

Impact of AI on Personalised Financial Marketing

Neel Mendpara*, Sneha Jethwa**

Abstract

The utilisation of Artificial Intelligence (AI) is driving a revolution in personalised financial marketing methods, replacing mass-segment approaches with precise one-on-one interactions. This research examines the various effects that tools based on AI technology have in creating modified financial products as well as customised communication approaches. Financial introductions can forecast individual preferences as well as needs through the analysis of large customer datasets with the help of machine learning algorithms. AI delivers through real-time personalised offers by dynamically adapting both messaging content and product references through direct client communications. The deployment of AI technology provides institutions with chatbots that personalise support services while predictive analysis generates positive advice and automated systems write targeted marketing content. The ability of AI to identify micro-segments drives higher customer engagement, along with better conversion rates as well as enhanced customer retention. The application of AI in financial marketing needs responsible ethical management of data privacy and algorithmic bias to achieve equitable and proper usage. A simple random sampling method was used, and a structured questionnaire was employed to collect data. In total, 225 respondents were selected based on their exposure to mobile marketing.

Keywords: Financial Marketing, Artificial Intelligence, Revolution

Introduction

Artificial Intelligence (AI) now drives a complete transformation within the financial services sector due to its accelerated integration. AI technology transforms

financial marketing into a personalised approach that depends on data analytics for customer communications. Banking institutions now rely on AI technology because customers demand personalised services which such systems facilitate beyond basic expectations.

The established marketing system based on general demographic modelling strategies has become outdated for modern businesses. Through analysis of large data collections such as purchase records and social media behaviour combined with transaction activities AI constructs detailed customer profiles. Financial marketing solutions benefit from detailed insight into client preferences, enabling organisations to develop practical customised communications beyond stereotypical messages.

AI predictive capabilities drive this fundamental change in operations. Machine learning analysis using algorithms detects patterns that help institutions foresee client behaviours, allowing them to deliver customised product solutions in advance. Through spending analysis AI produces relevant credit card recommendations while forecasting which investments customers will favour based on their savings behaviours. Such forward-thinking methods enable higher customer involvement which results in improved conversion rates and stronger customer relationship growth.

Moreover, AI facilitates the creation of personalised content and recommendations. Through Natural Language Processing (NLP) businesses generate custom-made emails and messages along with website content that appeals to individual customers. Chatbot's with AI capabilities alongside virtual assistants supply continuous personalised advice for financial questions over 24-hour periods. The individualised form of communication

* Student, Department of Management, Faculty of Business & Commerce, Atmiya University, Gujarat, India.
Email: neel.mendpara2002@gmail.com

** Student, Department of Management, Faculty of Business & Commerce, Atmiya University, Gujarat, India.
Email: snehajethwa2003@gmail.com

creates strong bonds with customers, leading to enhanced customer loyalty.

Marketing campaigns receive essential optimisation support from AI technology in addition to its personalisation abilities. Through the use of machine learning algorithms financial institutions identify which marketing channels with specific messages and audience segments produce the best campaign results. Real-time data analysis through this approach enables marketers to optimise their return on investment by automatically making adjustments to optimise resource allocation.

The adoption of AI technology in financial marketing requires resolving various implementation challenges. The protection of both personal data privacy and security need to be considered as an essential priority. Financial institutions must follow strict regulations which directly impact their responsibility for handling all sensitive personal information pertaining to customers. AI systems trained with biased data maintain and reproduce such prejudice throughout their operational tasks. Transparent operations together with continuous monitoring systems and full accountability form the foundations for addressing these ethical concerns.

Organisations need new work cultures and specialists to successfully implement AI solutions. Financial organisations need to provide training programs for their personnel to acquire the abilities needed to work with AI systems. Financial institutions need their employees to acquire knowledge about AI principles alongside data analysis techniques and ethical frameworks.

The unbeatable potential advantages of AI for personalised financial marketing stay unaffected by these hurdles. Financial institutions achieve three key benefits by combining AI with their operations which include better customer connections combined with marketing effectiveness and increased loyalty rates. Companies gain a major competitive advantage through their capability to deliver individualised engagements and improve marketing strategies, and enhance fraud prevention.

The path of financial marketing development is tightly linked to AI technology. The ongoing advancements of AI technology will result in more sophisticated personalisation techniques for the future. AI technology empowers financial corporations to reinvent their customer engagement model through automated financial

advisors and predictive financial management solutions. Financial institutions that fully embrace AI technology along with its corresponding hurdles will find pathways to digital growth and profitable success.

Literature Review

Data Privacy

Hassan H. H. Aldboush and and Marah Ferdous, AI-driven personalised financial marketing, while offering personalised services, raises important data privacy concerns due to the general collection and analysis of sensitive customer information. Md. Majadul Islam Jim et al., While AI in cloud banking significantly increases data privacy, its application in personalised financial marketing requires careful consideration to prevent potential misuse of customer data and to maintain customer trust. Toluwalase Vanessa Iyelolu et al., While AI improves personalised marketing, it also increases critical data privacy concerns observing the collection and use of individual consumer data to customise those campaigns. Bibhu Dash et al., Federated learning emerges as a critical AI technique in FinTech, balancing the need for advanced data analysis with the essential of healthy data privacy and ethical compliance. Oliver Cartwright et al., AI integration increases data privacy concerns, demanding strict regulation and continuous monitoring, as shown by the variable compliance of financial marketing.

H1: Data Privacy has no significant impact on Customer Satisfaction.

User Trust

Hassan H. H. Aldboush and Marah Ferdous, Maintaining user trust in AI-driven personalised financial marketing pivots on transparent data practices and strong privacy safeguards, directly impacting customer confidence and engagement. Amil and Yasmine, User trust in AI personalisation is influenced by perceived data privacy risks and benefits. Wael Sh. Basri and Abdullah Almutairi, Trust in AI, improved by bank transparency, improves financial self-efficacy in Saudi Arabian banking. Yang Ni, Understandable AI, correctness, and data privacy significantly impact bank customer trust and satisfaction. Jungkeun Kim et al., Precise AI information increases

consumer trust and positive responses, qualified by accuracy and product quality.

H2: Higher User Trust leads to increased Customer Satisfaction.

Competitiveness

Weihan Wang, AI personalisation in marketing improves competitiveness through targeted campaigns and engagement. Lima Nasrin Eni et al., AI and big data are transforming Indian bank marketing, contribution personalisation and competitive limits, but require addressing privacy and ethical concerns. Gabriela Nicola and Rony Setiawan, e-commerce startups expansion competitive advantage through digital innovation, but face challenges like resource controls. Abiola Moshood Komolafe et al., business analytics offers competitive advantage in developing markets, despite data privacy and skill challenges.

H3: Competitiveness has no significant impact on Customer Satisfaction.

Fraud Detection

Lima Nasrin Eni et al., AI in personalised financial marketing improves fraud detection by analysing large datasets to recognise variances and doubtful designs, protecting both the bank and its customers. Mohammed Hazem M. Hamadaqa et al., AI enhances fraud detection within personalised financial marketing by identifying

irregular patterns in customer data, hence protecting against fake activities. Nozigul Panjievna Khodjaeva et al., this discusses field production and plant transpiration. Fatema Tuz Johora et al., this focuses on using AI for fraud detection in general banking transactions, not particularly personalised financial marketing. Birajit Mohanty et al., AI-driven fraud detection solutions in banking not only reduce fraud cases but also enhance functional efficiency, cost savings, and the overall reputation of financial institutions.

H4: Effective Fraud Detection significantly enhances Customer Satisfaction.

Research Methodology

The concepts and the measurement instruments presented in Table 1 were developed based on the literature review, and drawing upon the Technology Acceptance Model. However, each variable was modified by the authors to make it possible to measure the perceived role of AI on personalised financial marketing.

For data collection, a questionnaire made up of questions (variables) was used (Table 1). Additionally, six demographics variables – gender, age, educational qualification, annual family income, occupation were also included in the survey. All measurement instrument were listed in Table 1, but the demographic variables were measured on a five-point Likert-scale ranging from strongly disagree (1) to strongly agree (5).

Table 1: Concepts and Measurement Instruments

Concept	Definition	Measurement Instrument
Data Privacy	Data privacy refers to the suitable use of data. It is the practice of protecting personal information from illegal access, use, or disclosure.	DP1 The use of AI in personalised financial marketing enhances overall customer trust in my organisation. DP2 AI allows for more secure data handling than traditional marketing methods. DP3 AI-driven personalised marketing is transparent about its data usage practices. DP4 AI-driven personalised marketing inherently increases the risk of data breaches.
User Trust	User trust is a key component in the relationship between users and any product, service, or organisation, especially in the digital area.	UT1 Customers generally trust AI-powered personalised financial recommendations. UT2 Concerns about data privacy negatively impact customer trust in AI-driven financial marketing. UT3 The perceived accuracy of AI-driven financial insights directly influences customer trust.

Concept	Definition	Measurement Instrument
Competitiveness	The term “competitiveness” can have slightly different shades depending on the context, but it normally refers to the ability to succeed in a competitive environment.	C1 AI-powered personalised marketing is essential for staying competitive in the modern financial services industry. C2 AI-driven personalisation increases customer loyalty, resulting in a sustainable competitive advantage. C3 AI helps financial institutions to optimise their marketing budgets and achieve a higher ROI than their competitors.
Fraud Detection	Fraud detection is the development of identifying and preventing fake activities.	FD1 AI-powered fraud detection reduces the incidence of false positives in personalised marketing transactions. FD2 AI-driven fraud detection enhances customer trust in personalised financial marketing platforms. FD3 AI-powered fraud detection systems are adaptable to evolving fraud tactics.
Customer Satisfaction	Customer satisfaction measures how happy customers are with a company’s products, services, or general customer experience.	CS1 AI-driven financial marketing helps me make better financial decisions. CS2 I feel that AI in financial marketing saves me time.

The objectives of this study focus on the role of AI in personalised financial marketing. It examines aspects such as ease of use. AI is helpful for facing problem while financial marketing it will help them to make their personalised market. The research analyses the relation between data privacy and trusts in AI acceptance. It also investigates the current state of personalised marketing strategies in the setting of AI and machine learning.

All samples were selected randomly from sub-geographical urban areas. So, the area random sampling method was accepted to find the list of respondents for the research study. In this study, 232 respondents were considered to measure the impact of AI on personalised financial marketing (Table 2). Demographic data such as name, gender, age, education qualification, annual family income, and occupation have been recorded. All samples were selected randomly from sub-geographical urban areas. Therefore, the area-based random sampling method was accepted to find the list of respondents for the research analysis.

Primary data was collected using a well-structured questionnaire was improved of AI on personalised financial marketing. The secondary data required for the study was collected from the research papers. A well-structured questionnaire was adopted after analysis of financial marketing. Responses were completed on a Likert scale, with 1 defining strongly disagree and 5 indicating strongly agree. The data were tested with Multiple Regression analysis and tested all hypotheses

done statistical software SPSS. Reliability and validity have been checked with the help of SPSS software.

Result and Analysis

To test the planned hypotheses, the theoretical model was evaluated using regression analysis. In the first stage, to test the reliability and validity of the measurement items, we conducted CFA using SPSS-AMOS 23. After confirming validity and reliability, multiple regression analysis was done using SPSS software.

Table 2: Respondents’ Demographic Profile

	Frequency (n=232)	Percentage
Gender		
Male	116	50%
Female	116	50%
Age		
Below 18	20	8.6%
18-25	122	52.6%
25-40	70	30.2%
Above 40	20	8.6%
Education Qualification		
Higher School or Below	23	9.9%
Under Graduate	100	43.1%
Post Graduate	87	37.5%
Other	22	9.5%
Annual Family Income		
Below 1,00,000	25	10.8%
1,00,000-3,00,000	58	25.0%
3,00,000-5,00,000	92	39.7%
Above 5,00,000	57	24.6%

	Frequency (n=232)	Percentage
Occupation		
Student	47	20.3%
Govt. Employee	34	14.7%
Private Employee	73	31.5%
Business	49	21.1%
Other	29	12.5%

Table 3 contains a summary of the regression analysis findings, which examines the influence of four independent variables Data Privacy (DP) and User Trust (UT) and Competitiveness (C) and Fraud Detection (FD) on Customer Satisfaction (CS). Table 3 consists of tested hypothesis results with data showing

Table 3: Multiple Regression Results

Hypothesis	Regression Weights	B	t Stats	p-Value	Results
H1	DP→CS	0.046	0.720	0.473	Rejected
H2	UT→CS	0.164	2.517	0.013	Supported
H3	C→CS	0.020	0.335	0.738	Rejected
H4	FD→CS	0.428	6.821	0.000	Supported
R	0.539				
R Square	0.291				

Note: *p<0.05. DP: Data Privacy, UT: User Trust, C: Competitiveness, FD: Fraud Detection.

Researcher identified that the H1 and H3 are rejected and as same on the other study identified that same result (DP-Yoon, 2010; Ndubai & C-R. E., Mbeche & Pokhariyal, 2018).

Research Gap

The paper presents useful insights into AI in personalised financial marketing but exposes key research gaps. It focuses just on mobile marketing and a narrow urban demographic, thereby limiting its generalisability. Psychological factors such as digital learning and perceived risk are overlooked, and the cross-sectional design fails to capture changes over time. Concepts such as customer loyalty absence clear metrics, and ethical concerns like algorithmic preference are not extremely examined. Moreover, the real-time usefulness of AI-driven personalisation is not measured. These gaps highlight areas for future research to develop a more holistic understanding of AI's impact.

regression weights unstandardised coefficients (B) and t-statistics combined with p-values and support or rejection assessment of each hypothesis. Results specify a statistically significant positive connection among User Trust and Fraud Detection variables which affect Customer Satisfaction based on their low p-values (0.013 and 0.000). Conversely, the Data Privacy and Competitiveness variables fail to demonstrate significance despite their p-values exceeding the 0.05 threshold. User Trust and Fraud Detection demonstrate statistically valid relationships that fulfil the research hypotheses but Data Privacy and Competitiveness show no evidence to support their theoretical associations.

Implication

The initial section starts by describing how AI transforms financial marketing operations. The research explains how businesses transitioned their focus from traditional marketing to personalised interactions through AI use for tailored products and information delivery resulting in better customer relationships and loyalty. The study includes ethical aspects together with details about its research methodology. The article introduces research boundaries and main discoveries to the audience.

Limitation

The research's findings are confined to mobile marketing platforms, because the study maintains this singular focus. The analysis does not consider how consumers might experience a breach of privacy through predictive analytical techniques. This personal concept has no clearly defined metrics for measuring "strong bonds" and "customer loyalty".

Conclusion

AI is transforming financial marketing operations through the implementation of individualised customer engagements strategies that replace traditional, broad-based approaches. Financial institutions leverage machine learning technology to evaluate large customer datasets for identifying personal needs which enables them to create personalised products and instant communications. The result of personal marketing strategies powered by AI includes stronger customer connection and higher conversion success customer loyalty. Tools for regulatory compliance must be strictly followed alongside transparent operations alongside constant monitoring as organisational essentials. Organisation success with AI implementation depends on their investments into training programs and development of new work culture systems that optimise AI operations. Financial institutions that use AI responsibly and effectively will gain a competitive advantage while leading new innovation in financial sector.

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