BHARANI PUBLICATION

Coimbatore – 641 046

**AI-Driven Finance 2025: Unlocking Business Growth
and Cost Optimization – International Seminar Proceedings**

**Dr. R. Rajkumar
Dr. M. Meenakshi Saratha
Dr. P. Sri Padma Abirami**

Copyright @ Author

Publishing rights reserved with Publisher.

First Edition: May 2024

No of Copies: 100

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of the publisher /author.

ISBN: 978-81-991858-5-2

Published by

SRI BHARANI PUBLICATION

17/21, Mappillai Gounder Layout

Kalveerampalayam,

Bharathiar University (Post)

Coimbatore - 641046

Phone: 95979 42112

Email: sribharanipublication@gmail.com

Website: [https:// sribharanipublication.com](https://sribharanipublication.com)

Printed at

SJK Print Shop,

Coimbatore - 46.

Tamil Nadu.

Phone: 96008 87663

Organizing committee

Patrons

Shri V. Lakshminarayananasamy
Chairman, Suguna Group of Institutions

Smt. L. Suguna
President, Suguna Group of Institutions

Dr. Srikanth Kannan
Secretary, Suguna Charitable Trust

Dr. V. Sekar
Director, Suguna College of Arts & Science

Conference Director

Dr. R. Rajkumar
Principal
Suguna College of Arts & Science

Conference Chair

Dr. M. Meenakshi Saratha
Head, Department of Commerce & Business Administration

Dr. P. Sri Padma Abirami
Assistant Professor, Department of Commerce

Conference Co-Chair

Dr. A. Vanitha
Assistant Professor,
Department of Commerce

Dr. B. Pradeepa
Assistant Professor
Department of Business Administration

Conference Convenors

Dr. V. P. Amuthanayagi , AP, Department of Commerce
Dr. S. Saravanan, AP, Department of Commerce
Dr. P. Janani, AP, Department of Commerce
Ms. M. Jayasurya, AP, Department of Commerce
Ms. S. Sruthi, AP, Department of Commerce
Ms.A. Anu Amalorpava Mary, AP, Department of Business Administration
Ms. Josphine Ruth Jennifer, AP, Department of Business Administration

Student Co-ordinators

Ms. Archana A
Mr. Revanth M
Ms. Harini S

54	Artificial Intelligence in The Context of Decision-Making: Opportunities, Challenges, and Ethical Dimensions	Sanjeedah Khatoon Prof. Shaheen Shaikh	305
55	Artificial Intelligence: Reshaping the Future of Commerce in India	Dr.C.Melvin Jebaraj Mr.C.Rajasekar	310
56	Revolutionizing Banking and Finance: The Power of Digital Transformation	Dr. T. Vijaya Chithra	313
57	AI Application in Taxation and Compliance	Dr.J. Rini Mercy, Ms. Prathiksha.P. R,	317
58	AI in Green Fintech for Sustainable Future of India: Transforming Financial Ecosystems through Intelligent Green Technologies	C. Harish B. Narasimhan	325
59	How Predictive Analysis can Save Your Supply Chain	P.Viswanathan	331
60	Blockchain Technology for AI in Finance: Transforming Financial Services Through Distributed Intelligence	S. Kathirvel B. Narasimhan	336
61	Cognitive Load and Decision Quality: a Comparative Study of Traditional vs. Immersive vr Financial Planning Tools	Dr. B. Narasimhan Ms. A. Praveena	344
62	Conversational Business Intelligence: Evaluating the Effectiveness of AI Chatbots and Voice Interfaces for Data Query and Analysis	Ms. A. Praveena Dr. B. Narasimhan	355
63	Business intelligence and data analytics through AI	Ms.L.Priyanka	375
64	AI in Risk Management and Fraud Detection	Dr.P.Gomathi Devi	387
65	Future Skills and Career Opportunities in AI – Enabled Finance	Dr.T.Mohana Sundari	391
66	Impact of Intra-Organizational Relationships on Organizational Effectiveness	Dr. S. S. Shahul Ameen	396
67	ESG Performance in Indian Industries: a Five-Year Sectoral Analysis (2020-2024)	Dr.M.Selvakumar Mrs.V. Dhivya S.S.Srivatsa kasi Narayanan	404
68	AI-based Career Guidance: Perception Among Final-Year Undergraduate Students	Dr.Razia Fathima L.A Kaviyadharshini A Dhanaasri SV	411
69	Digital Transformation in Banking and Finance	Dr.A.Meenakshi Bharani muthukani K	423

56

Revolutionizing Banking and Finance: The Power of Digital Transformation

Dr. T. Vijaya Chithra

Assistant Professor

B.Com (CA) Department

Nallamuthu Gounder Mahalingam College, Pollachi

drvijayachithra@gmail.com.

Abstract

Digital transformation in banking is the act of integrating digital technologies and strategies to optimize operations and enhance personalized experiences. Across the financial services industry, this process can occur by breaking down data silos and reimagining the customer experience. The world is rapidly changing to be more digitally focused, especially in the banking industry. Traditional banks are undergoing major digital transformations in order to meet the needs of new customers and existing customers seeking a more tailored and individualized banking experience through digital channels. Digital transformation isn't new to the banking sector, but it has become more relevant as fintech and new operating models have gained in popularity. Traditional banks must keep up with the changing market and ever-evolving customer needs, such as the drive toward using mobile apps or websites to perform transactions. These types of technology are part of the omni channel strategy banks are using to break down data silos and reimagining the customer journey. Hence the present study focuses on knowing the power of Artificial Intelligence in revolutionizing the functions of Banking and Financial services.

Introduction

Digital transformation in banking is the act of integrating digital technologies and strategies to optimize operations and enhance personalized experiences. Across the financial services industry, this process can occur by breaking down data silos and reimagining the customer experience. The world is rapidly changing to be more digitally focused, especially in the banking industry. Traditional banks are undergoing major digital transformations in order to meet the needs of new customers and existing customers seeking a more tailored and individualized banking experience through digital channels. Digital transformation isn't new to the banking sector, but it has become more relevant as fintech and new operating models have gained in popularity. Traditional banks must keep up with the changing market and ever-evolving customer needs, such as the drive toward using mobile apps or websites to perform transactions.

Digital transformation, in the financial services space means, integrating modern technologies into institutions. It changes how these companies operate, serve customers, and empower employees. The goal is to improve efficiency, productivity, and experience. For professionals, new software and technology power more personalized recommendations and advisory. Tasks that are manual and time-intensive can be automated and streamlined. This frees up the capacity to nurture client relationships.

For consumers, digital platforms expand access and convenience. Customers can independently explore options and self-educate. Virtual tools also make remote services possible.

Transformational Benefits of Digitalization in Financial Sectors

1. Reduce operational costs

Legacy processes and outdated technology drain resources in financial services. Paper-heavy workflows, manual data entry, and having staff handle routine requests used to be the status quo. Now, all those things can drive up costs.

Digital transformation efforts increase profitability by cutting unnecessary expenses. For example, digitizing documents and integrations between systems reduces administrative work. Chatbots and self-service portals also minimize repetitive basic queries from customers.

2. Improve customer experience

Financial services is a human-centric industry, but that doesn't mean customers don't expect options that allow them to be more independent. Self-service functionality empowers customers to manage simple interactions. Digital platforms allow them to access documents, check balances, make payments, and more without contacting advisors. This autonomy provides new levels of convenience. Personalization improves customer service by responding to individual client needs and preferences. For example, advisors can tailor communications based on the data they have about customers. They can manage relationships more strategically.

3. Foster creativity and innovation

Financial advisors must constantly create new value for customers. Modern technology provides advisors with tools to develop original ideas and gives them time to brainstorm offerings to match what customers want now. For example, a financial advisor could design a customized investment plan for a client that blends traditional stocks with newer assets like green bonds. Fast system updates also let advisors test innovations with real-time feedback.

Technologies driving digital transformation in banking

Cloud computing

Traditionally, banks have stored all their data on-premises for security and privacy reasons. However, cloud computing offers a more flexible and scalable infrastructure that can help banks compete more effectively. With cloud computing, banks can quickly bring new products and services to market.

Artificial intelligence (AI) and machine learning (ML)

AI and Machine Learning (ML)

They are changing the banking industry. With AI-Powered chatbots and agentic AI, customers can get help whenever they need it. They can ask questions, get support, and even do basic transactions. ML algorithms can also analyze customer data to find patterns and trends. This information can be used to offer personalized recommendations, like tailored financial products or investment strategies.

Blockchain

Blockchain is a secure, transparent, and tamper-proof technology that banks can use to create new products, like digital currencies. It also helps banks improve the speed and efficiency of cross-border transactions. Because blockchain reduces costs by eliminating middlemen, it has the potential to support new settlement platforms across borders.

Internet of Things (IoT)

The Internet of Things (IoT) connects devices and transmits data through the internet. In the banking sector, IoT can boost customer experience and automate operations. For example, wearable payments let customers make secure, contactless payments through smartwatches and fitness trackers. IoT can also trigger alarms for proactive maintenance on key banking infrastructure like ATMs, to detect mechanical issues and outages.

Challenges and solutions for modernizing the banking sector

It's not easy updating a bank's infrastructure, and a carefully planned approach is a must. First, you'll need stakeholders on board. To guarantee your investment, it's crucial to build a compelling business case that's well-structured. Your business case must cover several different considerations.

Outdated legacy systems

Banks and financial institutions often have a lot of legacy systems, which can be expensive to maintain. These systems are often still being amortized, which can make it difficult to find the money to invest in digital transformation initiatives.

Modernizing core banking systems requires more than new software. You need to rethink core processes to create a better customer experience. Get buy-in from stakeholders with a clear and compelling business case.

Data privacy regulations

Data privacy laws apply to all banking channels, including digital. To protect customer data, banks must implement encryption technologies, security audits, and strict access controls. Compliance with Know Your Customer (KYC) and Anti-Money Laundering (AML) regulations is essential to prevent fraud, identity theft, and money laundering. To comply with regulatory standards, banks should use advanced identity verification and transaction monitoring systems to protect sensitive data.

Cyber security threats

Customer data and transactions need to be secure throughout a bank's digital transformation. By balancing innovation with strong cyber security practices, banks can give their customers peace of mind. Banks are stepping up their cyber security game with advanced fraud detection systems. These systems use AI algorithms to spot bad actors before they can do any damage. Banks are also implementing multi-factor authentication (MFA) to make it harder for criminals to access accounts. These measures are essential for protecting customer information and transactions from cyber threats.

Future Trends and Innovations in Digital Transformation in Banking

The financial landscape is rapidly evolving, driven by digital innovation, social change, and user expectations. Looking to the interesting BFSI industry trends are emerging in digital technology:

Open Banking: a system in which banks open their APIs to third-party service providers to access clients' financial information and perform economic operations on behalf of clients. Such a digital transformation creates many opportunities for all parties involved. Legacy banks can monetize existing infrastructure by opening it up to third parties, and customers can choose from a broader range of options.

DeFi and Blockchain in Finance: is an ecosystem of financial applications and projects that are built on top of blockchain technology. Transactions in this system are processed not by banks, brokers, or stock exchanges but by smart contracts, which means people get complete control over their financial data away from the government.

Robotic Process Automation (RPA) in Finance: by automating routine tasks, RPA reduces errors, increases efficiency, and ensures consistency and accurate data. In the future of finance, these trends in digital transformation and payment innovations will become our everyday reality and provide an impeccable customer experience.

Conclusion

Digital transformation in banking uses technology to make banking services more efficient, accessible, and focused on the customer. For example, mobile banking and online transactions give customers easier access to their accounts and make it easier to conduct transactions. The move to digital also frees up space for advanced data analysis and artificial intelligence (AI). Together, these innovations help banks customize interactions with their customers, find fraudulent activities, and predict financial trends. As financial services software evolves, digital transformation in the banking industry is becoming more popular. Customers want a digital experience integrated, personalized, transparent, and secure. To make this happen, banks need to centralize their data. This will allow them to create a seamless customer experience across all channels, including mobile apps and websites.

References

1. <https://www.ibm.com/think/topics/digital-transformation-banking>
2. [https://www.visualsp.com/blog/digital-transformation-in-banking/#:~:text=Digital%20transformation%20in%20banking%20means,intelligence%20\(AI\)%20and%20blockchain.](https://www.visualsp.com/blog/digital-transformation-in-banking/#:~:text=Digital%20transformation%20in%20banking%20means,intelligence%20(AI)%20and%20blockchain.)
3. <https://www.coursera.org/specializations/digital-transformation-financial-services>
4. <https://whatfix.com/blog/digital-transformation-financial-services/>
5. <https://mcrhrdi.gov.in/images/samriddhi/number2/10.Digital%20Transformation%20of%20Financial%20Sector%20in%20India.pdf>
6. <https://www.salesforce.com/financial-services/digital-transformation-banking/>
7. <https://www.walkme.com/blog/digital-transformation-in-banking/>
8. <https://www.zebra.com/ap/en/resource-library/faq/what-is-digital-transformation-in-banking-industry.html>
9. <https://www.youtube.com/watch?v=VPFAJ5nUeiQ>
10. <https://www.youtube.com/watch?v=3q66lqQuC5Y>

