

Artificial Intelligence (AI): Implications for Wealth and Asset Management



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Introduction:

With the evolution and growth of artificial intelligence (AI) platforms such as ChatGPT comes the possibility of revamping many functions. processes, and jobs. Competitors in the financial sector are likely to emerge, too. With past new strides in financial technology, the world eventually caught up. From the first ATM to online banking and now Al. the financial industry has grown and adapted to new inventions. Introducing Al into the financial world could restructure how financial institutions and investors behave and go about their business. In this paper, we explore the implications of Al platforms, their potential uses. and the various challenges and dangers of Al, with emphasis on the implications for the wealth and investment management industry. Some questions we address:

What are the key milestones and inventions in financial technology over time, and how have they paved the way for the current fintech era and Al integration in the wealth and asset management industry?

How is ChatGPT, as an AI language model, impacting the wealth and asset management industry, and what are the implications for

professionals and clients?

How has integrating AI, machine learning, and natural language processing into the business and practices of asset and wealth management, as well as the broader finance industry, transformed research and analytics, and what are the implications of these advancements?

How can asset management and wealth management address the challenges associated with Al—such as risks to data privacy and cybersecurity, algorithmic bias, legal compliance, and lack of human oversight—to ensure responsible Al practices?

How can asset managers effectively invest in AI and integrate it into their day-to-day operations to enhance productivity, profitability, and investment strategies? What steps can leaders take to encourage the adoption of AI?

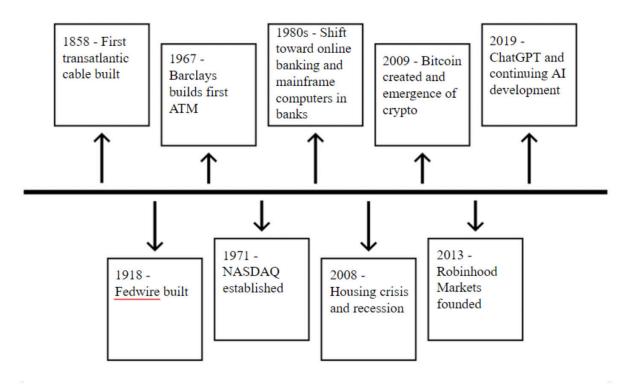
History

When the first transatlantic cable was laid in 1858, it enabled electronic funds transfer using telegraphs and Morse code. While these inventions are outdated today, in the following years they

Sapere Aude Consortium, Inc. was formed to serve first generation college students interested in financial services. Our goal is to provide a forum for students to research and learn about critical issues impacting wealth and investment management. The authors listed above were asked to express their own ideas in this Opinion Snapshot, whether or not the founders, board members, mentors or other industry professionals agreed with their opinions or proposals. This Opinion Snapshot is offered in that spirit – to hear the views of some of the next generation of professionals to enter wealth and investment management. Neither Sapere Aude Consortium, its board member, mentors, nor any of the authors received any financial support from any firm or person with any interest, financial or otherwise, in this article. Neither Sapere Aude Consortium nor the authors are currently affiliated with any organization mentioned in this paper.

facilitated increased productivity and opportunities in the financial sector. In 1918, Fedwire, a realtime system used for transferring funds between institutions, further enabled funds transfer using Morse code. Shortly after, in 1924, the first mutual fund was created.1 The next truly major development did not occur until 1967, when Barclays installed the first ATM, beginning the digitization of finance. This again exponentially increased productivity and efficiency in the financial industry, allowing for infinitely easier access to funds. NASDAQ was established on February 8, 1971, transforming the way stocks were purchased and sold. The 1980s saw a rise in bank mainframe computers, an enormous step toward primarily digital banking. Toward the end of the twentieth century, digital banking continued to grow and become the status quo. We saw the first exchange-traded fund, SPY, in 19932, and PayPal launched in 1998. The 2000s saw the explosion of the internet bubble and the creation of much easier access to the mortgage application process as well as new companies offering easy access to money. These developments among others led to the 2008 financial crisis. However, this setback did not forestall innovation. Bitcoin was created in 2009, contributing to the beginning of the most recent fintech era. By using blockchain technology to verify transactions, Bitcoin grew quickly in popularity and was followed soon by other technologies attempting to use this "scamproof" modern technology. Furthermore, we saw the launch of Square, Shopify, and Robinhood; the offering of fractional shares and costless trading; and the advent of directing indexing, among multiple innovations. The financial industry continued to build on these trends and technologies until the emergence of AI in recent years, as shown in the timeline in Exhibit 1. Tools such as ChatGPT have further increased productivity and opened a new window to the world of automation and streamlining. All these moments in history, including AI, have improved the efficiency and accessibility of the world.3

Exhibit 1. Timeline of Milestones in the Digitization of Finance



Source: The Payments Association

ChatGPT Tutorial

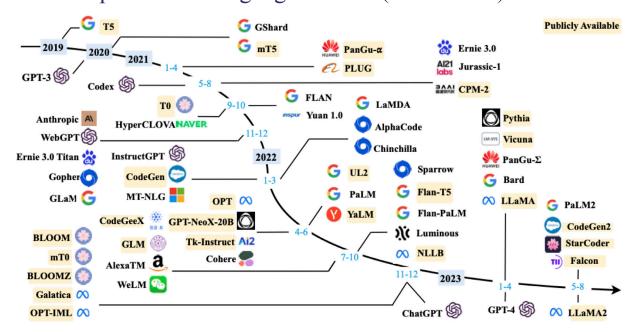
ChatGPT is an Al language model created and released in 2018 by the company OpenAl. An Al language model is a system or computer program that uses textual data to create humanlike language. Generative AI is another system that can create text, images, videos, and even audio. Generative Al differs from Al in general, which doesn't have the techniques or capabilities to generate high-quality content. Generative Al requires a large dataset and other technological resources, while more basic AI needs less data for its text generation.

The origin of AI can be traced to the 1950s when many scientists started to research the ways a computer can come to think or act like a human, followed in 1955 when the term "artificial intelligence" was established at a conference at Dartmouth University⁴. Since then, research into AI has led to the development of a new generation of machines and the technology we have today. Currently, ChatGPT is one of the largest language models worldwide5. What makes it "generative AI" is that it generates structured and informed responses after a user provides a prompt. It is a personal virtual assistant that

uses conversational AI systems and has led to the creation of other language models that have similar parameters, making them capable and reliable. This new chatbot has opened a new set of possibilities, most recently with ChatGPT progeny such as ChatGPT-3.5 and ChatGPT-4. All of these latest versions have the potential to impact the field of AI and transform how humans interact with machines and technology, including in the financial services industry. Exhibit 2 shows the explosive development of language models, mostly after the advent of ChatGPT.

ChatGPT uses natural language processing (NLP) algorithms and machine learning (ML) technologies; OpenAl's corporate infrastructure oversees managing the systems, operations, and processes that come to support these chatbots' development and functions. OpenAl uses other technology and systems to support the company's infrastructure. For example, it uses Microsoft Azure's cloud infrastructure to run its Al interface, which requires the foundational systems of computing, data storage, and global availability⁶. This infrastructure helps ChatGPT identify patterns, interpret user input and trends, and generate the correct responses in handling multiple tasks.

Exhibit 2. Explosion of Language Models (2018–2023)



The chatbots highlighted in yellow are the language models published after the creation of ChatGPT in 2018, whereas unhighlighted chatbots were created but not released to the public.34 The first GPT-1 was released in 2018, followed by GPT-2 in 2019, GPT-3 in 2020, GPT-3.5 in 2022, and the latest, GPT-4, in 2023.

ChatGPT stands out from other AI models due to its versatile, coherent, and exceptional natural language processing capabilities. Compared to other models, ChatGPT can engage in more natural and humanlike conversations; it has a dynamic and diverse range of responses to prompts.7 Other chatbots can only predefine some inputs given by the user-meaning that these chatbots often have limitations because of their small dataset and a narrow domain in which they do not have the flexibility to handle complex conversations, giving only basic responses. They also have difficulty in understanding the advanced techniques of natural language processing. In contrast, ChatGPT is an open-source application with a massive dataset that helps generate the most nuanced human response.8 This massive and diverse dataset consists of everything available on the internet, such as public pages, books, research, articles, and so forth. Based on human feedback, this huge dataset, and selfsupervision, ChatGPT can train and reinforce its predictions and understanding of human conversations. While some chatbot models have advantages and limitations, ChatGPT is the best Al option, and we believe it is more accessible to everyone, in that its capabilities are relevant for students, developers, researchers, and businesses.

How Can Asset and Wealth Managers Utilize AI?

Impact of AI/ChatGPT on Wealth Managers and the Financial Industry

ChatGPT has caused notable changes in the financial industry, including in wealth and investment management. We see four key areas in which AI and ChatGPT-like technologies will positively impact wealth and asset management businesses:

- 1. enhancing research and analytics
- 2. improving client experiences
- 3. automated processes
- 4. risk and regulatory management

However, many important risks also must be considered. Executives at wealth and investment management firms need to carefully evaluate these challenges in the context of the opportunities listed above. This paper will explore all of these opportunities and risks.

Several notable financial services executives have commented on the potential impact of Al. David Solomon, the CEO of Goldman Sachs, says he is "encouraging people to play around with [ChatGPT] and learn from it." He also noted that Goldman has used Al for years to speed up its data interpretation process and is currently developing productivity use cases to figure out the best line of implementation.9 Larry Fink, the CEO of BlackRock, similarly supported the use of ChatGPT by his employees. He said, "Al has enormous potential to improve productivity and increase margins across sectors."10 As long as employers share this sentiment, employees in wealth management should embrace AI and use it to their advantage.

Executives in other C-suite positions at other large firms hold the same sentiment: that ChatGPT is a new tool allowing their companies to work more efficiently and successfully. Morgan Stanley's chief data officer, Jeff McMillan, has held this stance for years. At Dataiku's EGG NYC event in 2019, he equated AI with other profound inventions that allowed humans to broaden their horizons. He said, "AI is a tool just as the telephone and the fax machine [were]" and passionately believes customers' preferred method of communication is a phone call but they want the option to talk to a chatbot.¹¹

Enhanced Research & Analytics

The financial industry has transformed significantly due to the integration and progression of Al. Machine learning (ML), as a field within Al, combines statistics and computer science to interpret vast amounts of available data effectively. This allows ML to execute its practical ability to project returns and prices. Incorporating multiple facets of Al enables Al to take research and analytics to the next level as firms begin to empower their departments with technological capabilities.

Conducting research within financial markets is

done to identify potential investment opportunities while also playing a crucial role in managing risks related to market and business developments.¹² This process is crucial yet time-consuming, so when tools that automate research processes are introduced to data-dependent fields, they can reduce the time needed to complete tasks. Similarly, data analytics improves business strategies by finding trends and patterns in data to gain insights into customer behaviors. This analysis allows companies to improve customer experiences and make smarter decisions as they strive for growth. According to Forbes, by utilizing data analytics, companies can safeguard their investments and improve their risk management for internal and external stakeholders.13 As Al becomes more informed, integral operations like conducting research and data analytics can be done faster and more productively.

Historically, the asset management field has used AI and ML extensively to predict stock and commodity prices and process critical information. Syndell Tech, a software development company based in India, highlights the combination of Al and ML in predictive analytics, which evaluates historical data to forecast trends. This procedure proves advantageous for predicting stock prices, forecasting revenue, and monitoring risk.¹⁴ Although ML and predictive analytics are separate processes—ML creates algorithms to automate processes while predictive analytics predicts—ML's algorithms directly impact predictive modeling by offering models and techniques. ML can even predict outcomes that people may not easily observe. The Harvard Business Review reports the immense potential of companies leveraging customer data to retain and expand their customer base. For instance, telecommunications companies employ ML to anticipate when young adults will leave their parents' phone plans and then propose customized deals to these young potential clients based on their previous usage patterns.15 This allows the companies to prevent these young adults from defecting to competitors, thus maintaining their customer base and fostering greater customer loyalty.

The widespread use of AI in finance has impacted investing strategies by leading to data-driven

approaches. Quantitative investing, or systematic investing, a popular investment strategy since the 1970s, automates the process of sifting through data, a process formerly conducted by human researchers. 16 In contrast, to help asset managers build better portfolios, ML facilitates aspects of portfolio creation and enhancement. Active portfolio managers must study available data on invested assets to make higher returns. With ML tools, portfolio managers can rapidly analyze all types of data—including reports, images, locations, searches, news sources, and social media postings—allowing them to find patterns on a larger scale to detect opportunities for returns.¹⁷ It becomes incredibly important that all the inputs and models fed into ML programs are efficient and accurate. While predictive analytics is excellent at forecasting the probability of future events, predicting every event is extremely difficult. Long-Term Capital Management (LTCM), a prominent hedge fund founded in 1994 by financial experts and academics, failed to account for extreme market events, such as the 1998 financial crisis in Russia. By relying on financial and quantitative models, LTCM was left vulnerable to that event, leading to the firm's eventual collapse in early 2000.18 Ultimately, LTCM's models underestimated or failed to recognize the implications of market events, and the leverage the firm employed led to its demise. As ML continues to develop, the process of predictive analysis improves.

"Machine Learning is an extension of AI, and soon tools like ChatGPT will serve as public points of entry in harnessing AI."

Progress in AI has led to the automation of numerous tasks in the finance industry, revolutionizing how people work within their respective fields. For example, technologies exist that analyze and present financial data through easy-to-view dashboards and data visualization tools. 19 AI-powered data analytics save investors the time needed to review data and identify trends

while aiding them in strategic decisions. Al is an essential tool that has opened new avenues for data visualization, problem-solving, and market analysis. ML is an extension of AI, and soon tools like ChatGPT will serve as public points of entry in harnessing AI. However, this development does not imply that wealth and asset manager roles have become more straightforward, nor should asset managers rely solely on AI to do their jobs. Although Al shortens the time required to sift through various sorts of information, investors must thoroughly review the information generated by the technology at multiple stages of the process to ensure that AI does not entirely dictate final decisions. Human judgment becomes essential as AI extends to complete a wider range of jobs. When AI becomes fully capable of handling mundane tasks, asset managers must shift their focus to tasks that Al lacks the capability for or cannot be trusted to perform.

Personalized Client Interactions

Al has many potential uses, but one of the most logical and prominent functions of existing Al is the ability to personalize client interactions. While this idea does not apply solely to the financial industry, its implementation has endless possibilities there. Al and ChatGPT should enable client executives to be better at their jobs. They can eliminate routine tasks, allowing professionals to focus on the more significant aspects of their work that require a human touch.20 Chatbots on companies' websites can respond to clients seeking investment ideas.

Wealth advisors do not need to worry about losing their jobs to artificial intelligence. Several chief executives throughout the wealth management industry say they are not seeking to replace workers with AI or ChatGPT, nor do they believe artificial intelligence is best suited to take over these jobs. Instead, they encourage their employees to use it to become more productive.

Wealth and investment managers are better suited than machines to provide high-level insight and advice to their clients when using ChatGPT and other AI in preparing for and having conversations with their clients. In fact, Morgan Stanley Wealth Management recently announced its partnership

with OpenAI, the developer of ChatGPT, obtaining early access to test OpenAl's new products and allowing for faster synthesis of data and opening the floor to new insights and possibilities in wealth management.21 Using this technology to streamline productivity and minimize spending time on necessary but tedious tasks like data entry and drafting reports will enhance Morgan Stanley's productivity and allow the company to redirect time to engaging new and existing customers. This will also give the company more time to expand its network and potentially bring in more business.

Al and ChatGPT-like programs can also improve client and marketing engagement. Most firms in the financial sector have some form of marketing to advertise their services to the public. According to Forbes, "Seventy-three percent of consumers prefer to do business with brands that consider their personal information. And 86% of customers state personalization plays a role in their decision."22 Firms can use AI to tailor their advertisements toward specific individuals, since doing so will result in more leads. Currently, this type of work takes a tremendous amount of time for an employee or team to do manually. Implementing an AI tool could drastically increase productivity and allow employees to devote more time to other aspects of their job. It could also boost customers' receptivity to ads, which can be personalized to the individual. As seen in Morgan Stanley's initiative with OpenAI, the human touch becomes increasingly integral as the wealth and asset management industries thoroughly fuse with AI technology; financial advisors will have access to more information—and time—as their roles shift to a heavier focus on client services. As introduced above, Al chatbots can create many efficiencies. While many firms have arsenals of employees on the phone or chatting face-toface with clients, firms can begin to implement artificial intelligence in these areas to help balance human interaction with the efficiency of Al. Chatbots can help clients with basic questions or concerns. There will still be a need for employees to stay close by in case the Al cannot thoroughly assist the customer. Over time, these AI features will improve, and eventually chatbots will be fully proficient, further increasing productivity in the industry. Al can ultimately become the norm

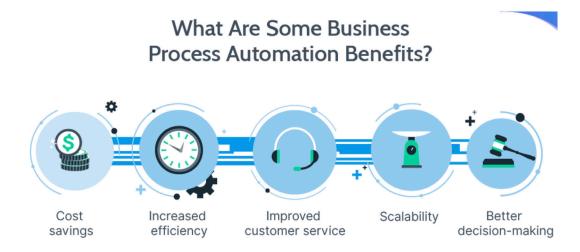
for personalizing experiences toward specific individuals and allow financial firms to allocate resources more efficiently.

Automated Processes

Automation can bring many benefits to wealth and asset management. As shown in Exhibit 3, the first is cost savings due to the automation of time-consuming and complex tasks such as generating client reports. There's also the reduction in the time employees spend reviewing data, inputting it into systems, and comparing the data and other resources. All these steps can lead to errors, which automating these tasks could mitigate.23 The second benefit is increased efficiency, in that automation can help financial institutions focus more on tasks that require human expertise. Better efficiency can lead to a more accurate process of collecting clients' information to insure that there are no inconsistencies when automated data is being validated through a business database, which can reduce errors and result in better decisions and outcomes. The third benefit is improved customer service, because automated processes can reduce the time customers have to wait. and employees will focus on providing accurate

responses to customer inquiries. All of this can lead to better customer satisfaction and increase client retention. The fourth benefit is scalability, which can enhance the business's ability to bring high-quality service at a broader level. Through technology, firms can manage the additional growth of assets and clients in a potentially more individualized manner. Automation could improve performance and should improve the efficiency of asset management. As Exhibit 3 shows, the fifth and most important benefit of automation is in decision-making; for example, during an investment or allocation of a client's capital, the decision can lead to strategically locating the required data to determine the best opportunities to act on and make prudent decisions about asset and wealth management. Decision-making is critical because of its potential for better performance and minimization of risks-good decisions enable a business to grow and to retain and build trust with clients. Automating processes can help asset and wealth management in cost savings, increased efficiency, improved customer service, scalability, and decision-making. An example can be the identification of trends after analyzing a large amount of data; analysts can decide to focus on complex tasks in ways that can mitigate errors that can have major impacts.²⁴

Exhibit 3.



The most commonly identified benefits for financial institutions using Al-automated processes leveraging ChatGPT.35

"Automating processes can help asset and wealth management in cost savings, increased efficiency, improved customer service, scalability, and decision-making."

Overall, automated processes that were previously done manually are being used to save time, improve efficiency, and reduce errors. As ML and Al enable automation, these technologies can help companies reduce risks and minimize expenses while also saving time. All these benefits should improve customer satisfaction and ensure that companies follow regulations and laws.

Risk & Regulatory Management

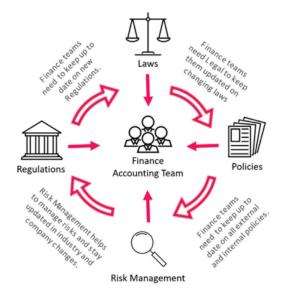
Risk management and regulatory compliance are critical functions in asset and wealth management. Both exist to protect the best interests of the firm's clients. Regulatory compliance requires implementing security protocols to protect consumers from crimes such as money laundering and other frauds that can lead to significant financial damage. Financial institutions implement procedures and policies to comply with regulations to manage or mitigate risks. Regulatory compliance often involves increased transparency. Changes in regulations frequently increase the cost of compliance. Government agencies create these regulations and policies to help their customers and prevent financial crimes. Any violations can result in fines, legal action, and negative impact on a company's reputation.

Risk management is a crucial area in the financial industry that helps companies identify problems before they occur and then prioritize and assess risks, giving companies the ability to resolve issues prior to negative impacts. Exhibit 4 shows how financial teams within companies must keep up with new laws, regulations, policies, and risk management best practices.

By developing effective risk management and regulatory compliance policies and procedures, financial services institutions can build and grow the trust of their clients, ideally leading to longterm relationships. Al is becoming significant in the practice of risk management, because it now offers analytics and monitors risks. It can also alert organizations to changes in regulations and laws and to update best practices for risk mitigation. Al can be valuable and highly beneficial to financial institutions as it improves their risk management processes.25

All companies in financial services need regulatory compliance, which is crucial to protecting clients' interests.26 Al creates solutions for automating processes for implementing laws and regulations; Al offers updates on the changes and can inform how to create reports on compliance and regulation. It also helps with awareness by providing resources and materials to educate others about various areas and their potential risks; it can analyze customer data and identify financial crimes, assist with regulatory reporting, ensure that employees have the latest regulations training, and prevent the company from breaking the law, even accidentally.

Exhibit 4. Regulatory and Compliance Requirements for **Financial Institutions**



Each process or step that financial institutions must take based on new laws, policies, risk management practices, and regulations has an impact on the finance team.²⁷

Since risk management and regulatory compliance can be very resource-intensive for many businesses, Al processes can help the industry be more efficient when, for example, detecting risks, analyzing data, and completing compliance tasks. Al tools can help minimize labor time and provide resources so employees can focus on tasks that require decision-making and strategic and critical thinking. Employees can dedicate their time to finding better solutions to fulfill their jobs within each step of the risk management and regulatory compliance processes shown in Exhibit 4. Al will not replace these jobs; rather, workers will collaborate with Al.

While Al provides benefits in these areas, there are also potential risks, like inadequate internal governance. According to the Artificial Intelligence/Machine Learning Risk & Security Working Group at the Wharton School of Business, "Unlike humans, AI systems lack the judgment and context for many of the environments in which they are deployed. In most cases, it is not possible to train the Al system on all possible scenarios and data. Lack of context, judgment, and overall learning limitations may play a key role in informing risk-based reviews and strategic deployment discussions."28 This caveat suggests that despite the benefits that Al can provide, it can also be used to evade laws and regulations. It will be important for asset management and wealth management firms to develop robust rules and processes for utilizing AI in their businesses.

Risks & Responsible Use of AI

While there are many opportunities for Al to advance the asset and wealth management industry, there are also significant risks that managers and firms must evaluate and plan to mitigate. As previously outlined, Al is powered by a vast collection of data. This collection of data allows Al to look at macro trends and potentially offer insights. A serious risk within the industry is the vast amount of private data housed in the databases of asset and wealth management firms that could be susceptible to a breach due to Al. This data is extremely sensitive and personal and includes information from many

individual and institutional clients from all over the world. Financial institutions need to plan carefully regarding how algorithms will be allowed access to, and how they deal with, personal client data linked to financial accounts. There is a grave risk that this information will become even more susceptible to data breaches. Financial institutions, with their vast resources, are often targets of cyberattacks. Hackers are leveraging Al for attacks more than ever, from Al-powered malware that "has been taught to think for itself, [and] adapt its course of action in response to the situation"29 to advanced persistent threats (APTs) and distributed denial of service (DDoS) attacks that allow hackers to scale their operations and attack servers systematically without detection. Cyberattacks are evolving with technology. More commonly known, phishing is another relevant form of Al-powered cyberattacks that deploy "synthetic media" and "convincing phishing emails and messages" that work to deceive ordinary individuals into releasing private, sensitive data to fraudsters.30 In addition, hackers might also engage in deepfakes, an act of misinformation in which images, videos, or audio messages are Al-altered to impersonate an individual or organization. While deepfake attacks are commonly used for the purpose of propaganda, hackers could also leverage these attacks to aid in their phishing efforts to steal sensitive data and capital by impersonating investment and wealth management firms and employees. It is imperative for wealth and asset management firms to invest in Al-enabled cyber protection systems to keep up with the evolution of Al-powered cyberattacks and protect sensitive client and firm data.

In addition to cybersecurity, data privacy, and protection concerns, algorithmic bias in Al poses another significant challenge for executives and consumers alike. Since Al is trained using historical data, a natural bias can exist in the data. This natural bias in data derives from both explicit and implicit biases that lie in every individual. As a result, people make judgments and beliefs around certain social groups, often driving their actions and behaviors. These biases are then replicated within Al, causing the model to "make decisions that are systematically unfair to certain groups of people," known as algorithmic bias.³¹ For instance, an investment firm could

have systematic bias toward minorities and immigrants based on historical data about their participation in the financial market. While data might suggest that minorities and immigrants have a lower market participation rate compared to white native-born people, it does not take into consideration context or history. As a result, the Al algorithm might exclude these groups altogether from marketing schemes aimed at attracting new clients, or maybe even clients with greater capital to invest. Furthermore, the algorithm might also recommend different kinds of assets and dissimilar levels of diversification and allocation for different groups of people based on historical data. While these recommendations might seem reasonable to the AI, it could potentially recommend sounder investments to some investors over other investors. Firms' dependency on third-party data sources further exacerbates the issue of algorithmic bias, because there can be an inconsistency in data-mining methodology and frameworks that shape the quality, depth, and integrity of the data. As a result, asset and wealth management leaders need to establish an excellent standard for both the AI systems and the data sources they leverage for their business. This can help maintain ethical business standards and help mitigate legal liability in the future.

The complexity of AI systems makes AI's integration into the wealth and investment management business risky. The lack of understanding around AI methods should be a significant concern for wealth and asset management leaders. Several of the most powerful Al algorithms take "millions of data points as inputs and correlate[...] specific data features to produce outputs."32 This sort of learning model creates what is known as the "black box problem."33 When an Al system comes to a decision using this kind of ML, it often cannot explain or justify its decisions. This is problematic from an ethical and logistical standpoint. For example, investment firms and hedge funds may use Al-powered algorithms for high-frequency trading and portfolio construction and management. However, the system may not be able to explain to analysts why it executed many of the transactions or explain with absolute transparency the risk assessment model it leveraged to construct a portfolio for a client.

Along with algorithmic bias, the complexity of Al models and our inability to understand their methods could lead to unintentional, and unethical, financial practices that would jeopardize the integrity and image of the business as well as put the company at legal risk. The nascent nature of Al has resulted in insufficient and inadequate regulation and governance of Al, further amplifying these risks.

While the risks associated with the integration of AI into the asset and wealth management industry are quite substantial, the risk of falling behind competitors and society at large is far greater and detrimental to individual companies. With strategic measures, firms and leaders can mitigate the risks of AI integration to practice the responsible use of AI and take advantage of this transformative technology. Below, we outline key recommendations firms should take to do just that.

Recommendations for Wealth and Asset Managers

Invest in Al

Wealth and investment managers must embrace Al and adapt to the technology by learning to use it within the day-to-day operations of their businesses. Profits and productivity will likely increase as a result. Industry leaders should push their companies and employees to use Al and begin educational opportunities for their employees to use the technology effectively. If firms are proactive in their approach and set a solid baseline among their employees, productivity will increase firm-wide rather than individually. Comparable to how financial literacy is fundamental for employees making financial decisions, Al literacy will be pivotal for effectively using and making decisions based on Al. Wealth and investment management firms must ensure the AI they use is safe and trustworthy, and once incorporated, they must use it responsibly. This includes within the firm and with clients.

It must be fully disclosed to clients how AI will be used, whether it eliminates the job's mundane tasks mentioned previously or impacts a firm's investment strategies. Al can play a role, but it cannot be the sole arbiter of asset allocation, and firms must continue to use their current practices to make these decisions; this is where the human touch is instrumental to the structure and integrity of the firm. Data privacy risks and all other applicable risks must also be disclosed. Clients must have awareness of potential risks to allow asset managers to form client relationships built on trust.

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Firms that implement AI must ensure their employees operate appropriately. They should define the parameters for the proper use of Al. It is human nature to push the boundaries of what is allowed and what is not, so having management oversight and firm-wide rules is paramount. It is also critical to remember a crucial element of the current state of AI; it is not always accurate, even though it produces responses that read as confidently as if they were fact. The firm should strictly review all generated responses that it will treat as fact and then will use in client communications to ensure that clients do not receive misinformation presented as truth, a process that a computer cannot oversee. Only people can ensure what the firm produces is entirely accurate. Thus, the need for thoughtful corporate rules for Al's oversight becomes even more important.

One way that companies could encourage their employees to master Al like ChatGPT is by having an intra-firm competition. One method we propose is for firms to hold an internal writing contest, with a single firm-wide essay prompt, in which only Al-generated text can be used and to crown one best essay the winner. By having

one prompt, employees will be forced to get creative on their own as to how they will prompt the AI to craft a response. They must also be allowed to pick out parts of the generated text that best suits their writing. This component is vital. Not only will the competitors engage with Al models and discover the best prompts to produce the results they are looking for, but they will also strategically pull pieces from many texts to turn them into coherent papers. They will ask the AI questions and should be encouraged to converse with it. Essays will be compared by a group of predetermined company employees who did not participate in the competition before a winner is selected. Once finished, employees can share methods and strategies within their firm so that the best practices become common use throughout the company. By doing this, employees will practice their prompting skills.

Those who do not elect to use AI technologies will be left behind and have an incredibly hard time catching up; Al has the potential to be more efficient than people when used the right way. ChatGPT can produce a paper in seconds that would take a person hours to write. For example, when we asked ChatGPT, "How will ChatGPT and its progeny impact wealth and investment management?" it produced a full response that aligned with the findings in our paper in under ten seconds. In contrast, this opinion snapshot has taken us months to research and write.

Wealth and investment management leaders must understand the risks of integrating Al into their business. To address these risks, wealth and investment firms and leaders should prioritize strong risk management, processes, and procedures with policies that define what is appropriate and what is not. This will establish a companywide AI framework, allow transparency, and provide accountability. Firms also need to organize an internal multifunctional AI task force to strictly monitor and assess the integrity of the Al systems they use. Another group should be tasked with reviewing the recommendations and decisions of AI and making the final choice as to whether or not those recommendations and decisions should be implemented. With careful integration and oversight of AI, asset and wealth management leaders can increase the quality

of their services and products and survive in a competitive and ever-evolving industry.

Conclusion

The rapid adoption of technology in the financial industry has laid the foundation for the current fintech era and the integration of AI into the wealth and investment management industry. The integration of Al language models like ChatGPT has ushered in a new era of data-driven decisions and personalized client experience for investors. Moreover, automation will allow workers in the industry to delegate their time to more meaningful work. The integration of AI also transforms analytics and research, providing investment firms with powerful tools to analyze large amounts of data and make data-driven investment decisions that allow their clients to maximize profits. As asset and wealth management leaders seek to leverage Al in their businesses, it is important to understand the risks. Addressing data privacy, cybersecurity, and algorithmic bias remains a top priority to protect investors and the business, especially considering the lack of understanding concerning Al systems. Investment firms must employ strong, binding guidelines and frameworks along with diverse teams to hold themselves accountable in practicing responsible AI use. Leaders in this

space will bring their businesses to the next level if they quickly embrace AI in their practices, including their day-to-day operations. Employees should be highly incentivized to learn and leverage different Al models. One interesting way to encourage participation among employees is to gamify the discourse of AI in the form of essays, inspiring them to practice and write publicly about their findings. We believe doing so will foster a culture of innovation and encourage employees to think creatively while engaging with AI, improving their clients' experience and their own products and services. Investment and wealth management leaders must move with the uttermost urgency. Otherwise, they will be left behind in the new Al era.

This opinion snapshot aims to provide valuable insights into the dynamic integration of AI into the wealth and asset management industry. We navigate the implications, challenges, and opportunities and provide key recommendations for how leaders and firms in the space could leverage AI into their businesses to stay competitive. The paper also stresses the urgency for asset and wealth executives and leaders to get moving, as the world is evolving into a new era of technology and AI—making it imperative for industry stakeholders to adapt or risk fading into obscurity in the face of this transformative wave.

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