Application of Artificial Intelligence in Promoting Economic Transparency and Optimizing Liquidity Management

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ARTICLE INFO	ABSTRACT
Keywords: Artificial Intelligence, Economic Transparency, Liquidity Management, Economic Stability	This study examines the transformative role of Artificial Intelligence (AI) in improving economic transparency and liquidity management. AI technologies, such as machine learning and predictive analytics, significantly enhance the accuracy and timeliness of economic data analysis, assisting financial institutions and central banks in decision-making. The study emphasizes the need for robust regulatory frameworks to ensure the ethical use of AI, with a focus on data privacy and algorithmic transparency. Key recommendations include enhancing high-quality data collection, promoting interdisciplinary collaboration, utilizing AI for real-time market monitoring, addressing algorithmic biases, and increasing transparency in AI models. The research also underscores the importance of continuous education and training for financial professionals and advocates for ethical AI practices to build market trust. By strategically integrating AI and supporting ongoing innovation, this study aims to optimize liquidity management and strengthen economic stability while addressing technical and ethical challenges in the financial sector.

Introduction

Artificial intelligence (AI) is a powerful and influential technology that is transforming many industries, including the economy. This technology has the ability to significantly improve transparency and effective management of liquidity in the economy. The emergence of artificial intelligence technologies, such as machine learning and predictive analytics, has fundamentally transformed the process of analyzing, interpreting, and applying economic data for policymaking and financial regulation (Zuo, Wang, & Dong, 2024). Liquidity, which refers to the ease with which assets can be converted into cash without affecting their market value, is a key factor in maintaining the stability and efficiency of financial markets. An abundance of highly liquid assets can lead to inflation, while a shortage of liquid assets can lead to recession and financial crises. Therefore, for economic stability, it is necessary to maintain an optimal level of liquidity. By providing real-time data analysis and predictive insights, AI can significantly improve the transparency of liquidity movements (Mahamoud Djama, 2024). This, in turn, helps central banks and financial institutions make more informed decisions. The main obstacle in liquidity management is the complex nature and high volume of financial data. Traditional approaches to data analysis often fail to fully understand the complex and ever-changing characteristics of financial markets. AI, with advanced algorithms and high processing power, is able to analyze a large amount of data efficiently and effectively, surpassing traditional methods (Hong & Xiao, 2024). Algorithms based on artificial intelligence have the ability to identify patterns and trends in high-frequency trading data. This allows regulators to anticipate and deal with potential liquidity problems before they become serious. In addition, AI has the ability to improve the transparency of monetary policies by increasing the accuracy and speed of economic forecasts. AI-based forecasting models can use macroeconomic data such as interest rates, inflation, and GDP growth to make more accurate predictions of future liquidity status (Yang, 2024). Greater transparency can strengthen the confidence of market players, reduce uncertainty, and facilitate the development of more stable and efficient financial markets.

However, integrating artificial intelligence into the economic policy-making process is fraught with difficulties, particularly in terms of data privacy and addressing ethical concerns. The use of extensive datasets and sophisticated algorithms raises concerns about the security of confidential financial data and the potential for algorithmic bias. Therefore, it is necessary to establish strong legal frameworks and ethical principles to ensure the proper use of artificial intelligence in liquidity management and improve transparency (Adigwe et al., 2024).

The purpose of this research is to investigate the effectiveness of artificial intelligence (AI) in improving economic transparency and liquidity management in financial markets. This, in turn, will lead to increased financial stability and efficiency.

The main question investigated in this study is: "How can using artificial intelligence improve the accuracy of economic forecasts, liquidity management and compliance with financial regulations, and remove ethical and regulatory barriers?"

The hypothesis is that the use of artificial intelligence-based models and predictive analytics, compared to traditional methods, can significantly increase the accuracy of economic forecasts, optimize liquidity management and regulatory compliance. improve This hypothesis is based on the advanced capabilities of data processing and the possibility of real-time analysis of artificial intelligence technologies.

The innovation of this research results from the combination of artificial intelligence approaches with a strategic management framework that is specifically designed for liquidity management. By carefully analyzing the case studies and using advanced artificial intelligence approaches, this study aims to provide a new strategy for liquidity management that can be implemented by policy makers and financial institutions. In addition, this research focuses on the ethical and regulatory barriers associated with the implementation of artificial intelligence and suggests solutions to ensure responsible and fair use.

1.The following article is organized in the following five sections. In the first part, the research problem and its importance are explained, and then the main question, hypothesis and organization of the article are given. In the second part, the research literature, the definition of the basic concepts and the scientific background of the article are explained. The third part describes theoretical foundations based on information economy, liquidity preference theory, machine learning and data analysis, deep learning, natural language processing, reinforcement learning, the importance of large data, obstacles and limitations, guaranteeing confidentiality and data protection, interpretability and Discusses transparency. The fourth part deals with the model of organizational excellence for economic transparency and liquidity management using artificial intelligence, and the last part summarizes the results of this research.

2.Research literature

The application of artificial intelligence (AI) in economic and financial research has attracted considerable attention in recent years due to advances in computing technology and increasing access to large datasets. AI includes several technologies including machine learning, neural networks and natural language processing. These technologies work together to automate and improve complex analytical activities. This section provides an overview of the existing research literature on the use of artificial intelligence to promote economic transparency and liquidity management. This review focuses on important findings and research methods.

 2.1Basic concepts

Artificial intelligence (AI) in economic transparency: Economic transparency refers to the level of clarity and openness in the communication of economic policies and data with people and market actors. According to Dinser and Eichengreen (2014), economic transparency plays a fundamental role in building trust, reducing uncertainty and improving the effectiveness of economic programs. Artificial intelligence (AI) has played a prominent role in increasing economic transparency by improving the accuracy and availability of economic forecasts and analysis (Zuo, Wang, & Dong, 2024).

Artificial Intelligence (AI) in Liquidity Management: Liquidity management requires conscious regulation of the amount of liquidity within the financial system to maintain stability and boost economic growth. Traditional liquidity management mainly depends on the analysis of financial statements, market conditions and macroeconomic factors. However, the complex nature and high volume of financial data have created significant obstacles for these traditional approaches (Mahamoud Djama, 2024).

.2 2. The scientific background of the studies conducted on the research title

Vinay et al. (2024) state that combining artificial intelligence with blockchain technology can improve supply chain efficiency and accuracy. This combination results in improved transaction times, data verification processes, and overall supply chain performance.

Eyieyien et al. (2024) state that artificial intelligence can provide improved transparency and better decision-making in the supply chain, which will help maintain competitiveness in the global market.

Majumder (2024) reports that in the banking sector, the use of artificial intelligence for risk management and fraud detection has increased dramatically. Advanced algorithms are used to assess credit risk, monitor transactions in real time, automate compliance and reduce operational risk. These technologies are also effective in customer verification and fraud detection processes, although concerns about data privacy and security remain.

In their research, Li et al. (2024) show that the adoption of artificial intelligence in Chinese listed companies has reduced the probability of stock price collapse and improved the quality of internal control, especially in non-state and non-foreign companies. These findings show that artificial intelligence can help improve the performance of financial markets and reduce risks.

Chauhan and Sahoo (2024) state that artificial intelligence can lead to resource management and optimization of energy use towards sustainability. Combining artificial intelligence with the Internet of Things (IoT) can improve resource management such as traffic conditions, air and water quality, and water management for sustainable development.

Singh and Johri (2024) state that in the financial services industry, artificial intelligence, along with other technologies such as blockchain and machine learning, have improved efficiency and innovation. These technologies are especially used in traditional banking through digital platforms and automated services.

Andryushin (2024) examines asset tokenization by artificial intelligence and states that this process can provide greater transparency regarding rights to real assets and ownership history. This helps to improve transaction efficiency and reduce costs.

Li (2024) in a research titled "Liquidity Management with Artificial Intelligence" has investigated the prediction of financial crises using big data and artificial intelligence. This study shows that combining AI and big data with various financial theories can improve the prediction of financial crises in the field of liquidity management and economic transparency. These methods help to identify early signs of crisis and provide preventive solutions

Obinna and Kess-Momoh (2024) in a study titled "Economic Transparency with Artificial Intelligence" showed that the use of artificial intelligence in procurement processes can improve transparency and accountability. Organizations have reported reduced risk and improved regulatory compliance by using AI in contract management. This study shows the high potential of AI in improving transparency and efficiency in various economic sectors.

Table No. (1) scientific background of the studies conducted on the research title

Key findings	researcher	Subject
This combination results in improved transaction times, data verification processes, .and overall supply chain performance	(2024) .Viney et al	Combining artificial intelligence with blockchain technology in the supply chain
Artificial intelligence can provide improved transparency and better decision-making in the supply chain, which will help maintain competitiveness in the global market.	(2024) .Eyvin et al	Improving transparency and decision-making in the supply chain with artificial intelligence
Advanced algorithms are used to assess credit risk, monitor transactions in real time, automate compliance and reduce operational .risk	(2024) Majumdar	Using artificial intelligence in risk management and fraud detection in the banking sector
The adoption of artificial intelligence has reduced the possibility of stock price falls and has improved the quality of internal control, especially in non-state and non-foreign .companies	(2024) .Lee et al	Acceptance of artificial intelligence in Chinese companies and its effect on the quality of internal control
Combining artificial intelligence with the Internet of Things (IoT) can improve resource management such as traffic conditions, air and water quality, and water management for .sustainable development	(2024) Chauhan and Sahu	Resource management and optimization of energy use with artificial intelligence
Artificial intelligence, along with other technologies such as blockchain and machine learning, have improved efficiency and .innovation	(2024) Singh and Juri	Improving efficiency and innovation in the financial services industry with artificial intelligence
Asset tokenization by artificial intelligence can provide greater transparency regarding rights to real assets and ownership history.	(2024) Andreyushin	Tokenization of assets by artificial intelligence
Combining AI and big data with various financial theories can further advance the prediction of financial crises in terms of liquidity management and economic .transparency	(2024) Lee	Liquidity management with artificial intelligence
The use of artificial intelligence in procurement processes can improve transparency and accountability	(2024) Obina and Kes-Mumoh	Economic transparency with artificial intelligence

Source: research findings

Theoretical foundations
The use of artificial intelligence (AI) to improve transparency and regulate liquidity in the economy is based on many fundamental economic and computational principles. This section describes the main ideas and concepts that underlie the use of artificial intelligence in various fields, with a special focus on information economics, liquidity preference theory, and principles of machine learning and data analysis.

Information economy
Information economics is a branch of microeconomics that examines the impact of information asymmetry and ambiguity on economic decisions and market outcomes. Developed by scholars

such as George Akerlof, Michael Spence, and Joseph Stiglitz, this theory explains how imperfect and asymmetric knowledge affects market efficiency. The contribution of artificial intelligence in improving economic transparency can be analyzed from the perspective of the information economy. Using advanced data analytics and machine learning algorithms, AI strives to reduce the disparity in knowledge between market participants and regulators. For example, AI-powered forecasting models can provide more accurate and timely economic forecasts, allowing central banks, investors and other stakeholders to make more informed decisions. This is consistent with the idea of reducing adverse selection and moral hazard in financial markets, as more transparency and accurate information can help reduce the risks of unequal access to information (Zuo, Wang, & Dong, 2024).

Liquidity preference theory
Liquidity preference theory is a concept that explains how individuals and investors prefer to hold liquid assets such as cash over less liquid assets such as bonds or stocks. The liquidity preference hypothesis, first proposed by John Maynard Keynes in his influential book The General Theory of Employment, Interest, and Money (1936), states that people prefer to hold their own money for transactions, as a precautionary measure, and for speculative reasons. be easily available. Keynes believed that the demand for liquidity plays a fundamental role in determining the interest rate and the overall stability of the economy. Artificial intelligence (AI) can improve liquidity management by providing real-time analysis of liquidity status and improving the distribution of cash assets. Machine learning models are able to analyze large amounts of financial data to predict liquidity shortages or surpluses. This allows preventive measures to be taken to maintain stability in the financial system. This application of AI is consistent with the theory of liquidity preference, as it ensures that there is sufficient liquidity to support economic demands for transactions and precautions while reducing speculative excesses that may cause financial instability (Mahamoud Djama, 2024).

Machine learning and data analysis
Machine learning is a branch of artificial intelligence (AI) that focuses on creating algorithms that allow computers to learn from data and make predictions. This field includes a set of methods, including supervised learning, unsupervised learning, and reinforcement learning, each of which has unique approaches and applications. Supervised learning algorithms, such as regression analysis and neural networks, are often applied in the fields of economic transparency and liquidity management. These algorithms are used to predict economic variables and discover patterns in financial data.

In reviewing the theoretical foundations of artificial intelligence (AI) in business applications, it is necessary to fully discuss data privacy and ethical issues. Data privacy standards are built on the broader framework of information security and confidentiality, which emphasizes the need to protect sensitive information from unauthorized access and misuse. Ethical issues in artificial intelligence (AI) include the requirement to maintain fairness, accountability, and openness in algorithmic decision-making. These principles are of great importance to maintain trust and legitimacy in financial markets. The principles of differential privacy and algorithmic justice are very important in solving these challenges from a theoretical perspective. Differential privacy is a mathematical framework that guarantees the privacy of individual data while allowing the study of aggregated data. Algorithmic fairness refers to the process of creating artificial intelligence (AI) systems that do not unfairly discriminate against certain groups or individuals. This is consistent with the ideals of justice and equality in economic decision-making, as stated by Barukas et al . .(2019)

By combining these theoretical foundations, a complete framework is formed to better understand how artificial intelligence can be used to improve economic transparency and liquidity management. Artificial intelligence has the potential to significantly improve the efficiency and

stability of financial markets by minimizing information imbalances, aligning with liquidity preference theory, and using advanced machine learning methods. However, to ensure the responsible and fair use of artificial intelligence (AI) in economic contexts, it is essential to understand and resolve the ethical and privacy issues associated with it. The use of advanced artificial intelligence (AI) techniques is expanding in many economic applications. To achieve a comprehensive understanding of the theoretical foundations of using artificial intelligence for economic transparency and liquidity management, it is necessary to explore the complex approaches of artificial intelligence used in these specific applications. These methodologies include deep learning, natural language processing, and reinforcement learning, each of which provides distinct capabilities for understanding and predicting economic events (Hong & Xiao, 2024)

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Deep learning
Deep learning is a type of machine learning that uses neural networks with multiple layers to effectively represent complex patterns and relationships within data. Deep learning models, including convolutional neural networks (CNN) and recurrent neural networks (RNN), can understand complex temporal and spatial relationships in economic data. For example, Recurrent Neural Networks (RNN) and their variants, such as Long Short Term Memory (LSTM) networks, are very efficient in predicting future values in time series data. These models are used to predict macroeconomic variables such as gross domestic growth (GDP) and inflation rate, and compared to traditional econometric models, they offer higher accuracy and reliability. Deep learning models can improve liquidity management by improving the accuracy of liquidity forecasting by considering sequential relationships in economic data.

Natural Language Processing (NLP)
Natural language processing (NLP) is a fundamental approach in artificial intelligence that has significant implications for promoting economic transparency. NLP involves examining and synthesizing human language and facilitating the understanding and production of text by artificial intelligence (AI) systems. This feature is especially valuable for reviewing large volumes of unorganized information, such as news, financial reports, and social media posts. Natural language processing (NLP) methods, such as sentiment analysis and topic modeling, have the ability to extract useful insights from written information. These approaches can provide a real-time understanding of market sentiment and economic patterns. Sentiment analysis based on artificial intelligence can measure investors' sentiments by evaluating financial news and social media and provide timely indications of market developments and liquidity conditions. This promotes economic transparency by providing policymakers and market players with a more accurate understanding of market dynamics.

Reinforcement learning
Reinforcement learning (RL) is an approach in machine learning in which an agent acquires the ability to make decisions by actively interacting with the environment and receiving feedback in the form of rewards or punishments. Reinforcement learning (RL) is well suited for solving dynamic optimization problems, such as developing trading strategies and liquidity management. In the field of liquidity management, reinforcement learning may be applied to create adaptive trading algorithms that improve order execution by optimizing order execution based on current market conditions. For example, a reinforcement learning agent can learn the effective management skill of balancing the immediate need for liquidity with its impact on market pricing. This allows the aforementioned agent to optimize liquidity provision. The use of this dynamic technique is in accordance with the theoretical framework of optimal control and dynamic planning and provides a reliable solution for effective control of liquidity in financial markets.

The importance of big data

The use of artificial intelligence (AI) to promote economic transparency and liquidity management is mainly influenced by the abundance of big data. Big data includes data sets that are characterized by their large volume, complex nature, and diverse composition, and require the use of advanced analytical methods for processing and analysis. The integration of big data with artificial intelligence enables a more detailed and detailed analysis of economic phenomena. Economic data encompasses a wide range of sources such as transaction data, financial records, market data, and social media. Efficient management and review of these multiple sources of real-time data is critical to successful liquidity management and economic forecasting. Artificial intelligence (AI) techniques such as deep learning and natural language processing (NLP) are very effective in handling huge amounts of data, enabling more accurate and faster analysis. The concept of data-driven decision-making provides a theoretical foundation for big data in economics. This approach prioritizes the use of real data and advanced analytics to guide economic policies and strategies. This approach goes beyond conventional theoretical models by considering the complexities and dynamics of the real world (Scott, Amajuoyi, & Adeusi, 2024).

☐ Obstacles and limitations

Although the theoretical foundations for the use of artificial intelligence in economic transparency and liquidity management are strong, there are several obstacles and limitations that must be overcome to fully benefit from the promises of these technologies. Algorithmic bias means systematic and unfair favoritism or discrimination that can occur in algorithms. This bias occurs when algorithms produce biased or unfair results because of factors such as race, gender, or other protected characteristics. Ensuring fairness in algorithms is important to reduce the negative impact of bias and promote equal treatment of all individuals. Algorithmic bias is a significant challenge in using artificial intelligence applications in economics. AI models are trained on past data, which may contain inherent biases that can be perpetuated and even exacerbated by algorithms. This has the potential to lead to unfair or discriminatory consequences, particularly in areas such as accreditation and financial regulation. To ensure fairness in AI models, it is essential to conduct rigorous testing and validation, along with the use of methods to reduce bias. These techniques include bias correction algorithms, fairness-aware machine learning, and transparent model evaluation processes.

☐ Ensuring confidentiality and data protection

The use of artificial intelligence (AI) in economic applications requires the processing of large volumes of confidential financial data. Maintaining confidentiality and protection of personal data is necessary to maintain trust and adhere to legal standards. Theoretical frameworks, including differential privacy, address data security by providing methods to protect individual data points while allowing aggregate analysis. In addition to technical solutions, strong legal frameworks are essential to manage the use of artificial intelligence in financial markets. These recommendations include data management protocols, disclosure of algorithms, and responsibility for ensuring compliance of AI applications with ethical norms and protecting users' privacy.

☐ Interpretability and transparency

AI models also face interpretability and transparency challenges. Advanced AI approaches, including deep learning, are commonly referred to as "black boxes" due to their complex and incomprehensible decision-making processes. The lack of transparency can create challenges in economic applications, because it is necessary to understand the reasoning underlying the predictions and judgments. Ongoing research focuses on creating AI models and procedures that are easy to understand and can provide clear explanations for the judgments made by algorithms. Methods such as model-independent interpretation approaches, transparent model architectures, and visualization can help reduce the gap between the complexity of models and their

interpretability. This ensures that insights from AI are understandable and actionable by policy makers and market players. As a result, the use of artificial intelligence to improve economic transparency and effective liquidity management is based on the concepts of information economy, liquidity preference theory, and advanced computing techniques. Through the use of artificial intelligence (AI), policymakers and financial institutions can gain a deeper understanding of economic dynamics, enhance their ability to manage liquidity, and improve the transparency and stability of financial markets. Despite this, to fully benefit from the capabilities of artificial intelligence in economic applications, it is necessary to overcome the obstacles caused by algorithmic bias, data privacy and model interpretability.

.8Organizational excellence model for economic transparency and liquidity management using artificial intelligence

Organizational excellence is the effort to achieve exceptional performance through continuous improvement, innovation and adherence to best practices in all aspects of an organization. When it comes to using artificial intelligence (AI) to improve economic transparency and liquidity management, an organizational excellence model provides a predefined structure for financial institutions, regulatory bodies and policy makers to achieve high levels of efficiency, reliability and Provides ethical standards. This model includes essential elements such as strategy alignment, technology infrastructure, data governance, human capital and continuous development.

☐ Strategic alignment

Strategic alignment refers to the process of ensuring that an organization's goals and objectives are aligned with its overall strategy and direction. Strategic alignment ensures that the integration and implementation of AI technologies are aligned with the organization's overall goals and objectives. These include:

•Integrating vision and goals: accurately determining the correlation between AI projects and the organization's goal to improve economic transparency and efficient liquidity management.

•Stakeholder Engagement: The process of actively involving key stakeholders such as policymakers, regulatory authorities, financial institutions, and customers in the process of creating and implementing AI initiatives.

•Key Performance Indicators (KPI): Define KPIs to assess the impact of AI on economic transparency and liquidity management, including metrics such as forecasting accuracy, liquidity optimization and regulatory compliance rates.

Technology infrastructure

An efficient and flexible technological framework is essential for the effective deployment of AI technologies. Essential elements include:

•Data management systems: Advanced systems for storing and processing data that are capable of managing large amounts of structured and unstructured data.

•AI and machine learning platforms: These platforms are advanced, scalable and designed to handle a wide range of machine learning models and patterns. They are specifically developed for tasks such as predictive analytics, natural language processing, and reinforcement learning.

•Integration Capabilities: Our AI solutions can easily integrate with your existing IT infrastructure and business processes, enabling seamless data flow and improved operational efficiency.

Data governance

Data governance is critical to maintaining the accuracy, protection and ethical management of data. Its key components are:

•Data quality management: implementing procedures that ensure accuracy, uniformity and reliability of data.

•Privacy and Security Laws: Enforce strict laws to protect confidential financial information and comply with legal frameworks such as GDPR (General Data Protection Regulation) and other applicable data protection laws.

•Ethical principles: developing ethical principles to address concerns such as algorithmic bias, transparency and accountability in AI-based decision-making.

☐ Human capital

Human capital is an essential factor that enables organizations to achieve excellence. The development of skilled and knowledgeable workforce includes the following:

•Talent acquisition and development: the process of attracting and retaining highly skilled people in the fields of artificial intelligence, data science, economics and finance. Ensure continuous professional development and training to keep staff up-to-date on the latest developments and best practices in AI.

•Creating a culture of collaboration: encouraging an environment that values and supports collaboration and creativity, where teams from different disciplines come together to create and implement AI solutions.

•Change Management: Implementing change management practices to help integrate AI technology and processes across the organization.

Continuous development

Continuous improvement ensures that the company maintains its agility and responsiveness to changes in the economic and technical environments. Key strategies include:

Supervision and evaluation of Am

As a result, the organizational excellence model for economic transparency and liquidity management with the use of artificial intelligence provides a complete framework to help financial companies, regulatory organizations and policy makers in the efficient use of artificial intelligence technology. By prioritizing strategy alignment, technology infrastructure, data governance, human capital and continuous development, organizations can achieve better performance, promote transparency and ensure stable cash management. Following this model not only improves operational efficiency, but also strengthens trust and confidence among stakeholders and ultimately promotes the stability and health of the financial system.

Diagram (1) organizational excellence model for economic transparency and liquidity management using artificial intelligence

Source: research findings
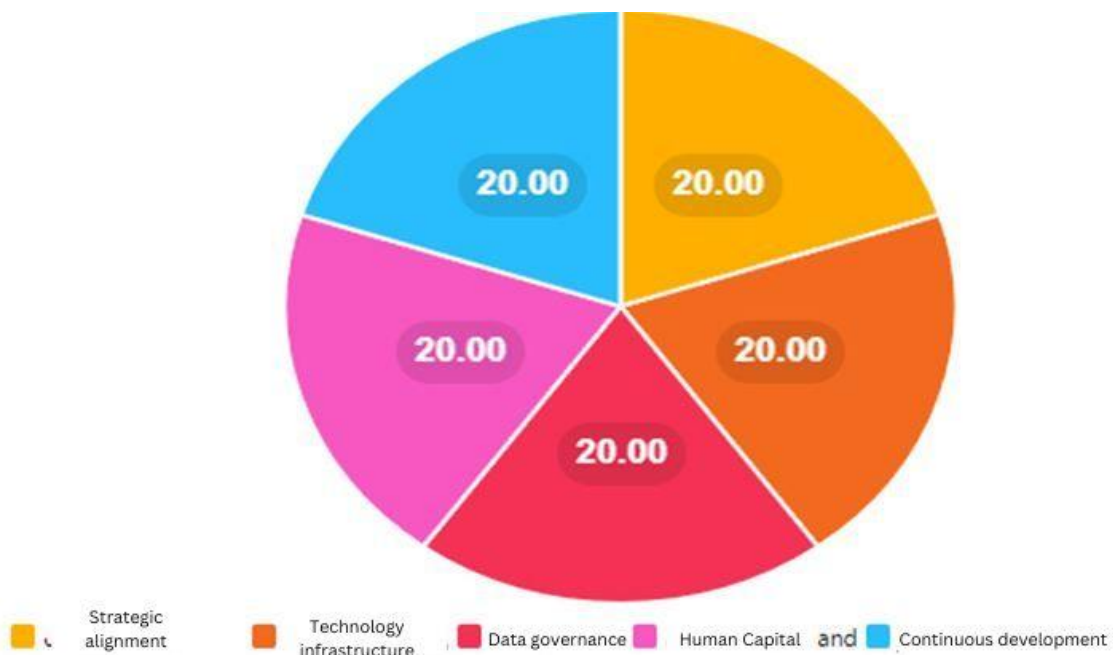
1. Summary and results

This article examines the application of artificial intelligence (AI) to promote economic transparency and liquidity management. By using advanced artificial intelligence methods, including machine learning and natural language processing, financial institutions and regulatory bodies can improve their ability to predict future outcomes, efficiently allocate resources, and meet regulatory requirements. The theoretical background of these applications includes information economy, liquidity preference theory and data analysis. Case studies provide evidence of effective AI deployments in central banks, financial institutions and regulatory bodies. Also, a model for organizational excellence is proposed to guide the efficient use of artificial intelligence in economic applications. Some of the most important results of this research are as follows:

Improved forecasting accuracy: The use of artificial intelligence-based models, by combining real-time data and sophisticated forecasting methods, has dramatically increased the accuracy of economic forecasts. This enables policymakers to make informed judgments that lead to more effective monetary policies.

Improved liquidity management: The application of machine learning algorithms and reinforcement learning approaches has led to the optimization of liquidity allocation in financial markets. This dynamic strategy ensures a smoother flow of liquidity and reduces its impact on the market, thereby promoting market stability.

Enhanced Regulatory Compliance: The use of artificial intelligence technologies, such as natural language processing, has improved the ability of regulatory bodies to effectively monitor and enforce regulatory compliance. Automated systems have the ability to identify anomalies and potential violations more efficiently, thereby ensuring compliance with financial requirements.

Greater market transparency: Artificial intelligence has created greater transparency in financial markets by providing real-time analysis of market sentiment and liquidity status. This has led to a reduction in differences in knowledge and an increase in confidence between market players.

Address ethical and privacy concerns: Implementation of strong data governance frameworks and ethical norms has effectively addressed issues of data privacy and algorithmic bias. Ensuring accountability and transparency in decision-making based on artificial intelligence has helped to maintain the trust of stakeholders and compliance with regulatory requirements.

Diagram (1) Application of artificial intelligence in promoting economic transparency and optimizing liquidity management
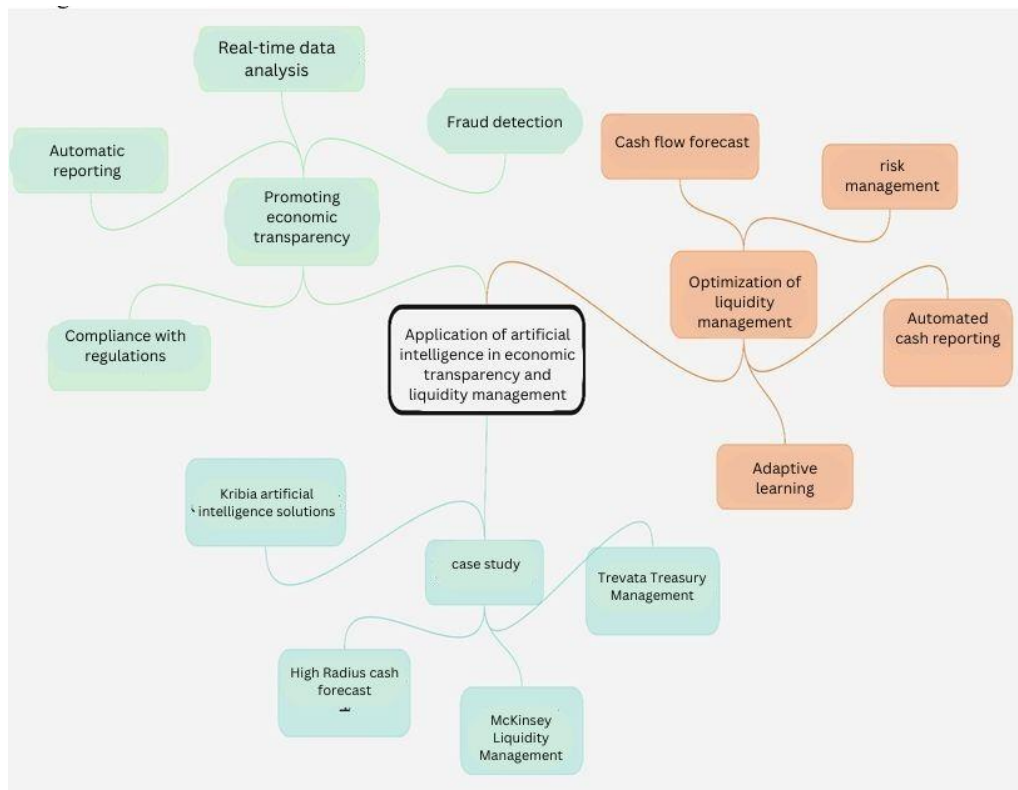
Source: research findings

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