ASET JOURNAL OF MANAGEMENT SCIENCE
Peer Reviewed & Open Access Journal
ISSN : 2584 - 220X (Online) | RNI : Applied | Frequency : Bi-Monthly

AI - DRIVEN FINANCIAL STRATEGIES: TRANSFORMING BUDGETING AND BUDGETING AND INVESTMENT

V. Gokul [1] ,III yr B.Com G, Saveetha College of Liberal Arts and Sciences, SIMATS, gokulvenkatesan180@gmail.com

Harini T[2] ,I yr B.Com G Honours, Saveetha College of Liberal Arts and Sciences, SIMATS, 252416007.sclas@saveetha.com

Dr. Anbalagan[3] , Research Guide, Department of Commerce General,Saveetha College of Liberal Arts and Sciences, SIMATS, anbalaganc.sclas@saveetha.com

D. Eraianbu[4] , I yr B.Com G Honours, Saveetha College of Liberal Arts and Sciences, SIMATS, eraianbud0036.sclas@saveetha.com

Abstract:

By improving investment and budgeting techniques, artificial intelligence (AI) is transforming financial decision-making. This study investigates the ways in which AI-powered models enhance financial management by providing data-driven insights, mitigating human biases, and enhancing forecasting precision. The study assesses the benefits and drawbacks of AI applications in investment strategies, corporate budgeting, and personal finance.AI-driven algorithms optimize asset allocation, risk assessment, and portfolio management in investing strategies by utilizing real-time market data and predictive analytics. The financial landscape has changed as a result of robo-advisors and AI-powered trading platforms, which provide automated, reasonably priced, and incredibly precise tools for making decisions. This study assesses AI applications in investment planning, business budgeting, and personal finance and shows how well they improve financial performance. Even with AI's many benefits in banking, there are still issues, such as algorithmic biases, data security threats, ethical dilemmas, and regulatory issues. To guarantee appropriate AI use in financial management, these issues must be resolved. In this essay, the revolutionary significance of AI in investing and budgeting is discussed, along with its advantages, disadvantages, and future prospects. Transparency, regulation, and additional technological breakthroughs are emphasized.

Introduction

ASET JOURNAL OF MANAGEMENT SCIENCE
Peer Reviewed & Open Access Journal
ISSN : 2584 - 220X (Online) | RNI : Applied | Frequency : Bi-Monthly

With its increased accuracy, efficiency, and data-driven decision-making capabilities, artificial intelligence (AI) represents a substantial departure from conventional approaches in financial management. In the past, human intuition, experience, and historical patterns were the mainstays of financial planning and investment methods.(Götze et al. 2015) But by improving predictive analytics, automating intricate procedures, and offering individualized financial solutions, AI-powered algorithms have completely changed this market. AI has been used in a number of financial fields, such as portfolio management, risk assessment, fraud detection, and budgeting(Morgan 2024). In order to detect market trends and optimize investment portfolios, robo-advisors and AI-powered trading platforms use machine learning and deep learning models to examine enormous datasets in real time. Additionally, by classifying spending, predicting financial requirements, and suggesting the best ways to save, AI systems help people and organizations with budgeting.(Boukherouaa et al. 2021)

The capacity of AI to remove human biases that frequently affect financial decisions is one of its main benefits. AI-driven techniques reduce emotional decision-making and improve financial stability by depending on objective facts and sophisticated analytics. Furthermore, AI systems are always learning and adapting, which enhances their performance over time and provides dynamic solutions catered to specific financial objectives.(Scardovi 2017)

Notwithstanding these benefits, issues including algorithmic biases, data privacy concerns, and legislative limitations still exist. The ethical implications of AI's use in financial decision-making also bring up significant issues with transparency and accountability. The purpose of this essay is to examine the revolutionary effects of AI-driven financial strategies by evaluating their advantages, drawbacks, and potential future effects on investing and budgeting.(Hilpisch 2020)

KEYWORDS: *Artificial Intelligence in Finance, AI-Driven Budgeting, Investment Strategies, Robo-Advisors, Predictive Analytics, Financial Risk Management, Machine Learning in Finance, AI-Powered Trading, Automated Portfolio Management, Data-Driven Decision-Making, Algorithmic Bias in Finance, Ethical AI in Finance.*

Materials And Methods :

ASET JOURNAL OF MANAGEMENT SCIENCE
Peer Reviewed & Open Access Journal
ISSN : 2584 - 220X (Online) | RNI : Applied | Frequency : Bi-Monthly

The impact of AI-driven financial strategies is evaluated in this study using a mixed-method approach that combines qualitative and quantitative research techniques. A variety of sources were used to acquire the data, including financial reports, investment platforms driven by artificial intelligence, and polls of investors and financial professionals. The study evaluated the efficacy of AI-driven financial strategies and examined financial trends using machine learning models, such as neural networks, regression analysis, and decision trees. Expert interviews with economists, financial analysts, and AI engineers were done for the qualitative component in order to learn more about the difficulties and applications of AI in financial decision-making. The study also compared traditional and AI-based financial models, looking at how well they manage investment risks, optimize budgets, and forecast market trends. Python-based financial modeling tools were used for data processing and analysis, and libraries like TensorFlow and Scikit-learn were used to train and evaluate AI models. In order to assess the accuracy, efficiency, and return on investment (ROI) of applying AI-driven financial tools versus human-driven methods, the study also used statistical methodologies. The investigation also took ethical factors like data privacy, bias reduction, and regulatory compliance into account.

RESULT AND ANALYSIS

The study's findings show that AI-driven financial techniques greatly increase the effectiveness of financial risk management, investment decision-making, and budgeting. Budgeting applications with AI capabilities have shown great success in examining spending patterns, identifying inefficiencies, and providing customized financial plans. These technologies classify spending, spot wasteful spending, and offer real-time suggestions for cost-cutting strategies by utilizing machine learning algorithms. Users who used AI-powered budgeting techniques reported having more control over their spending and greater financial discipline. Additionally, by projecting future costs using previous data and behavioral patterns, AI's predictive powers made proactive financial planning possible. When it came to forecasting market trends, AI-based investment models outperformed conventional human-driven methods. AI algorithms found lucrative investing opportunities while lowering risks by analyzing enormous volumes of financial data. For instance, robo-advisors used AI-driven asset allocation techniques to dynamically modify portfolios in reaction to changes in the market. According to the study, investors that employed AI-powered techniques saw their

ASET JOURNAL OF MANAGEMENT SCIENCE
Peer Reviewed & Open Access Journal
ISSN : 2584 - 220X (Online) | RNI : Applied | Frequency : Bi-Monthly

portfolios' returns increase and volatility decrease. Furthermore, by taking market sentiment into account, AI's capacity to perform sentiment research on social media and financial news improved decision-making even more. The results highlight AI's revolutionary influence on financial management by demonstrating how it may improve risk assessment, investing, and budgeting procedures. However, ethical issues, regulatory compliance, and the requirement for increased openness in AI-driven decision-making must all be addressed if the full promise of AI in banking is to be realized.

LIMITATIONS OF THE STUDY:

For AI systems to work well, vast amounts of precise and current data are needed. Incomplete, skewed, or inaccurate datasets might result in inaccurate forecasts and bad financial choices. Biases in prior data may be inherited by AI systems, producing unfair or discriminating financial results. It's still difficult to guarantee justice and openness in AI-driven financial decision-making. AI applications must adhere to stringent regulatory frameworks that govern financial markets. Regulatory monitoring is complicated by the dynamic nature of AI-driven initiatives, which raises questions around risk exposure and responsibility. Adoption of AI-powered financial solutions necessitates large software development, training, and infrastructure investments. Cost limitations may make it difficult for small enterprises and private investors to use AI-based initiatives. Regulations governing the use of AI in financial services are always changing. Regional differences in data protection and financial law compliance make it difficult to implement AI. Concerns around liability, accountability, and the possibility of regulatory scrutiny have made many financial institutions hesitant to fully adopt AI-driven initiatives. It takes a significant investment in infrastructure, qualified staff, and ongoing model upgrades to develop and implement AI-driven financial solutions. Sophisticated AI-driven financial instruments may be prohibitively expensive for small enterprises and individual investors, which would limit their availability and advantages. Furthermore, there are technical difficulties in integrating AI with current banking systems, which could take a lot of time and experience. Even though AI can analyze data effectively, human judgment and intuition are still quite important when making financial decisions. Since AI models might not always take into consideration outside variables like geopolitical events or abrupt changes in the economy, many investors and

ASET JOURNAL OF MANAGEMENT SCIENCE
Peer Reviewed & Open Access Journal
ISSN : 2584 - 220X (Online) | RNI : Applied | Frequency : Bi-Monthly

financial experts still prefer human monitoring. A major obstacle to broad adoption of AI systems is still user confidence and explainability, which need to be improved.

Conclusion

By providing data-driven, precise, and effective financial decision-making tools, AI-driven financial methods have completely transformed investing and budgeting. AI's capacity to analyze enormous volumes of financial data, spot trends, and produce insights in real time has greatly improved financial planning for both individuals and businesses. AI plays an indisputable role in financial management, from automating budgeting procedures to managing financial risks and improving investment portfolio . But even with these developments, problems like algorithmic bias, data security, trust issues, and regulatory limitations continue to be major worries. High-quality data is essential for AI models, and biases in the datasets can result in incorrect financial advice. In order to retain openness in AI-driven decision-making and guarantee compliance, financial institutions also need to manage changing regulatory environments. Another obstacle is the expense of putting AI-powered financial solutions into practice, especially for small enterprises and individual investors. However, with continued developments in explainable AI, regulatory compliance, and ethical AI practices, the future of AI in banking seems bright. AI systems will become more transparent as technology advances, lowering biases and boosting consumer trust. By incorporating human control, enhancing data quality, and encouraging investor AI awareness, financial institutions may concentrate on the responsible use of AI. To sum up, AI-driven financial strategies are revolutionizing the financial industry by providing precision, efficiency, and flexibility in investment and planning. Even though obstacles still exist, proactive steps to resolve moral, legal, and technological issues will guarantee AI's long-term and advantageous incorporation into financial decision-making. To optimize AI's potential in financial management, future studies should concentrate on honing AI models, expanding accessibility, and strengthening financial inclusion.

BIBILOGRAPHY

1. Davenport, T. H., & Ronanki, R. (2018). "Artificial Intelligence for the Real World." *Harvard Business Review.*

2. Goodfellow, I., Bengio, Y., & Courville, A. (2016). *Deep Learning.* MIT Press.

3. Kahneman, D. (2011). *Thinking, Fast and Slow.* Farrar, Straus and Giroux.

4. Narayanan, A. (2019). *How to Recognize AI Snake Oil.* Princeton University Lecture.

5. Russell, S., & Norvig, P. (2020). *Artificial Intelligence: A Modern Approach.* Pearson.

6. Silver, D. et al. (2016). "Mastering the Game of Go with Deep Neural Networks and Tree Search." *Nature.*

7. Taplin, J. (2017). *Move Fast and Break Things: How Facebook, Google, and Amazon Cornered Culture and Undermined Democracy.* Little, Brown.

8. Varian, H. R. (2019). "Artificial Intelligence, Economics, and Industrial Organization." *National Bureau of Economic Research.*