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Research Article

A Framework For Exploring The Integration Of AI And Financial Literacy Toward A Sustainable Financial Ecosystem

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ABSTRACT

Introduction: The nascent field of artificial intelligence(AI) and sustainability development has significant financial inclusion and literacy implications. This study looks at how artificial intelligence might improve financial decision-making, especially for underrepresented groups. Using knowledge from the 2030 Agenda covering a wide range of development-related topics, this paper clarifies how AI-powered financial products can help solve complicated problems and give people of all socio-economic backgrounds more power.

Objectives: This study examines the development of decision support systems in the financial industry, stressing the role of AI in optimizing workflows and enhancing results. Based on an analysis of recent literature, this study explores the complex workings of AI-powered financial analysis, highlighting how it can improve the precision, effectiveness, and inclusivity of decision-making. In addition, a theoretical framework that incorporates AI into financial literacy campaigns highlights the technology's contribution to risk assessment, fraud detection, text analysis, and improved customer services. This approach emphasizes how crucial AI is to increasing financial services accessibility, encouraging sustainability, and encouraging lifelong learning.

Method and result: This study deeply analyses the research articles, papers, or conferences to explore education with information technology so that the weaker section of society has access to improve their standard of living. The study highlights the complex interplay between cognitive and non-cognitive components of financial ability. Individuals may make better judgments, comprehend financial concepts, and negotiate complex economic environments by utilizing AI-driven tools and platforms. Personalized recommendations, predictive insights, and customized learning experiences are all provided by AI-driven solutions, which further advance financial inclusion and literacy worldwide.

Keywords: financial literacy, financial competence, artificial intelligence, machine learning, textual analysis, accessible education.

Introduction

A new frontier in the field of sustainable development is being opened by artificial intelligence (AI) (Salimzadeh & Courvisanos, 2015). It is garnering significant interest from scholars and decision-makers. All 193 member nations of the United Nations ratified this all-inclusive plan (education, health, gender equality, etc) in 2015 as part of the 2030 Agenda, which is the most transparent map of humankind's loftiest ambitions (Cohen, 2016; Frank et al., 2013; Ozkan et al., 2023).

The use of contemporary financial solutions not only reduces employment expenses but also focuses attention on the intricate issues that clients experience (Ozili, 2021). Artificial intelligence and robotics both have a big impact on the financial sector, as technology plays a major role in banks, education, and financial institutions' business plans (Koskelainen et al., 2023). Because intellectual property is becoming more and more significant the universal invention of the atmosphere has evolved substantially. At now, fintech emphasizes the creation

and use of novel financial instruments to fulfill end-users' financial needs (Kara et al., 2021; Nikolaos et al., 2009; Patrick et al., 2021). Currently, the main topic of discussion in the worldwide education debate is digital technology and how it affects individual decision-making. Utilizing contemporary technology offers a distinct chance to quicken investment alternatives and provide management and future prosperity (Barna & Epure, 2020; Di Giuli et al., 2011; Kojo Oseifuah, 2010). Asset management support technologies have the potential to be a novel and exciting tool for financial decision-making, particularly when it comes to analyzing options under highly variable situations (Chetty et al., 2018). Some of the most talked-about issues these days include consumer privacy, the impact of modern financial technology on the transmission of information and safeguards, the responsibility of financial services firms on internet platforms, and digital education for clients, etc (Koskelainen et al., 2023).

The influence of resource scarcity on decision-making is discussed by researcher Elb (2022), and it is suggested that artificial intelligence (AI) can assist in lessening the negative impacts. It emphasizes how having a low socioeconomic level (SES) might affect one's ability to think clearly and make less-than-ideal financial judgments. To emphasize this statement, a growing number of individuals in industrialized countries like the US and Europe are falling into lower-income strata, as evidenced by recent OECD assessments, which highlight the seriousness of the issue. In 2022, the percentage of the population living below the national poverty line (%) in Mexico is 36.3%, and in Bangladesh 14.5% according to a World Bank report. This aspect requires some measurement to improve the standard of living and get out of the crisis. There are major two issues that contribute to the digital divide, insufficient infrastructure and the second is limited digital knowledge in low-income populations. These low socioeconomic communities face restricted access to digital technology due to high costs and infrastructure issues, such as intermittent electricity supplies and limited ICT facilities. The China Internet Network Information Center (2021) and Statistics South Africa – General Household Survey (2022) reveal that China has stagnated with lack of awareness being the main reason for the non-use Internet while 35.8% of South Africa households found no value in using the internet (Barna & Epure, 2020; Patrick et al., 2021). Thus to improve awareness among low/middle-income countries, significant digital access is needed to expand broadband services allocation spectrum and secure infrastructure to improve their standard of living in the form of finance (Agyei, 2018; Chutani et al., 2015; Ovat, 2016; Zheng et al., 2013).

Technology has completely changed many facts of our lives in the last few years, including the way we handle our money (Rassool & Dissanayake, 2019). A framework for ICT literacy on Digital Transformation reports that utilizing technology-based financial education has the potential to enhance financial literacy, encourage inclusivity, and enhance the availability of financial services (Kanafi, n.d.; University of Southern California et al., 2016). Financial literacy is essential for individuals to make well-informed financial decisions and actively engage in the economy. Nevertheless, the task of attaining extensive financial literacy continues to be a formidable obstacle, especially in marginalized populations and emerging economies. Technology has been increasingly influential in providing financial education, presenting creative methods to narrow the information divide and enhance financial inclusivity (Ansari et al., 2022; Dikmen, 2022; Jia et al., 2022; Monteiro & Leite, 2021). This study explores the conceptual work of Christian T. Elb et al., (2022) by emphasizing the necessity of digital literacy when applying AI to help those who are less fortunate financially and can improve their financial services (Arnaud et al., 2024). The objective of this research is to advance our knowledge of the psychological processes underlying decision-making in situations of resource scarcity and suggest artificial intelligence (AI) in financial literacy as a means of enhancing the lives of those who lack resources(Novitasari, 2023) and access to financial services (Brunetti et al., 2020; Khokhar, 2016; Nadkarni & Prügl, 2021; Zain, 2021). While previous research emphasizes the potential of AI to increase financial inclusion and provide individualized financial advice, there is a paucity of empirical evidence on the long-term impact of these interventions on an individual's financial knowledge, behavior, and outcomes. The technology-driven financial education emphasizes its capacity to reach a broad demographic, provide tailored learning opportunities, and improve user involvement. Research has demonstrated that interactive web platforms, mobile applications, and gamified learning modules are successful in conveying financial ideas and enhancing financial literacy outcomes. Moreover, the collaboration of financial institutions, educational groups, and technology suppliers has played a crucial role in creating extensive financial education ecosystems. Nevertheless, obstacles such as insufficient digital infrastructure, disparities in digital proficiency, and cultural barriers provide substantial challenges to the universal acceptance and efficacy of technology-based financial education.

Literature Review

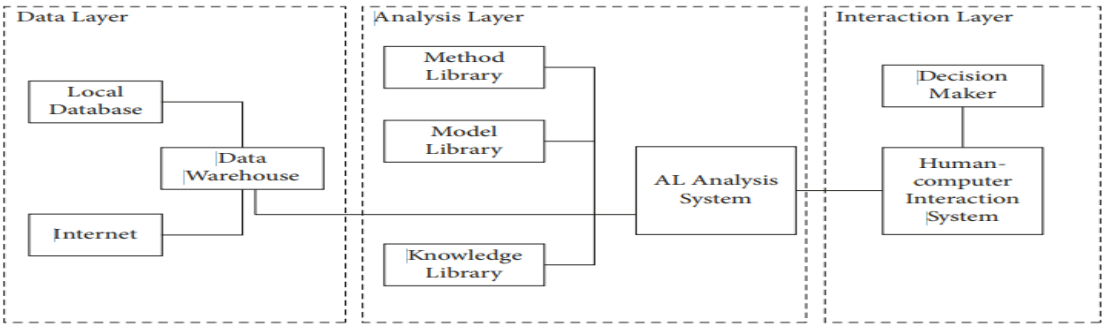
The effect of AI on making a decision

The phrase "management decision systems" and the use of computers in decision-making processes were originally introduced by Scott et al. in the 1970s, which marked the beginning of research on decision support systems (DSSs). The five stages of decision support system development are the intelligent decision support system (IDSS), which combines knowledge reasoning and model calculation; the decision support system based on the data warehouse (DW); the client/server (C/S) decision support system; and the web service-based decision support system (Ozili, 2021).

To streamline decision-making and stay competitive, the financial sector is embracing fintech, robotization, and artificial intelligence (Bagnoli et al., 1999; Miklosik et al., 2021; Óskarsdóttir et al., 2019; Waliszewski & Warchlewska, 2020). The researchers Levantesi & Zacchia, (2021) state that as computing power has increased, financial decision support systems have been developed. However, these systems continue to encounter challenges including ineffective decision-making, artificial intelligence, and ineffective leadership (Arnaud et al., 2024; Zahoor et al., 2023). The introduction of artificial intelligence technology has the potential to improve existing systems, leading to a more intelligent and efficient financial decision support system that can boost the speed and accuracy of decision-making while decreasing costs (Ansari et al., 2022; Deja et al., 2021; Hanley & Hoberg, 2010; Khokhar, 2016; Zain, 2021). Using computerized and intelligent devices may help those making choices make more appealing, unbiased, and rational choices in science by providing them with a wealth of precise information, expanding the scope of financial decision support, and reducing the likelihood of drawing irrational conclusions (Akour et al., 2024); (Melnychenko, 2020); (Zakaria et al., 2023); (Ozili, 2021). This can eventually improve the overall quality of financial decision-making and assure the long-term success of the organization (Waliszewski & Warchlewska, 2020).

A theoretical framework highlights the financial decisions supported by artificial intelligence in the research paper of author Jia et al., (2022). The process of decision-making starts from the storage of data mainly from a data warehouse where local and internet information is retrieved in multidimensional layers such as debtor or creditor detail, accounts audit report, policies relating to rules and regulations, levy of tax, exchange rates, response in the market and much more information relating to the external environment (Khokhar, 2016; Krajčík et al., 2023; X. Li, 2020; Monteiro & Leite, 2021; Radovanović et al., 2020). This all-above information is sorted to easily identify in the data warehouse which saves the time to quickly make financial decisions. The combination of financial education, financial technologies, and financial models becoming part of financial analysis and responsible for artificial intelligence analysis systems (Akour et al., 2024; Menberu, 2024; Miklosik et al., 2021). The best feature of artificial intelligence analysis is depending on deep learning procedures that make significant results in forecasting and decision-making (Goyal & Kumar, 2021). The interaction layer of computer and human language processing through a new system (Zakaria et al., 2023). This system recognizes, converts, and transmits the computer language into the natural language to communicate financial information. At the same time, the system provides the information to artificial

Figure 1: Financial Decision Support System



Source: (Jia et al., 2022)

intelligence analysis to provide the information reports of finance, financial forecast, and financial goals (Akour et al., 2024, 2024; Cellan-Jones, 2014; Dikmen, 2022; Irfan et al., 2022; Kerkhoff & Makubuya, 2022).

The process of AI for cognitive development and decision

Meanwhile, the study dives into what elements impact consumer pleasure when it comes to personal finance planning utilizing current technology (Coco et al., 2024; Koskelainen et al., 2023; Sharma, 2019; Zakaria et al., 2023). The rate at which new technological solutions are deployed is determined by the complexity of a country's financial services (Priyono et al., 2020). Minimizing labor expenditures and resolving client concerns are two aims of modern financial solutions. However, consumers are averse to new technologies that replace conventional consulting services because of causes such as fear, unfamiliarity, competitiveness, and a lack of knowledge (Belleflamme & Vergote, 2016; Levantesi & Zacchia, 2021; Taylor, 2000). The purpose of this literature is to identify the factors that enhance financial education when it comes to adopting technology for personal financial planning (Jain, 2021) there are numerous variables such as age, income, qualification, etc to predict the financial education among the individuals with the help of artificial neural network (Bagnoli et al., 1999; Hanley & Hoberg, 2010; Lehavy et al., 2011; Menberu, 2024; Miller, 2010). This layering not only accesses the financial knowledge but also forecasts the financial behavior, and financial attitude to make successful judgments.

The researcher Xiao Li elaborates on financial literacy in textual analysis via the use of information retrieval, content analysis, computational linguistics, natural (or statistical) language processing, and stylometrics. to

evaluate the data from SEBI filing, annual reports, conference calls, news and media, posts on online social network, etc. The bag-of-words methodology, also known as the Lexicon-based approach used in textual content for text parsing. For instance, Goyal & Kumar, (2021) are concerned with the evolutionary strategy of financial literacy to focus on the targeted phrases.

As a substitution, certain scholars identify and categorize textual patterns using machine learning methods. Two main phases make up machine learning, which is strongly associated with computational statistics (Koskelainen et al., 2023). The computer with "learning experience" must make judgments or predictions in the second phase even when it isn't trained to do so. Because they may have an impact on prediction, excellent datasets, and efficient algorithms are therefore two important aspects of machine learning (Kerkhoff & Makubuya, 2022; F. Li, 2005; X. Li, 2020; Miklosik et al., 2021). Commonly utilized machine learning techniques in the finance industry are Neural Networks, Support Vector Machines, and Naïve Bayes. In the realm of financial textual analysis, machine learning approaches might not always yield superior results compared to the Lexicon-based approach. In Guo et al. (2016) examination of several textual analysis techniques, for instance, it is demonstrated that the Harvard General Inquirer (GI) Word Lists outperform the Naïve Bayes strategy, while the Loughran and McDonald Word Lists perform even better. In conclusion, word lists play a major role in the Lexicon-based approach, whereas training algorithms and "training data" influence machine learning methodologies. In conclusion both, methods are considered effective and generate great performance.

Davis et al. (2012) examine 23000 issued press announcements on quarterly earnings Released quarterly results news releases show a favorable correlation between the market's performance and potential return on assets. Furthermore, Hanley and Hoberg (2012) present more proof regarding official filings from the IPO market, showing that more informational contents result in reduced under-pricing and smaller absolute fluctuations in offer prices. In addition to reviewing the official filings and disclosures, Huang et al. (2014) look at the information included in analyst reports and note how predictable future profit growth is for the next five years. Boudoukh and Feldman, (2019) use machine learning techniques on news articles from Dow Jones Newswire to examine the market reaction during trading hours and overnight make intensity of information contents to make effective decisions. As a Substitute, Wysocki, (1999) and Antweiler and Frank, (2004) explore the Online chat board for stocks and Determine the favorable impact of Yahoo! Finance message posts on predictability for trade volume the next day and anomalous stock return. In a similar vein, Bagnoli Et a., (1999) provide online unofficial forecasts from netters (namely “whispers”) that perform great in predicting corporate earnings.

Li F (2008), a trailblazing study in this area, gauges the readability of 10-K annual reports using the Fog Index and word count whereas, Miller (2010) and Lawrence (2013) study finds the difficulties of retail investors to trade with low literacy level to read the annual reports and process to affect their trading behavior. The authors Lehavy et al., (2011) find a positive relation by using the Fog Index to read the annual report with low analyst dispersion and greater earnings forecast accuracy. Guay et al. (2016) concentrate on investigating the connection between the information environment and the readability of financial statements. Thus, the use of technology to improve financial education is essential for the financial community, institutions, and society to strengthen their responsibilities in designing investment strategies (Ansari et al., 2022).

FINANCIAL BEHAVIOUR COMPETENCY THROUGH AI

Artificial intelligence is redefining financial behavior skills by offering individualized insights, automating complex tasks, and eliminating biases in decision-making processes (Ansari et al., 2022; Davy Tsz Kit Ng et al., 2021; Irfan et al., 2022; F. Li, 2005). Through AI-driven analysis, low-income group individuals can obtain individualized financial advice, increase their comprehension of financial concepts, and make informed decisions regarding investments, savings, and expenditures (Akour et al., 2024; Deja et al., 2021; Su et al., 2023; Waliszewski & Warchlewska, 2020). AI systems can recognize patterns in financial data, identify trends, and predict market changes, enabling individuals to optimize their financial plans. Moreover, AI-powered solutions can promote financial literacy by giving interactive learning experiences, modeling real-life financial circumstances, and providing quick feedback on financial decisions (Davis et al., 2012; Katharina Dowling et al., 2020; Ozili, 2021; Sharma, 2019). This method creates a greater knowledge of financial topics and promotes responsible financial conduct. As AI continues to advance, its integration into financial services and education platforms will play a vital role in enhancing individuals' financial behavior competency and empowering them to reach their long-term financial goals (Acquisti & Varian, 2005; Chetty et al., 2018; Ng et al., 2021)

Individual everyday lives are becoming more and more reliant on technology, and in the years to come, this will only continue to intensify (Jia et al., 2022). Information and communication technologies are no longer limited to specific professional environments; they are now widely used in homes, schools, and community settings (Monteiro & Leite, 2021). Everyday tasks have been transformed by ICT, whether it’s searching for a book at a public library using an automated card catalog, withdrawing money from an ATM, or checking phone messages. Because of this, the idea of a literate population needs to be broadened to encompass the technology-based skills and abilities necessary for citizens to function in an increasingly technological environment (International Ict Literacy Pane, n.d.; Krajčík et al., 2023; Radovanović et al., 2020).

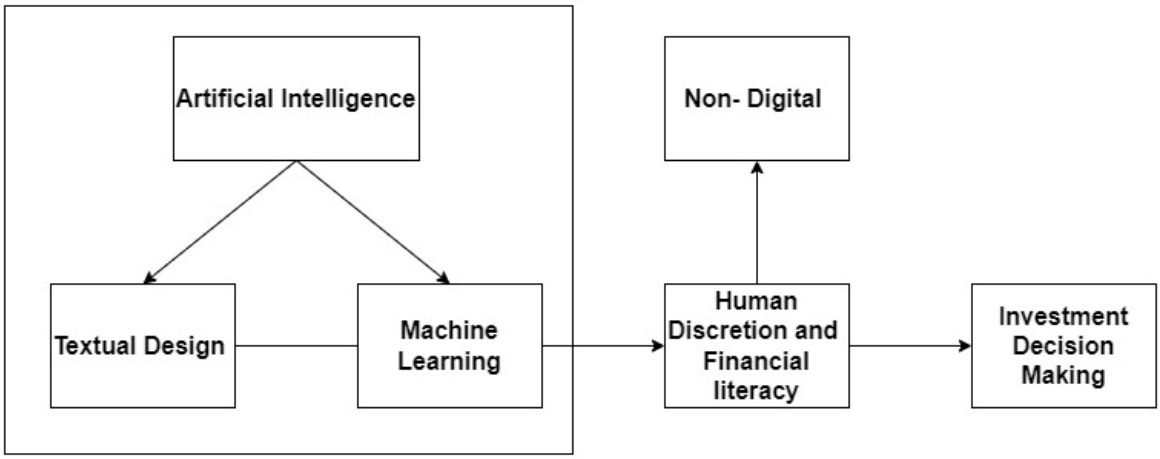
In addition to the fact that economic and financial situations, products, and issues are becoming more intricately linked, financial literacy is also viewed as a multifaceted, complex construct that is necessary for a

person to be financially competent (Farias-Gaytan et al., 2023; Khokhar, 2016; Lusardi, 2015). Financial competence is thought to have a complex, multifaceted structure of its own (Panos & Wilson, 2020). It is generally agreed upon that there are both cognitive and noncognitive aspects to financial competence and based on Weinert (2001) there are many evaluation tools and tests available for financial literacy delving into construct but does not consider the concept of financial competency when it comes to non-cognitive elements (such as risk tolerance habits, enthusiasm, curiosity, and feelings) (Abdullah & Tursoy, 2021; Brunetti et al., 2020; Deja et al., 2021; Zain, 2021). These approaches are operationalized using uniform survey instruments for assessing knowledge but the correlation between the constructs and conclusions regarding literacy level is not much computed and requires new techniques to make a strong integration (Datta et al., 2020; Nadkarni & Prügl, 2021). Figure 2 describe the new model to make investment decisions by linking the machine and textual design with humans (financial literacy) for the betterment of the future. The various opportunities to apply AI in schools and colleges are defined in this section. Children are the future of the economy to build development by reducing the inequality system (Koskelainen et al., 2023). To provide valuable education virtually remained attentive and make it interesting to learn the financial terms to use in future decisions. In this contribution, we present artificial intelligence to evaluate financial literacy using a sophisticated assessment scenario built on a sophisticated framework for problem-solving and financial competency (Deja et al., 2021; Jain, 2021; Novitasari, 2023; Panos & Wilson, 2020; Yilmaz, 2020). To assess the complex construct of financial competence effectively and legitimately, we seek to provide an answer to the question of how to conceptualize a complex performance instrument (Ozili, 2021). We also seek to substantially contribute by following a rigorous and coordinated procedure for the creation of an alternative competence measuring approach, to theory construction in educational evaluation for the personal financial sector (Coco et al., 2024). The opportunity of AI applicability with financial literacy to make better decisions for low-income groups is highlighted as follows:

a. ***Educational Initiatives:*** The incorporation of artificial intelligence (AI) into financial systems is greatly aided by financial literacy programs. Initiatives aimed at financial literacy concentrate on teaching AI systems the basics of finance (Koskelainen et al., 2023; Lawrence, 2013; Molina-Collado et al., 2021; Rana et al., 2019). This entails writing algorithms to comprehend fundamental concepts in finance, market dynamics, investment approaches, and risk management (Schmidt et al., 2019). Its endeavors encompass empowering AI to make responsible decisions. This involves incorporating frameworks for responsible decision-making and ethical considerations into AI algorithms (Melnychenko, 2020). AI systems are therefore capable of making defensible, open, and moral financial decisions.

Financial literacy programs use advanced algorithms to improve AI analysis. Pattern recognition and prediction are done using machine learning on massive financial data sets (Belleflamme & Vergote, 2016; Levantesi & Zacchia, 2021; Murray Z. Frank, 2024). AI systems can provide valuable decision-making insights. Using machine learning techniques allows AI to modify and enhance its financial analysis over time. AI improves predictions and financial strategies by learning from historical data and adapting to market conditions (Taylor, 2000). Moreover, it also involves incorporating sustainability criteria into decision-making algorithms and encouraging ESG-aligned investments and financial strategies.

Figure 2: Conceptual model to enhance investment decision-making.



Source: The author designs

b. ***AI and Inclusion:*** Traditional risk assessment methods are less accurate than AI-driven algorithms. Machine learning models analyze many variables, including alternative data sources, to help lenders determine loan eligibility (Lehavy et al., 2011; Neumeyer et al., 2021; Zhao et al., 2024). Lenders can now extend credit to people who were previously deemed ineligible thanks to AI's accurate risk assessment (Molina-Collado et al.,

2021). By promoting inclusivity in the financial system, this increase in credit availability is especially advantageous for people with a clean credit record or nontraditional financial backgrounds.
Models for machine learning are always learning and changing in response to fresh data. Because of their adaptability, AI systems can develop over time, becoming more accurate and responsive to shifting market and economic conditions (Neumeyer et al., 2021). Although AI offers chances for financial inclusion, issues, and ethical concerns must be taken care of (Koskelainen et al., 2023). Building trust in AI-driven financial systems involves doing things like guaranteeing transparency, avoiding algorithmic biases, and protecting data privacy.

c. ***Enhanced Risk Management and Fraud Detection:*** The ability of AI to improve fraud detection and risk management systems is one of the technology's most notable benefits in the financial sector (Barna & Epure, 2020; Kerkhoff & Makubuya, 2022; Mani et al., 2013). Conventional techniques for detecting fraud frequently depend on pre-established guidelines and patterns, which cannot always identify complex fraudulent activity. On the other hand, AI-powered fraud detection systems use cutting-edge algorithms and machine learning approaches to quickly and accurately identify possible fraudulent transactions by analyzing large amounts of data in real time and spotting unusual trends (Cellan-Jones, 2014; Hackman & Farah, 2009; Kerkhoff & Makubuya, 2022).
Dubte variations from typical transaction patterns can be picked up by AI systems, which can then flag questionable activity for more scrutiny (Christian T Elb et al., 2022). Artificial intelligence systems can prevent financial losses for financial institutions and their clients by staying ahead of fraudulent schemes through constant learning from fresh data and adaptation to changing fraud strategies (Arnaud et al., 2024; Menberu, 2024). Moreover, AI helps financial institutions evaluate and reduce a range of risks, such as credit, market, and operational risks, protecting the stability and integrity of the financial system. This is achieved by improving risk management capabilities.

d. ***Textual Analysis and Literacy:*** To improve digital financial literacy, textual analysis, and analytical abilities must be combined (Neumeyer et al., 2021). People who possess these abilities can understand intricate financial information that can be found in textual data, including market analyses, articles, and reports (Zakaria et al., 2023). When combined with analytical skills, textual analysis enables people to recognize opportunities and hazards in financial data. Artificial intelligence (AI)-driven solutions can reveal insights that conventional approaches might miss, offering a more nuanced view of investment opportunities and potential pitfalls. These abilities work together to promote lifelong learning (Melnychenko, 2020). Through textual analysis, people improve their analytical skills, which feeds back positively and promotes continued advancements in digital financial literacy.

e. ***AI and Generative Models*****:** Improving customer service experience is one of the major opportunities that artificial intelligence in banking offers (Kerkhoff & Makubuya, 2022; Mani et al., 2013; Neumeyer et al., 2021; Zhao et al., 2024). In the banking sector, AI-powered chatbots and virtual assistants are becoming more commonplace since they offer clients 24/7 individualized and attentive help. These artificial intelligence solutions use machine learning algorithms and natural language processing (NLP) to comprehend customer inquiries, deliver pertinent data, and make customized recommendations (Bagnoli et al., 1999; Lehavy et al., 2011; Miklosik et al., 2021; Miller, 2010). Content personalization is the area of expertise for generative AI models such as Chat GPT, Scholarcy, etc. In this context, AI-powered recommendation engines employ sophisticated analytical and predictive modeling methodologies to evaluate personal financial profiles, detect pertinent trends and patterns, and customize suggestions based on those findings. In this way, financial literacy is revealed to provide relevant and understandable personalized information. These models improve comprehension and engagement by tailoring content to users' desires and knowledge levels. It is frequently hampered by technical terms and complicated jargon. More people can understand complex financial concepts when they are explained and simplified by generative models (Zakaria et al., 2023). Because of its accessibility, financial concepts are easier for people to understand in a classroom setting without feeling overwhelmed. Text, audio, and visual components are just a few of the formats in which these models can convey information (Ozili, 2021). This adaptability accommodates a variety of learning preferences, including those who might prefer text-based instruction, visual aids, or audio explanations (Koskelainen et al., 2023). Ai-powered customer service solutions improve the entire experience, encouraging greater satisfaction whether they are helping consumers with account inquiries, suggesting appropriate financial products, or offering customized budgeting advice. Based on user interactions and feedback, generative AI models can adjust their responses. This flexibility enables learning paths to be customized, guaranteeing that users get pertinent information and advance at a speed that fits their comprehension and comfort level.

Conclusion

The use of contemporary financial solutions not only reduces employment expenses but also focuses attention on the intricate issues that clients experience. Artificial intelligence and robotics both have a big impact on the financial sector, as technology plays a major role in banks, education, and financial institutions' business plans. Artificial intelligence (AI) is said to be able to help mitigate the detrimental effects on decision-making. The

study explores how artificial intelligence (AI) might significantly advance financial inclusion and literacy, especially for low socioeconomic status (SES). Financil orgainsations may improve decision-making procedures, facilitate better access to financial services, and efficiently reduce risk by utilizing AI-driven solutions. In order to create a financial ecosystem that is more inclusive and sustainable, the study highlights the significance of digital literacy and AI integration. Furthermore, this underscores the possibility of AI-driven instruments to improve financial industry risk management, fraud detection, and customer service. The study emphasizes how important it is for technology companies, financial institutions, and legislators to work together to use AI to promote financial inclusion and provide underrepresented populations around the world more power.

Future studies explore this avenue and provide concrete, useful examples of how AI may support financial decision-making in times of economic constraint. This type of study will thus assist society, especially for those with the fewest resources and indirectly development of economy.

Author Contribution

Manpreet Kaur and Dr. Babli Dhiman contributed equally accountable to the development of this article.

Declaration of Interest

There is no conflict of interest.

Declaration of funding

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