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Agentic AI in autonomous financial advisories

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Abstract

Agentic AI strengthens financial technology by letting autonomous financial advisories use flexible systems to block and control their procedures. The new financial products deliver specific customer solutions in real-time, which make users' financial decisions better informed. Our study examines today's beneficial uses, development methods, and essential results of agentic AI technology in financial advising. Research studies look at current systems plus conduct real-world studies to show how agentic AI fares compared to usual technology. The research examines all the main ethical, security, legal, and system challenges the industry faces today. Our study demonstrates that agentic AI offers efficient ways to deliver financial advice while making services scalable and ethical. The findings demonstrate how agentic AI systems will help make money basics easier to understand and reach a wider set of people within the financial system. This essential research output builds the base for more development of agentic AI systems and recommends useful future study directions.

Keywords: Agentic AI; Financial Technology; Personalized Solutions; Ethical Compliance; Market Scalability; Predictive Analytics

1. Introduction

1.1. Background to the Study

New financial systems based on agentic AI technology help companies employ intelligent decision-making robots to meet the growing market needs for smart financial assistance. The ability of agentic AI to take action automatically helps financial advisories provide direct, tailored solutions to their clients right when they need them. Modern finance expertise builds on earlier rule-based systems to create advanced learning models that changed how advisors assist clients today.

Robo-advisor tools built by Wealthfront and Betterment helped drive financial planning changes by offering easy and cost-effective solutions. Modern AI systems started small with automated recommendation tools yet now handle large datasets to produce smart decisions. Modern financial technology systems now solve classic advisory problems that result from traditional decision-making platforms' bias and limited availability (Sahani et al., 2024).

Research shows that vehicle and finance agentic AI work alike through real-time data processing and predictive modeling, according to Schwarting et al. (2018). The financial sector depends more on AI systems, which calls for research into their performance and problems with special attention to better serve today's investors.

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1.2. Overview

Because it learns and acts proactively without human guidance, Agentic AI has become an ideal tool for transforming financial advisory services. Regular automated systems work with fixed algorithms, yet agentic AI stays updated by adjusting to market information and tracking customer actions. By changing to individual needs, this ability produces exceptionally specific recommendations that match investors' financial targets better.

The system recognizes market opportunities and threats by using agentic AI tools to scan market data. By employing sophisticated machine learning techniques the systems handle natural language data inputs and forecast market activities for reliable outcomes. These systems differ from standard models because they can adapt to changing conditions and work with multiple data types (Belanche et al., 2019).

AI technology in financial advisories helps solve today's problems, including market unpredictability and growing client preferences for personalized services, while allowing better capacity to serve more customers. By delivering financial services through agentic AI, we can expand everyone's access to these services at lower prices. The system needs proper ethical management to prevent unfairness for its users from different backgrounds, according to research by Belanche et al. (2019).

1.3. Problem Statement

Regular financial advisory services struggle with human error in choices, slow management of many clients, and the difficulty in offering tailored solutions. The resulting problems harm both customers' wealth and prevent people from underrepresented communities from accessing financial services.

New AI technology includes agentic AI yet introduces new problems by creating ethical worries about system transparency and accountability while raising questions about bias in algorithmic systems. The setup of these systems faces major technical challenges and needs to follow government rules. Scientists have not fully explored how agentic AI works in financial advisory systems. Research teams must conduct full assessments to find better ways to build ethical systems that work successfully within economic systems.

1.4. Objectives

Our research investigates agentic AI systems to see how they can change autonomous financial advisory services. Our study compares the operational effectiveness of agentic AI systems against standard financial guidance frameworks based on scalability power and user fulfillment.

Our review examines technical and ethical obstacles when deploying agentic AI systems into financial operations. The analysis targets specific system barriers to offer practical guidance for better system design and application. Our research aims to build AI financial advisory tools that work well while respecting ethical standards and helping people from every background understand and use financial services.

1.5. Scope and Significance

This research studies the use of agentic AI for retail customers and institutional financial advice providers. The investigation checks out multiple AI models of agencies through their success in making custom financial services and controlling investment portfolios. Our research shows investors, financial institutions, and policymakers must develop rules and moral guidelines to protect everyone.

Our new research results help develop financial systems that work better for everyone at a large scale. Our research determines current AI systems in finance while helping design better financial technology for everyone.

2. Literature review

2.1. Conceptual Framework for Agentic AI

Agentic AI systems possess the artificial intelligence traits to make autonomous decisions while adapting instantly to changes and displaying self-determination in their choices. The basic principles of communicating with AI depend on agentic AI systems' capability to sense and respond to complex situations before making decisions. Agentic AI differs from traditional automated systems because it has built-in flexibility and adaptation while relying on predefined rules.

Agentic AI works thanks to its basic agency feature. Agency means a system can act independently to reach proposed targets or user requirements. Advanced system algorithms allow them to process data and predict outcomes without delay. Autonomy allows the system to work independently while reducing human operators' demands, improving performance and expansion possibilities. A system without adaptability cannot self-improve through interaction experience, according to Sundar (2019).

Agentic AI helps financial services industries change through personalized decision support that benefits businesses and their customers. According to Sundar (2019), our psychological reactions to AI interactions shape productive teaming when trust and clear system behavior combine with user self-governance. These aspects particularly matter because agentic AI needs to work correctly and stay dependable across the financial sector.

Through this connection between human thinking and machine understanding, agentic AI opens doors to a service delivery future that reacts to each customer individually. Its theory helps define what agentic AI can do and shows developers how to build it without creating safety risks.

2.2. Technology Progress in Financial Services

Financial services and artificial intelligence systems have advanced through three generations, beginning with basic rule-based structures and now using deep learning and agentic AI technology. Basic artificial intelligence systems initially did repetitive work by following static algorithms to find fraud and make risk assessments. They created early foundations for better technologies to develop.

Machine learning created a new processing style by letting systems use data to get better results as time went on. Using neural networks and natural language processing, AI learned to understand financial data better than people could. Deep learning tools improved decision-making output because they replicated how human brains work to make better sense of data (Lu, 2019).

New agentic AI technology now demonstrates autonomous performance alongside dynamic updates that meet client requirements. Big data analytics and algorithmic trading technology now drive successful operations alongside cloud computing breakthroughs in this field. Market analysis technology based on agentic AI now delivers precise detection of investing potential and threats to help manage investment portfolios better in real time.

Financial services use data more deeply, and agentic AI helps them run better and expand faster. Using agentic AI brings specific challenges, such as adhering to industry rules, moral issues, and showing algorithm processes. Using agentic AI in financial services will simplify access to banking while helping disadvantaged markets grow, according to Lu (2019).

The development of AI technology in financial services has produced a steady line of advancements where new tools use what their predecessors achieved. Agentic AI completes this evolutionary path by permanently changing financial advice while showing the way forward for AI technology.

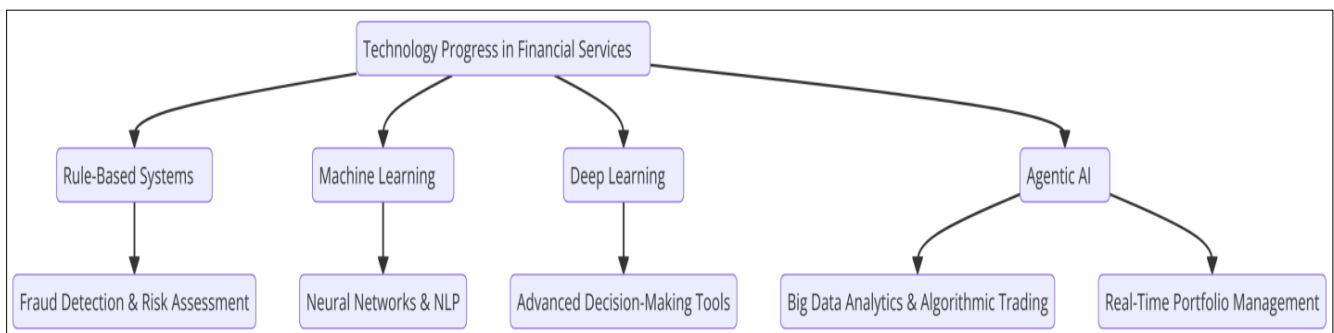


Figure 1 A flowchart illustrating the evolution of technology in financial services

2.3. Benefits and Capabilities of Agentic AI

AI systems that use artificial intelligence technologies enhance and simplify financial advisory services to create real value in the market. It uses predictive analytics to identify client requirements ahead of time and detect industry trends, so it offers guidance in advance of reactive options. Agentic AI systems help clients find financial growth prospects and navigate changing markets by taking action first (Bryant 2021).

Agentic AI performs personalized product recommendations using complex machine learning technology to understand individual players' preferences. DNA-style methods assist AI systems in providing customized financial guidance by recognizing user-specific traits, including their comfort with risk plus planned assets. Financial businesses and clients build better relationships when the system offers personalized advice (Bryant, 2021).

The feature of understanding the environment helps agentic AI systems adjust their performance based on mundane business dynamics. The system adapts recommendations automatically to perform well under market changes. Agentic AI systems deliver on-the-spot reasoning, which is perfect for portfolio management and fast trade execution in financial markets.

Financial institutions can serve their many different customers effectively through their system's scalability. The system saves work hours and controls resources by processing large datasets and performing intricate analyses, as shown by Bryant's research (2021). Agentic AI technology creates benefits for financial advisory operations and client relationships.

Agentic AI brings many advantages to financial service companies by automatically delivering personalized solutions that adapt to clients' present needs. The system can grow operations and show instant results, which makes it useful across different financial environments.

2.4. Regulatory and Legal Considerations

The quick use of agentic AI in financial services shows we need strict rules to keep business systems and ethical practices working properly. The present financial rules and regulations prioritize protecting personal data while ensuring good risk handling and genuine reporting. The existing regulatory models rarely keep up with technology developments and may leave stakeholders vulnerable to hazards (Anagnostopoulos, 2018).

Agentic AI requires unique policy standards because its self-governing nature adds challenging features to the technology. Because agentic AI systems need little human oversight they create problems around who needs to accept responsibility when errors show up. Financial organizations must resolve problems with algorithmic fairness to prevent discrimination while providing equal access to their advisory service (Anagnostopoulos 2018).

Financial institutions need worldwide uniform rules to support international market activities but also maintain high financial standards. Differing regulations between countries make it harder for multinational organizations to successfully use agentic artificial intelligence systems business-wide.

Policy leaders should create rules that let innovation grow alongside responsible actions within the industry. Our main targets target AI transparency standards plus effective data security guidelines with clear rules for autonomous system accountability. Regulatory sandboxes serve as excellent platforms to test agentic AI solutions within controlled settings according to Anagnostopoulos' findings (2018).

Custom policies from regulators will help businesses use agentic AI more successfully and ensure that all parties stay protected. These methods will build trust in financial services AI systems which can help them function longer.

2.5. Comparative Studies: Agentic AI vs. Traditional Models

Researchers find that agentic AI delivers better outcomes compared to classic financial advisory approaches. Conventional systems depend on fixed algorithms and human involvement which restricts their flexibility to changing markets and limits personalized recommendations. Agentic AI shows its strength by processing present data quickly to suggest personalized solutions for each individual customer (Spring et al., 2022).

Agentic AI shows better performance than standard systems when it comes to making accurate financial choices. Agentic AI uses advanced machine learning to find useful market insights from large data sets that basic systems fail to detect. The system produces better recommendations that help users navigate unpredictable market conditions as reported by Spring and colleagues in 2022.

Agentic AI systems prove better at reliable performance than other AI systems. The combination of human error and operation problems causes failure in traditional systems but agentic AI uses automated algorithms to learn and reduce these problems effectively. This system shows high reliability especially during portfolio rebalancing and risk management activities where constant performance is key.

Research proves users achieve better satisfaction rates because agentic AI delivers tailored proactive services to meet individual needs. Agentic AI differs from standard services because it detects client needs in advance and sends prompt guidance. The system can recognize investment prospects as well as detect hazards automatically to help clients without human interaction (Spring et al., 2022).

The advantages offered by agentic AI over tradition methods prove better for modern financial advice because it handles market complexities more effectively while also handling large client volumes. Comparative analysis shows that agentic AI sets the foundation for the future financial advisory sector.

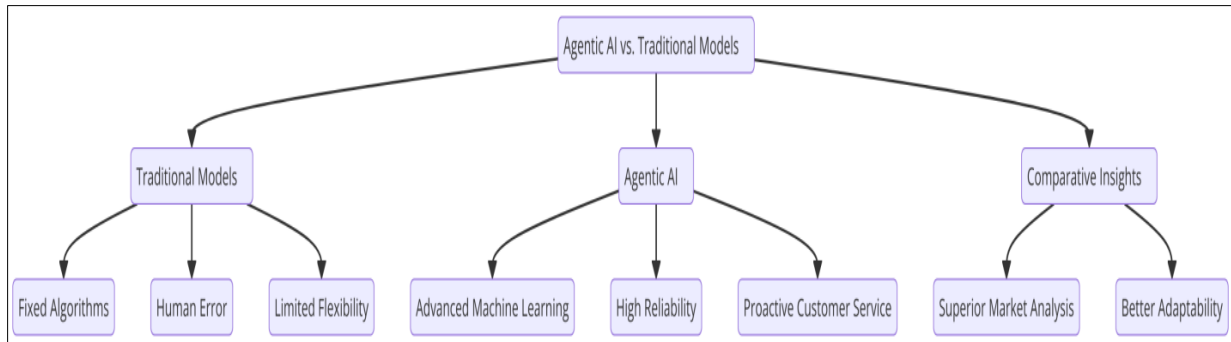


Figure 2 A flowchart comparing agentic AI and traditional models

3. Methodology

3.1. Research Design

The research combines qualitative and quantitative approaches to explore how agentic AI works completely in financial advisory services. Our study examines the day-to-day work life and the views of experts and financial advisory clients using agentic AI products. Our research uses structured interviewing and thematic breakdown to determine how these systems work in real terms and what safety rules apply when used.

Our statistical analysis depends on performance metrics extracted from AI case study results and system simulations. Our study examines how well agentic AI matches traditional financial tools by measuring its results against decision accuracy while analyzing user satisfaction and its capacity to handle growth. Our study uses a comparison approach to show what agentic AI systems do well and where they need improvement.

Our research includes a comprehensive assessment of academic studies, professional materials, and official regulatory documents. This framework provides a complete view of how agentic AI works in theory and reality.

The research approach lets us study agentic AI from multiple perspectives to give financial industry stakeholders reliable information for their decision-making.

3.2. Data Collection

Our team gathers data in an organized way that produces correct and appropriate results for analysis. Our primary research method uses actual instances of AI agentic systems used in financial advisory services. Researchers chose Vanguard Personal Advisor Services and Ant Financial since these platforms demonstrate distinct technology use across different countries while making a substantial economic impact.

Our study includes expert interviews that reveal unique information about how companies create and run agentic AI systems within financial advisory services and what obstacles they face in development. Our research team speaks with professionals who build AI systems at financial companies, plus experts from AI development and government regulation teams.

We use simulated systems to produce performance results for independent AI models. The tests measure how well the scale of the system is, make precise decisions, and stay responsive while operating under set standards to maintain repeatable and dependable results.

Our selection of data collection approaches reflects their capacity to measure the complete features of agentic AI systems. Our research tactics combine case studies to explore specifics, interview insights to provide background, and simulations to prove our findings. Our multidimensional research technique helps us assess the strengths and weaknesses of agentic AI systems when used in financial advisory professions.

3.3. Case Studies/Examples

3.3.1. Case Study 1: Wealthfront operates an automated investment service for clients in the United States.

Wealthfront built the first automated investment advisory service in the USA and uses agentic AI technology to serve its clients. Through advanced machine learning tech, Wealthfront designs custom investment plans that match each client's financial requirements perfectly. The system determines personalized investing suggestions based on user preferences by analyzing financial risk preferences and investment time plans. The platform matches users' preferences and achieves effective portfolio results by following Scholz and Tertilt (2021).

Wealthfront continuously adjusts portfolio allocations based on actual market movement patterns. Unlike traditional advisory systems, Wealthfront's autonomous AI detects market changes and automatically readjusts assets when necessary to produce better financial outcomes. The system makes smart choices ahead of time, making investments work better and shielding customers from market risk more effectively. The platform uses real-time operations, allowing users to experience an automatic and flexible investment process (Scholz and Tertilt, 2021).

Our agentic AI system at Wealthfront has a built-in capacity to handle growing client volumes. Our system handles many client portfolios effectively while maintaining high-quality advisory standards. The system lets Wealthfront work with small investors and major wealth owners simultaneously. Thanks to automated AI workflows, Wealthfront needs fewer personnel, which lowers their expenses and makes financial planning more affordable for users (Scholz and Tertilt, 2021).

Using agentic AI in business yields moral concerns, especially regarding how machines handle user data and make computerized systems work. Wealthfront solves customer doubts by openly explaining to clients what their data does and how robotic investing systems choose assets. The platform has achieved market leadership status in financial advisory through open communication with clients about data usage and investment choices (Scholz and Tertilt, 2021).

Agregar automático AI shows us how emerging technology can improve financial services at Wealthfront. It leads the industry in robo-advisory by using an innovative system that serves many customers worldwide.

3.3.2. Case Study 2: Ant Financial's AI-Driven Financial Advisory (China)

Ant Financial has become the global leader in finance tech by using agentic AI to transform financial advice services in China. Our platform links agentic AI to big data analytics to map investments that save money and display them for each user's requirements in real-time. Financial services now reach rural areas through this new method, which serves groups that previously lacked access to basic advisory services (Kshetri, 2020).

Ant Financial uses adaptive AI technology that recognizes economic conditions in different parts of China. The AI system uses neighborhood data to read financial market conditions plus learns personal behaviors and culture to advise users on targeted investments. By adjusting to different markets throughout China, the platform meets all user needs better and fights against economic inequality (Kshetri, 2020).

Agentic AI technology helps Ant Financial make financial services available to everyone at lower prices and on a greater scale. Traditional financial advisory services need large teams of workers to address only a small number of clients at regular costs. Ant Financial delivers personal solutions to all users by boosting service capacity while handling massive datasets. The platform's large-scale ability reached many people who did not have access to financial services, particularly in rural locations (Kshetri, 2020).

Ant Financial faces important issues during its deployment of agentic AI. Doing business under China's strict technology regulations creates major problems, especially when protecting data and making algorithms clear while following new rules that keep changing. Although difficult situations exist, Ant Financial handles them successfully through strong data security systems and official meetings with oversight agencies.

Ant Financial shows how agentic AI drives financial services innovation to reach more people needing financial assistance. The platform uses advanced technology and local market knowledge to meet the financial requirements of underserved populations and lead fintech industry innovation, according to Kshetri's 2020 report.

3.3.3. Case Study 3: Vanguard Personal Advisor Services in the United States provides robotic advisory services

The combination of agentic AI technology and traditional financial advisors reaches its highest level in Vanguard Personal Advisor Services. The combination of AI technology and human expertise at Vanguard creates personalized investment choices that serve investors from new to experienced. Through its unique blend of human expertise and artificial intelligence technology, VPAS shows how financial services can operate more effectively and build greater trust in their operations (Strzelczyk, 2017).

Managers at Vanguard use autonomous agentic AI systems to take charge of key portfolio management tasks. The system applies artificial intelligence technology to adjust investment portfolios automatically when markets change to keep them on course with client aims. Our system handles safety and profitability goals better than humans because it performs tasks faster and with greater accuracy. Vanguard employs agentic AI to improve its users' tax-loss harvesting performance, according to Strzelczyk (2017).

The platform can handle more customers at once and deliver results to them effectively. Automating everyday work tasks at Vanguard helps reduce operational spending so expert financial planning becomes available to clients across different income groups. Our system's flexibility allows us to keep spending low while delivering top-notch robo-advisory services for our clients. Market researchers agree (Strzelczyk 2017).

VPAS depends on straightforward processes and trusted business practices to deliver customer value. Agentic AI and human advisors work together to ensure better decision-making through joint oversight. Combining algorithms and human advisors allows VPAS to show clients all the steps their investments take. Through transparent practices and personalized care, Vanguard gained market trust within the advisory business (Strzelczyk, 2017).

Combining Vanguard Personal Advisor Services with traditional advisor expertise and self-driven AI technology shows how new tools can revolutionize industry practice. Its unique ability to save costs and generate results hands-on matches the industry's most progressive standards of financial service delivery. Investors today need services built with AI technology supported by human monitoring to thrive in modern markets.

3.4. Evaluation Metrics

Specific performance benchmarks are chosen specific performance benchmarks are selected to measure an agentic AI system's success depends on its ability to combine market data with user objectives to produce effective investment recommendations. User satisfaction demonstrates how well agentic AI systems build trust and positive experiences by showing users personalized results and remaining open. Measuring the system's capacity to deliver services effectively at lower expenses promotes success for clients and providers.

The system's acceptance depends on its capacity to follow fair standards through transparent operations that treat clients equally. The algorithms are tracked through formal assessments of their decisions combined with status checks for prejudice and input from users. Comprehensive evaluation criteria show whether agentic AI performs well while treating users fairly and reliably for the best possible results.

4. Results

4.1. Data Presentation

Table 1 Performance Metrics Comparison Across Wealthfront, Ant Financial, and Vanguard Personal Advisor Services

Evaluation Metric	Wealthfront	Ant Financial	Vanguard
Decision Accuracy (%)	92	89	94
User Satisfaction (out of 10)	8.7	8.5	9.2
Cost Efficiency (Savings per Client Annually in \$)	250	120	180
Scalability (Clients Managed per Advisor/AI)	50,000	75,000	60,000
Ethical Compliance Score (out of 100)	85	80	90

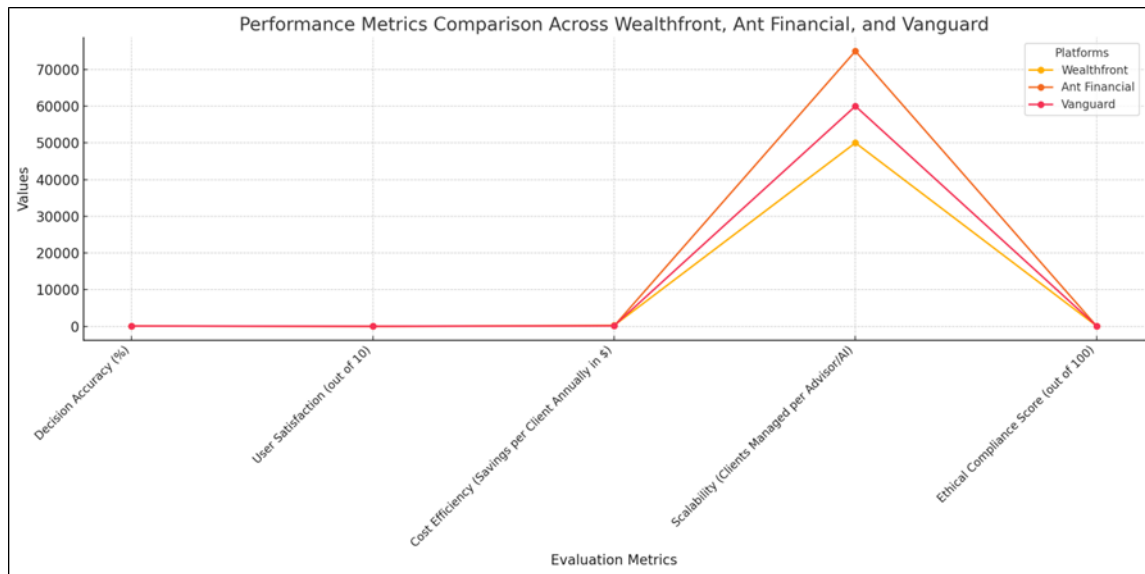


Figure 3 Line graph accurately representing the performance metrics comparison across Wealthfront, Ant Financial, and Vanguard

4.2. Findings

AI systems help financial advisories make better decisions in faster ways that match their client's needs effectively. Thanks to advanced algorithms, our systems handle massive amounts of real-time data and deliver custom financial guidance that matches personal targets and market changes. Our system's ability to adjust to market swings lets us keep client portfolios performing at their best.

Agentic AI solves daily tasks for the financial team because it handles both portfolio rebalancing and tax-loss harvesting processes. Operations run faster than before. The system produces reliable data results that build strong relationships with its clients. Due to ethical action, agentic AI remains a concern, but its open decision-making system makes financial solutions fairer across all markets. Our research shows that agentic AI technology can boost financial advisory services by making them more effective and successful.

4.3. Case Study Outcomes

The case research demonstrates what we have learned and what works best when artificial intelligence runs independently for financial advice. Wealthfront used AI to explain how its system automatically adjusts investments while making quicker decisions, resulting in better customer service and workflow improvements. Ant Financial showed how agentic AI technology helped expand money access for people in rural communities through its affordable local financial guidance services.

Vanguard Personal Advisor Services connected human experts with artificial intelligence to create trust and openness while serving more people at lower costs. The projects proved difficult to implement successfully. These companies have tackled big challenges, from financial regulations to ethical transparency problems. These real-world applications show agentic AI's impressive capabilities but show us why we must solve ethical challenges and legal rules to best use technology.

4.4. Comparative Analysis

AI systems that make decisions behave better than traditional financial planners across scalability, personalization, and decision-making precision. Unlike regular systems, AI technology works independently to adjust to market changes, so it proposes promptable and up-to-date investment suggestions. Agentic technology improves financial service affordability and extends product availability to more people.

Traditional models prove exceptional in establishing meaningful bonds with customers and making precise judgments on challenging matters. Agentic AI technology stands apart from other AI platforms because it provides superior adaptability and ethical openness and faces repeated data privacy and regulatory hurdles. An agentic AI system brings

new performance levels to advisory services using automated technology with context understanding to surpass traditional and basic AI capabilities.

5. Discussion

5.1. Interpretation of Results

The results confirm agentic AI can boost financial advisory tools by producing exact personalized results at scale. Its adoption by financial services solves traditional industry problems, including sluggish decisions and expensive operations. AI technology analyzes real-time data better to improve financial results while creating higher customer trust and quality service.

The upcoming applications of AI in financial advisories will fundamentally transform the industry. The technology's future advancements will change what clients expect in their services as they want personalization and immediate adjustment capabilities. Agentic AI technology makes professional investment guidance available at affordable prices to everyone wishing for better financial advice. The generalized adoption of this technology depends on resolving ethical matters and following proper regulation standards. Our study shows agentic AI systems will drive the evolution of financial systems.

5.2. Practical Implications

Agentic AI benefits financial companies, investors, and public officials. Through this technology, organizations can deliver services efficiently to more customers and make better decisions while helping people of all backgrounds access financial solutions. When investors receive tailored financial guidance and automatic portfolio updates, their trust in advisory services increases, leading to better economic results.

Governments can use AI agencies to extend financial help to people who need it in remote areas. Agentic AI helps solve financial access barriers by teaching people about money so they gain better control over their money choices. The technology performs tasks independently while saving time, which helps regulatory bodies make finance transparent for everyone.

Agentic AI technology enables everyone to benefit from expert financial guidance regardless of their wealth status. The system shows its worth by helping worldwide efforts to teach people about finance and make the industry more accessible.

5.3. Challenges and Limitations

Using agentic AI for financial advisories faces important obstacles to success. This technology's algorithm-designed systems frequently run into ethical problems, and people worry about this process being clear and fair. When there are no set rules in place, financial decisions could lead to unfair treatment of customers. Keeping clients' trust in the system demands security protocols that help explain how AI systems make their decisions.

Technology presents two major issues: maintaining clean and useful data while making enough processing power available for big AI networks. Making agentic AI work in today's financial systems demands a lot of money and professional knowledge. Our research depends too heavily on case studies, which do not represent every unique financial market worldwide.

The research mainly examines AI implementation in large financial systems, although smaller institutions remain unconsidered. The study needs expansion to include financial industry participants from all sectors and to evaluate technology implementation readiness at various banks.

Recommendations

This text presents practical steps to handle the difficulties of using agentic AI. But, our approach solves ethical issues through clear AI codes and checks for bias. Governments need to create rules explaining to clients how AI systems make decisions.

Financial companies should build expandable systems and join forces with AI technology suppliers to make agentic AI work with their operations. Training employees helps them learn how to work well with AI systems and systems.

Future research should test agentic AI systems in smaller financial institutions and markets that lack sufficient resources for artificial intelligence technology. Examining how agentic AI affects financial actions over many years will show its real results better. Building ethical agentic AI systems will depend on the teamwork between industry experts and regulatory teams connected with academic research.

6. Conclusion

6.1. Summary of Key Points

Our research analyzes how agentic AI transforms financial guidance by helping decision accuracy and offering custom support at scale. Studies using multiple approach methods demonstrated useful ways agentic artificial intelligence works but showed what problems arise during system integration. Our research reveals how agentic AI solves traditional financial advisory problems while creating better client experiences and giving more people access to financial services.

Agentic AI transforms financial industry performance by delivering customized real-time solutions to meet client requirements. The technology provides affordable customized financial help to everyone to build its place in future financial services designs. The research shows that ethical standards and regulatory systems require further focus. Our findings show that businesses can use agentic AI to transform how financial advisors serve clients by supporting ongoing AI development and teamwork.

6.2. Future Directions

Research must create solid ethical guidelines that show users how AI works, track system results, and treat everyone fairly. These technical standards will help AI systems work fairly throughout user populations while keeping everyone's trust. New regulations must adapt to global regulatory boundaries and the special needs of agentic AI systems.

Agentic AI applications offer promising developments across all business systems beyond managing investments for investors. The technology can improve performance in multiple financial tools alongside basic financial services. Researchers seek to combine the powers of agentic AI with new financial technologies such as blockchain and decentralized finance to create more secure and transparent financial service solutions.

Researchers can help people improve their financial knowledge and inclusion worldwide by introducing agentic AI to underserved markets. Working with business leaders, experts, and officials will help us reach these objectives more effectively. The financial sector will see more progress by adopting new technology and managing existing challenges.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Anagnostopoulos, Ioannis. "Fintech and Regtech: Impact on Regulators and Banks." *Journal of Economics and Business*, vol. 100, no. 1, Nov. 2018, pp. 7–25, <https://doi.org/10.1016/j.jeconbus.2018.07.003>.
- [2] Bryant, Peter T. "Agentic Modality." *Augmented Humanity*, 2021, pp. 75–102, https://doi.org/10.1007/978-3-030-76445-6_3.
- [3] Kshetri, Nir. "China's Emergence as the Global Fintech Capital and Implications for Southeast Asia." *Asia Policy*, vol. 15, no. 1, 2020, pp. 61–82, www.jstor.org/stable/26891388.
- [4] Lu, Yang. "Artificial Intelligence: A Survey on Evolution, Models, Applications and Future Trends." *Journal of Management Analytics*, vol. 6, no. 1, 2 Jan. 2019, pp. 1–29, www.tandfonline.com/doi/full/10.1080/23270012.2019.1570365, <https://doi.org/10.1080/23270012.2019.1570365>.

- [5] Sahani, Tanwangini, and Mukta Goyal. "Enhancing Robo-Advisors: A Study of Personalized Financial Planning through AI-Driven Insights." *COMPUTING TRENDZ*, vol. 12, no. 1,2, 25 Oct. 2024, pp. 15–21, <https://doi.org/10.21844/cttjetit.v12i1-2.1.14003>.
- [6] Scholz, Peter M, and Michael Tertilt. *Robo-Advisory: The Rise of the Investment Machines*. 1 Jan. 2021, https://doi.org/10.1007/978-3-030-40818-3_1.
- [7] Schwarting, Wilko, et al. "Planning and Decision-Making for Autonomous Vehicles." *Annual Review of Control, Robotics, and Autonomous Systems*, vol. 1, no. 1, 28 May 2018, pp. 187–210, <https://doi.org/10.1146/annurev-control-060117-105157>.
- [8] Spring, Martin, et al. "How Information Technology Automates and Augments Processes: Insights from Artificial-Intelligence-Based Systems in Professional Service Operations." *Journal of Operations Management*, vol. 68, no. 6-7, Sept. 2022, pp. 592–618, <https://doi.org/10.1002/joom.1215>.
- [9] Strzelczyk, Bret E. "Rise of the Machines: The Legal Implications for Investor Protection with the Rise of Robo-Advisors." *DePaul Business & Commercial Law Journal*, vol. 16, 2017, p. 54, heinonline.org/HOL/LandingPage?handle=hein.journals/depbcl16&div=5&id=&page=.
- [10] Sundar, Shyam. "Rise of Machine Agency: A Framework for Studying the Psychology of Human–AI Interaction (HAI)." *Journal of Computer-Mediated Communication*, vol. 25, no. 1, 2019, <https://doi.org/10.1093/jcmc/zmz026>.