

Artificial Intelligence in Accounting, Medicine, and Law with Potential Implications for Financial Planning: A Review of Literature

Manuela E. Faulhaber¹ and Charles Chaffin²

Abstract

Generative Artificial Intelligence (AI) is rapidly reshaping multiple fields. Generative AI is a type of AI that can create new content or information from scratch, rather than simply manipulating or organizing existing data. This has the potential to revolutionize the way that financial advisors interact with clients and manage their businesses. However, there are many unknowns as it relates to the level and degree of disruption that Generative AI can bring to financial planning. This paper explores the interaction of AI with financial planning, drawing insights from the practices of accounting, medicine, and law. While the primary focus remains on financial planning, this interdisciplinary approach aims to enrich understanding while examining parallels and emerging trends across diverse professional domains as each of the four professions reviewed in this paper integrates client needs, preferences, and goals into their decision-making processes.

Creative Commons License



This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 License

Recommended Citation

Faulhaber, M. E., & Chaffin, C. (2024). Artificial intelligence in accounting, medicine, and law with potential implications for financial planning: A review of literature. *Financial Services Review*, 32(4), 1-11.

Introduction

According to the World Economic Forum's 2023 "Future of Jobs Report," jobs that necessitate "human skills such as judgment, creativity, physical dexterity, and emotional intelligence" are the least likely to be replaced by artificial intelligence (Shine, 2023). Within financial planning, AI can revolutionize client communication, streamlining backend operations, and redefining the role of advisors. Advisors can generate client communication quickly and efficiently, developing tailored emails and other correspondence to clients during market volatility and client life changes. Back-

office work in developing financial plans will likely be impacted as generative AI can be used to develop plans quickly and more efficiently.

One of the most promising applications of generative AI in financial planning is in the area of client communication. Advisors can use generative AI to generate personalized and tailored emails, letters, and other forms of correspondence to clients. This can save advisors time and effort, while also ensuring that clients receive timely and relevant information. For example, advisors can use generative AI to generate personalized investment recommendations, based on each client's

¹ Corresponding author (manufa@iastate.edu). Iowa State University, Ames, IA, USA

² Iowa State University, Ames, IA, USA

circumstances and risk tolerance. Generative AI can also be used to streamline back-office operations in financial planning. For example, advisors can use generative AI to automate the process of creating financial plans. This can free up advisors' time, allowing them to focus on more strategic tasks, such as developing client relationships and providing personalized advice.

In addition, generative AI can augment the knowledge and skills of the financial advisor, providing clients with more comprehensive and sophisticated advice. For example, advisors can use generative AI to generate hypothetical scenarios, allowing clients to see how different investment decisions might affect their financial future in much more specific, tangible ways.

The use of generative AI in financial planning is still in its early stages, but it has the potential to revolutionize the way that advisors do business. Advisors who are early adopters of generative AI will be well-positioned to succeed in the future.

Here are some specific examples of how generative AI can be used in financial planning (Spiegel, 2023):

- Client communication:
 - Generate personalized emails and letters to clients
 - Create tailored investment recommendations
 - Develop hypothetical scenarios
- Back-office operations:
 - Automate the process of creating financial plans
 - Generate reports and presentations
 - Manage client data
- Advisor development:
 - Provide training and education on new investment products and strategies
 - Generate ideas for new marketing campaigns
 - Develop new business plans

Despite its transformative potential, apprehension looms among financial advisors

regarding the extent of AI's disruption to the profession. Within larger firms, AI is being used more frequently, whereas, within smaller firms, advisors may only use ChatGPT to draft client communication, not having the resources to use AI for the development of comprehensive financial plans.

In many cases, AI is most effective at increasing assets via client communication, specifically what to deliver and when to deliver to a client relative market, life event, or other economic commentary. Drawing insights from parallel professions like accounting, medicine, and law, this paper delves into the disruptive impact of AI, not only on day-to-day operations but also on crucial aspects such as talent acquisition and client engagement.

Generative AI is already having a significant impact on financial planning. However, there are still a great deal of unknowns as to the implications on the workforce, competencies, and business models that Generative AI will have within the next several years. This is why we explore the impact of Generative AI on accounting, medicine, and law as it relates to the business processes, workforce, and compensation structures—our hope is to provide context on how AI can impact financial planning.

Accounting

The accounting profession has not been immune to the growing adoption of artificial intelligence. From data entry to financial analysis, AI has the potential to automate many of the routine and repetitive tasks that accountants currently perform. This has led to a significant increase in the implementation of AI in accounting, with 24% of top-performing client advisory services practices incorporating AI, as per the 2022 CAS Benchmark Survey conducted by CPA.com (CPA.com, 2022, p. 19)

While AI excels in repetitive tasks, it lacks the subject matter expertise required for certain specialized tasks. However, the use of AI in accounting allows professionals to transition away from daily repetitive tasks and focus on more complex and strategic responsibilities where AI may not be as effective. This enables accounting professionals to serve more clients,

provide tailored services to clients with more complex needs, and increase the revenue of the accounting firm. Additionally, implementing AI in accounting can reduce stress levels by allowing accountants to transition from repetitive tasks to more complex and strategic responsibilities.

Incorporating AI in accounting offers a solution to the pressing concerns of accountant burnout and staffing shortages. By automating routine tasks, AI empowers accountants to shift their focus from mundane duties to more complex, strategic responsibilities. This, in turn, has a positive impact on accountant well-being and overall job satisfaction.

Here is how AI is revolutionizing the accounting landscape:

1. **Streamlined Workflow and Efficiency:** AI automates tasks such as data entry, invoice processing, and financial reporting, freeing up accountants' time for more value-added activities. This streamlining of workflows enhances productivity, enables faster turnaround times, and reduces the risk of errors.
2. **Improved Accuracy and Consistency:** AI algorithms analyze vast amounts of data with precision and consistency, minimizing the potential for human error. This enhances the reliability of financial statements and improves compliance with accounting standards.
3. **Real-Time Insights and Decision-Making:** AI-powered analytics provide real-time insights into financial performance, enabling accountants to make informed decisions promptly. This agility gives businesses a competitive edge and fosters a proactive approach to financial management.
4. **Enhanced Audit and Risk Management:** AI assists in identifying inconsistencies, anomalies, and potential risks within financial data. This facilitates timely and effective audits, strengthens internal controls, and ensures compliance with regulatory requirements.
5. **Personalized Client Service:** AI enables accountants to offer tailored and personalized

services to clients. By leveraging data-driven insights, accountants can better understand client needs, anticipate challenges, and provide proactive solutions.

6. **Enhanced Job Satisfaction and Reduced Burnout:** By eliminating repetitive and mundane tasks, AI empowers accountants to engage in more intellectually stimulating and challenging work. This shift enhances job satisfaction, reduces stress, and fosters a sense of accomplishment, contributing to a more positive work environment.
7. **Upskilling and Continuous Learning:** The integration of AI demands continuous learning and upskilling. Accountants are encouraged to embrace new technologies, develop programming skills, and deepen their understanding of data analytics. This fosters a culture of innovation and adaptability within the accounting profession.
8. **Future-Proofing the Accounting Profession:** By embracing AI, accounting firms position themselves for future success. As technology continues to advance, AI will play an increasingly pivotal role in the accounting landscape. Firms that invest in AI today will be well-equipped to meet the demands of tomorrow.

The integration of AI in accounting is not merely a technological advancement; it represents a transformative shift that empowers accountants to unlock their full potential. By leveraging the capabilities of AI, accounting firms can enhance efficiency, improve accuracy, gain real-time insights, and deliver exceptional client service. As a result, accountants can focus on strategic and advisory roles, leading to increased job satisfaction, reduced burnout, and a sustainable future for the accounting profession. However, while AI can respond to prompts and input, trained on big data, it cannot make original decisions or develop new ideas (Badonia, 2023). Human touch is of utmost importance when it comes to nuanced decision-making, empathetic client interactions, or addressing complex scenarios. While AI can enhance efficiency in accounting firms, human expertise remains invaluable.

There is a steadily increasing shortage of accountants in the accounting profession. A 2022 Deloitte poll found that 82% of hiring managers for accounting at public companies and 69% at private companies mentioned talent retention as a challenge (Deloitte, 2022). Simultaneously, AI in the accounting market is expected to exceed 39.57 billion USD by 2030, exhibiting a compound annual growth rate (CAGR) of 45.31% during the forecast period of 2023-2030 (SNS Insider, 2023). Accountants have to be able to think logically to make well-informed decisions, utilize their creativity to devise solutions for clients and communicate effectively.

The U.S. Bureau of Labor Statistics projects a 4% growth in employment for accountants and auditors from 2022 to 2032, in line with the average for all occupations. This growth is influenced by factors such as globalization, economic expansion, and a complex regulatory landscape. Approximately 126,500 annual job openings are anticipated, driven by replacements for workers changing occupations or retiring (U.S. Bureau of Labor Statistics, 2023a). While technological advancements, including cloud computing and AI, may automate routine tasks for accountants, they are expected to enhance efficiency rather than reduce overall demand. This automation will likely increase the importance of accountants' advisory and analytical responsibilities. Hence, the impact of AI on accounting suggests that rather than leading to job losses, it has the potential to enhance efficiency and productivity in the profession.

As the accounting landscape is constantly changing with the inclusion of AI, accountants are compelled to adapt to these evolving technological trends which also mark a significant shift in the required skills for accountants. Key areas include data analysis, cyber security, the strategic utilization of AI as well as a pivotal shift from a traditional role to a more advisory role. According to a recent survey conducted by the American Institute of CPAs, it was found that 44% of surveyed firms are presently providing advisory services and 70% intend to expand their advisory offerings within the next five years (Schraeder, 2023).

Accountants are expected to provide strategic financial guidance for clients, leveraging their analytical skills for complex tasks and industry knowledge to offer valuable insights to their customers.

Furthermore, the implementation and utilization of AI in accounting has been shown to assist organizations in minimizing their exposure to accounting risks, such as outstanding debts or tax penalties (Farkas, 2023). The reliability of AI in handling routine data entry tasks significantly reduces the risk of human error.

AI has the ability to process vast amounts of numerical data exponentially faster and with greater accuracy than accountants. Its computational speed surpasses human capabilities. It can analyze and interpret quantitative information in a fraction of the time it would take a human accountant. Furthermore, the accuracy of AI in handling quantitative tasks is unparalleled. The algorithms AI uses are designed to execute calculations precisely and do not leave room for human error (OECD, 2021). This precision ensures reliable results and can improve integrity for accounting firms. Additionally, another strength of AI is managing and analyzing large quantities of data. It can process financial transactions, conduct market trend analyses, or perform complex calculations. These tasks would be impractical or time-consuming for a human accountant to manage manually. AI has shown itself to be an efficient tool for tasks that require precision and mathematical rigor.

While AI excels in quantitative tasks, as previously discussed, AI falls short in the realm of qualitative skills, compared to human accountants. Human accountants have the ability to understand the broader context surrounding financial data and decisions. They can consider industry dynamics, market trends, and the unique circumstances of each client and they can offer strategic advice (Gaetano, 2023). Accountants can leverage their experience and industry knowledge to interpret complex situations and ask clients the right questions at the right time based on their specific needs and scenarios. This may also help them to foresee potential challenges, identify opportunities, and make

decisions beyond quantitative data alone. It can be concluded that the qualitative value provided by human accountants is unmatched.

Like financial planning, human impact in the field of accounting is irreplaceable. A human touch is needed to form trusting business relationships (Marciano, 2023). This also includes accounting professionals who can empathize with their clients about, for instance business anxiety, understand their business vision, and guide them in decision-making. The relational aspect of relationships accountants have with their clients cannot be replicated by AI. Human accountants have a profound understanding of financial principles and the financial industry—attributes that are difficult for AI to replicate. Furthermore, humans play an essential role in maintaining ethical integrity of financial practices, ensuring adherence to regulations, and making decisions with a personal touch (Bontrager, 2023). Understanding ethics is crucial to maintaining industry standards and fostering trust with clients.

In the realm of accounting, human involvement remains irreplaceable, just like in financial planning. Developing strong business relationships necessitates the human touch. Accountants, for example, can relate to their clients' concerns, such as business anxiety, grasp their business objectives, and guide them in making wise decisions. Artificial intelligence (AI) cannot duplicate the relational aspect of accountants' relationships with their clients.

Human accountants have a deep understanding of financial principles and the industry, which are qualities that AI finds difficult to duplicate. Additionally, humans play a vital role in upholding the moral fiber of financial practices, adhering to rules, and making decisions with a personal touch. Maintaining industry standards and gaining clients' trust rely heavily on ethical comprehension.

Accountants' ability to grasp the emotional and psychological elements of clients' financial decisions gives them a significant edge over AI. Humans can empathize with clients who are experiencing financial anxiety or stress, providing emotional support and a personalized touch that AI lacks. This empathetic approach

helps build stronger client relationships and fosters trust, leading to improved communication and decision-making.

Furthermore, human accountants' deep understanding of the specific nuances and complexities of their clients' industries allows them to provide more tailored and effective advice. By leveraging their knowledge and experience, accountants can offer customized solutions that address the unique challenges and opportunities faced by their clients. This level of personalization is difficult for AI to achieve, as it cannot comprehensively grasp the intricacies of various industries and their impact on financial decisions.

As AI continues to advance, certain aspects of accounting work may likely become automated. However, the human element will always be essential in providing high-quality accounting services that meet the complex needs of clients. By combining the strengths of AI and human expertise, accounting professionals can deliver a comprehensive and personalized approach that maximizes value for their clients.

In addition to technical skills, accountants are also being encouraged to develop a range of soft skills that are essential for success in the modern workplace. These skills include being a team player, having strong interpersonal skills, valuing professional and personal integrity, being creative, and being empathic. These traits are difficult for AI to replicate, and they are therefore essential for accountants who want to distinguish themselves in the job market.

Accountants who possess these skills will be well-positioned to succeed in the future of accounting. They will be able to work effectively with AI technology, and they will be able to provide valuable insights to their clients and organizations.

Here are some specific examples of how accountants can use their analytical and strategic thinking skills to complement AI technology:

- Accountants can use AI to automate repetitive tasks, such as data entry and analysis. This can free up accountants' time so that they can focus on more complex and value-added activities,

such as providing insights to clients and organizations.

- Accountants can use AI to identify trends and patterns in data. This information can be used to make better decisions and to develop more effective strategies.
- Accountants can use AI to create and evaluate financial models. This can help accountants to better understand the financial implications of different decisions.

Accountants who possess these skills will be in high demand in the years to come. They will be well-positioned to succeed in the future of accounting, and they will be able to make a significant contribution to their organizations.

Medicine

Rapid advancements in AI have uncovered new possibilities for the healthcare sector. One application is in the realm of telehealth and telemedicine. AI can be seamlessly integrated into clinical practice to enhance and improve patient care and diagnostic accuracy. According to Alowais et al. (2023), AI-driven virtual healthcare can successfully simulate conversations, diagnose diseases, formulate personalized treatment plans, and support medical professionals in decision-making. These systems can provide personalized care to individual patients. With this evolution, the primary emphasis shifts beyond task automation, directing attention to technologies that can improve patient care in a healthcare setting.

Studies conducted by Fitzpatrick et al. (2017) and Williams and Andrews (2013) emphasize the effectiveness and accessibility of AI in providing mental health support to patients who suffer from symptoms of anxiety and depression. Internet-based cognitive behavioral therapy (CBT) has emerged as a promising psychotherapeutic intervention that can be facilitated with the help of AI. Fitzpatrick et al.'s study focused on the feasibility and acceptability of a fully automated conversational AI agent that engaged with participants by delivering a self-help program. Results indicated that participants in the AI agent group significantly reduced their symptoms of depression over the study period compared to a control group. This study serves as one example

that demonstrates the potential of conversational AI to deliver therapy effectively. Similarly, Williams and Andrews explored the effectiveness of internet-delivered cognitive-behavioral therapy (iCBT) and found significant reductions in depressive symptoms. These studies underscore the potential of AI-driven mental health support.

AI has had a remarkable impact on diagnostic accuracy in healthcare. AI can analyze extensive sets of medical data, identify intricate patterns, and provide predictions. This can facilitate early and precise diagnoses and revolutionize the landscape of healthcare. The significance of automating the interpretation of chest radiographs is underscored by a study that aimed to evaluate the performance of an AI tool (Plesner et al., 2023). The tool's assessment was based on (a) the number of autonomously reported chest radiographs, (b) its sensitivity in detecting abnormalities, and (c) its performance compared to clinical radiology reports. The AI tool, in comparison to clinical radiology reports, exhibited a sensitivity of 99.1% for detecting abnormal radiographs and an even higher sensitivity of 99.8% for identifying critical abnormalities. This performance surpassed the sensitivity of radiologist reports, which stood at 72.3% and 93.5%. This study highlights the potential of AI to achieve high accuracy in identifying abnormalities in chest radiographs with further implications in detecting and treating a number of patient needs. Furthermore, AI has the ability to identify subtle nuances and detect these abnormalities early in the diagnostic process which can contribute to a proactive approach to healthcare and therefore improve patient outcomes.

Plesner et al.'s (2023) findings underscore the potential of AI to significantly reduce the risk of misdiagnoses. It has emerged as a promising solution for an already existing global shortage of trained radiologists reported by the Radiological Society of North America (Henderson, 2022). By outperforming human experts in accuracy and sensitivity, AI introduces a level of reliability and constituency that is very important in the field of medical diagnostics. The integration of AI in diagnostic assistance represents a shift in

healthcare, ultimately having the potential to reduce errors and improve patient outcomes.

As the demand for quality healthcare increases, healthcare systems are dealing with time constraints and excessive workloads. These can compromise the quality of patient care. AI can be utilized by trained medical health professionals for multiple tasks such as diagnostics, data analysis, health insurance tasks, or treatment planning. AI contributes to more efficient healthcare delivery, reduces costs, and facilitates better patient experiences. The integration of AI into medical workflows holds the potential to significantly enhance efficiency and accuracy (Krishnan et al., 2023). AI assists healthcare professionals in managing their workload efficiently and can provide them with valuable insights. As a result, the collaboration between AI and humans can address the challenges of healthcare and improve overall healthcare delivery. However, while AI has proven itself to be very helpful and supportive, regulatory bodies such as the Food and Drug Administration (FDA) maintain a crucial requirement. The FDA mandates that a human must serve as the "ultimate arbiter" of what the machine-learning algorithm finds (Park, 2022). This regulatory oversight ensures that the ethical and decision-making aspects of healthcare remain within the control of trained medical professionals.

Like financial planning and accounting, the role of a human touch remains indispensable in healthcare. Medical healthcare professionals possess a unique, holistic understanding of patients, taking into account not only their symptoms but also the emotional and social aspects of their well-being. This human-centric approach, focused on human touch is crucial for providing patient-centered healthcare (Drouin & Freeman, 2020). Furthermore, participants in a study by Longoni et al. (2019) exhibited strong reluctance across various procedures, ranging from skin cancer screenings to pacemaker implant surgeries, when AI was proposed as the service provider. Participants expressed a preference for human care providers, even if it meant a greater risk of inaccurate diagnosis or surgical complications. It was identified that the resistance to AI was rooted in the belief that AI cannot account for individual characteristics and

circumstances. People perceive themselves as unique and extend this belief to their health needs. The study found that participants were less likely to utilize AI services and preferred human providers. Additionally, they reported wanting to pay less for AI-based healthcare, implying a lesser value.

Proper physician contact can model calmness and a sense of protection for patients (Spivack, 2023). Spivack argued that, despite technological advancements, no substitute exists for the essential human-to-human connection in healthcare. In conclusion, the integration of AI into healthcare has to consider the inherent value of human touch. While AI offers remarkable capabilities, patients' beliefs, reluctance, and a strong need for human connection remain.

Law

Recent advancements in technology—specifically AI—are playing an important role in shaping the future trajectory of the legal profession. As mentioned by Segarra (2023), the integration of AI into legal practices can change the nature of lawyers' day-to-day work. Attorneys can utilize AI in various capacities. This can range from document creation and processing to database classification. Additionally, AI can help streamline other tasks, such as due diligence, document review, contract management and review, and data analysis as well as enhancing efficiency and productivity (AltFee, 2023).

However, despite these efficiency gains, the human element remains indispensable in legal practice. While AI can automate mundane tasks for lawyers, the complexity of legal strategy, decision-making, and ethical considerations still need human involvement (Segarra, 2023). Furthermore, while the usage of AI presents significant advantages, it also carries risks. Relying excessively on AI for tasks that require human judgment and oversight can lead to serious repercussions. For instance, in the case of Mata versus Avianca, a lawyer utilized ChatGPT, an OpenAI program, to draft a legal brief. However, the program "hallucinated" and produced a fictitious case law (McGregor & Atherton, 2023). The lawyer who used AI expressed deep regret for relying on ChatGPT and vowed never to use it again without absolute

verification of its authenticity. The judge described the legal submission as filled with fake judicial decisions, quotes, and citations, and called it an "unprecedented situation." The case was dismissed and the judge imposed a \$5,000 fine on the lawyer and their firm. Additionally, they were mandated to send letters of apology to six actual judges who were wrongly attributed as the authors of the fabricated opinions cited in their legal documents (Weiser, 2023). This example emphasizes the importance for legal professionals to understand and work within the limitations of AI tools. AI may lack the capacity for logical reasoning and to identify factual inconsistencies in responses when attempting to fulfill a request.

Generative AI presents opportunities for legal professionals to expand their firms by enabling them to take on more clients and handle additional work, due to the ability to increase productivity. Furthermore, AI holds promise for bridging the justice gap and expanding access to legal counsel, particularly for individuals from low-economic communities. Many individuals still view hiring a lawyer as financially prohibitive, with 80% of low-income individuals unable to afford legal representation (Beckman, 2023). "DoNotPay" is hailed as the "World's First Robot Lawyer", and shows the potential of AI in addressing legal challenges. Its CEO Joshua Browder reports over 2 million successfully resolved cases through AI. The company mainly focuses on supporting individuals with legal conflicts related to medical bills (DoNotPay, 2023). Currently, DoNotPay maintains hundreds of thousands of active subscribers. The impact of AI in the legal industry can also pave access to solving justice issues.

The impact of AI on the legal field is undeniable. While senior legal professionals often proceed with their duties relatively unaffected, junior lawyers and legal support staff must adapt to the evolving circumstances. They must embrace AI, understand its constraints, and uphold ethical norms (Segarra, 2023). According to a recent survey conducted by the Thomson Reuters Institute, 82% of legal professionals acknowledged the potential AI capabilities in legal work. However, only 51% believe that AI should be implemented in legal work. This

difference suggests that while legal professionals understand the potential benefits of AI, they show hesitation regarding the reliability of AI tools and work accuracy (Warren, 2023).

The employment outlook for lawyers appears promising with a projected growth rate of 8% from 2022 to 2032 (U.S. Bureau of Labor Statistics, 2023b). This exceeds the average growth rate for all occupations reported by the Labor Department. Furthermore, AI presents opportunities for legal professionals to expand their firms by enabling them to take on more clients and handle additional work, due to the ability to increase productivity. This can increase the time spent on mundane tasks which also may lead to a decrease in billable hours per client. This shift could prompt some firms to have to reevaluate their billing model. There may be the chance to move towards a more "value-based" billing process, where it is ensured that proper compensation for legal services is provided while also providing clients with additional transparency (LexisNexis, 2023). While the billable hour method may still be utilized, clients may receive greater value from an attorney's time as a result of this shift. Moreover, attorneys may be able to offer flat-rate pricing, when taking on more clients or handling additional work, through the help of AI. This shift in billing practice is most likely appreciated by clients. Additionally, lawyers may have to spend less time on mundane tasks and are therefore able to bill for activities that provide greater value for the clients, such as high-value activities that require legal expertise or critical thinking.

Overall, the efficiency gains brought by AI underscore the potential unsustainability of the billable hour model. Law firms cannot ignore these technological advancements as lawyers can become more efficient with the help of AI (AltFee, 2023). According to the Generative AI & the Legal Profession: 2023 Survey Report, lawyers report recognizing the potential benefits of AI in the legal space, however, the continued importance of human attorneys to prevent over-reliance on technology is also emphasized. Legal AI is viewed more as a tool to complement rather than replace human lawyers (Generative AI & the Legal Profession 2023 Survey Report, 2023). In addition, the ability to use AI to develop wills,

trusts, and other legal documents can expand the market to consumers who otherwise would not be served, with consumers with more complex situations seeking additional legal advice.

Financial planning helps guide individuals and businesses in achieving their financial goals. The integration of AI has started to reshape financial planning and offers opportunities for continuous innovation. This last section explores the intersection of financial planning and AI, highlighting the significance of AI across diverse industries.

Financial Planning

Financial planning, coupled with the integration of Artificial Intelligence (AI), presents a transformative landscape of opportunities for optimizing client outcomes and achieving operational efficiencies. Financial firms have been leveraging AI for various tasks, including fraud detection and credit scoring, for some time now. However, the advent of generative AI has opened new doors for financial advisors to seamlessly incorporate this technology into their daily workflows.

Tasks such as conducting comprehensive research, analyzing stock market trends, and generating insightful reports can be significantly enhanced with the assistance of AI. Furthermore, chatbots have emerged as valuable tools for financial advisors, simplifying tasks like drafting personalized emails to clients. However, it is crucial to recognize that the information provided by AI may not always be entirely accurate or comprehensive. Without incorporating specific client details, the advice received may lack the necessary customization to address individual needs. Therefore, financial advisors must engage in asking follow-up questions and be mindful of the limitations of AI in providing financial advice.

The integration of AI offers financial advisors the ability to analyze large data sets rapidly and reliably. AI-driven financial tools can provide automated budgeting and expense tracking, personalized debt management strategies, enhanced financial literacy resources, and practical tips for smart investing. By utilizing historical data, machine learning algorithms, and

statistical models, AI can identify trends and patterns to suggest portfolio optimization and ensure compliance by flagging potential issues.

While AI presents numerous benefits, it is essential to acknowledge the potential legal, ethical, and regulatory considerations associated with its implementation. Financial advisors must navigate these considerations responsibly and ethically to maintain the trust and confidence of their clients.

A recent survey conducted by F2 Strategy revealed that over half (51%) of wealth management firms are actively engaged in AI projects, while 49% have yet to initiate such projects (F2 Strategy, 2023). Among the ongoing projects, optical character recognition, predictive analysis, and a combination of both are the most commonly utilized AI applications. Notably, 62% of surveyed wealth management firms rated their AI knowledge as 5 out of 10 or lower. This finding highlights the need and opportunity for enhancing understanding and awareness in this domain. Firms can benefit immensely from additional education about AI's capabilities, value, practical applications, and limitations.

The U.S. Bureau of Labor Statistics projects a rapid growth rate of 13% for the employment of personal financial advisors from 2022 to 2032. This surpasses the average growth rate for all occupations. The integration of AI is reshaping traditional practices and redefining the role of financial advisors in the years to come. Financial planners can extract valuable insights and best practices from related sectors such as accounting, medicine, and law to effectively navigate the influence of AI and provide holistic financial guidance to their clients.

Legal, Ethical, and Regulatory Considerations

This section aims to provide guidance on navigating legal, ethical, and regulatory considerations in AI-driven financial planning. Financial planners must familiarize themselves with the legal and regulatory framework governing AI applications in financial services. This could include laws such as the GDPR or CCPA. Like other aspects of financial planning practice, with an awareness of regulatory developments and compliance requirements,

financial planners can mitigate potential legal risks and ensure adherence to industry standards. Additionally, central to AI-driven financial planning is the responsible handling of client data. Financial planners must implement reliable data privacy and security measures to protect sensitive information from unauthorized access. This may include encryption protocols, access, and regular audits to ensure compliance with data regulations. Additionally, transparency in data collection and usage can foster trust and demonstrate commitment to client confidentiality. Financial planners should openly discuss the role of AI in their practice, including its benefits, limitations, and potential risks. Transparency about data usage, algorithmic decision-making, and risk management processes can instill confidence in the process. By proactively addressing these potential issues and implementing best practices, financial planners can uphold client trust, mitigate risks, and utilize the potential of AI technologies in financial planning.

Conclusion

In conclusion, this paper underscores the importance of leveraging insights from accounting, medicine, and law to enhance the understanding of AI in financial planning. By embracing AI and continuously enhancing their knowledge and skills, financial advisors can stay at the forefront of innovation, deliver exceptional client service, and contribute to the overall financial well-being of individuals and families.

References

- Alowais, S. A., Alghamdi, S. S., Alsuhebany, N., Alqahtani, T., Alshaya, A. I., Almohareb, S. N., Aldairem, A., Alrashed, M., Bin Saleh, K., Badreldin, H. A., Al Yami, M. S., Al Harbi, S., & Albekairy, A. M. (2023). Revolutionizing healthcare: the role of artificial intelligence in clinical practice. *BMC Medical Education*, 23(1), 689.
- AltFee. (2023, October 24). *How AI For Lawyers is Changing the Legal Industry*. <https://www.altfeeco.com/resources/ai-for-lawyers>
- Badonia, S. (2023, January 21). *ChatGPT vs. Human Writers: The Abilities AI Can't Replicate*. The Startup. <https://medium.com/swlh/chatgpt-vs-human-writers-the-abilities-ai-cant-replicate-8ec346844ebb>
- Beckman, M. (2023, April 10). *Artificial Intelligence Presents Opportunities and Challenges for the Legal Ecosystem*. <https://nysba.org/artificial-intelligence-presents-opportunities-and-challenges-for-the-legal-ecosystem/>
- Bontrager, M. (2023, June 6). *How AI Is Transforming the Accounting Industry — and What the Future Will Look Like*. Entrepreneur. <https://www.entrepreneur.com/science-technology/how-ai-is-transforming-the-accounting-industry/452837>
- CPA.com (2022, December 1). *CAS Benchmark Survey*. <https://www.cpa.com/sites/cpa/files/2022-12/cas-benchmark-survey-22-cpacom.pdf>
- Deloitte. (2022, September 21). *Most Public Companies Are Challenged in Attracting Finance and Accounting Talent, Deloitte Finds*. Deloitte United States. <https://www2.deloitte.com/us/en/pages/about-deloitte/articles/press-releases/most-companies-challenged-to-attract-finance-and-accounting-talent.html>
- DoNotPay. (2023). <https://donotpay.com/about/>
- Drouin, O., & Freeman, S. (2020, January 22). *Health care needs AI. It also needs the human touch*. <https://www.statnews.com/2020/01/22/health-care-needs-ai-it-also-needs-human-touch/>
- Farkas, C. (2023, June). *AI in accounting and tax compliance: the possibilities and pitfalls*. https://accounting.nridigital.com/iab_jun23/ai_in_accounting_and_tax_compliance_the_possibilities_and_pitfalls
- F2 Strategy. (2023, October 26). *Wealth Management firms begin to implement AI with an eye on security and regulation*. <https://www.f2strategy.com/insight/wealth-management-firms-begin-to-implement-ai-with-an-eye-on-security-and-regulation>

- Gaetano, C. (2023, August 8). *Big Four: AI will augment, not replace, accountants*. Accounting Today. <https://www.accountingtoday.com/news/big-four-squarely-on-team-human-when-it-comes-to-ai-says-tech-not-there-to-replace-accountants>
- Generative AI & the Legal Profession 2023 Survey Report*. (2023). https://www.lexisnexis.com/pdf/ln_generative_ai_report.pdf
- Henderson, M. (May 10, 2022). *Radiology Facing a Global Shortage*. Radiological Society of North America. <https://www.rsna.org/news/2022/may/global-radiologist-shortage>
- Krishnan, G., Singh, S., Pathania, M., Gosavi, S., Abhishek, S., Parchani, A., & Dhar, M. (2023). Artificial intelligence in clinical medicine: catalyzing a sustainable global healthcare paradigm. *Frontiers in Artificial Intelligence*, 6, 1227091.
- LexisNexis. (2023, November 6). *How Generative AI is disrupting law firm billing practices*. Community. <https://www.lexisnexis.com/community/insights/legal/b/thought-leadership/posts/how-generative-ai-is-disrupting-law-firm-billing-practices>
- Longoni, C., Bonezzi, A., & Morewedge, C. K. (2019). Resistance to Medical Artificial Intelligence. *The Journal of Consumer Research*, 46(4), 629–650.
- Marciano, J. (2023, April 17). *How Marketing and Finance can Click Better*. <https://www.datarails.com/how-marketing-and-finance-can-click-better/>
- McGregor, S., & Atherton, D. (2023, May 4). *Incident 541: ChatGPT Reportedly Produced False Court Case Law Presented by Legal Counsel in Court*. <https://incidentdatabase.ai/cite/541/>
- OECD. (2021). *Artificial Intelligence, Machine Learning and Big Data in Finance: Opportunities, Challenges, and Implications for Policy Makers*. <https://www.oecd.org/finance/artificial-intelligence-machine-learning-big-data-in-finance.htm>
- Park, A. (2022, November 4). *How AI Is Changing Medical Imaging to Improve Patient Care*. <https://time.com/6227623/ai-medical-imaging-radiology/>
- Plesner, L. L., Müller, F. C., Nybing, J. D., Laustrup, L. C., Rasmussen, F., Nielsen, O. W., Boesen, M., & Andersen, M. B. (2023). Autonomous Chest Radiograph Reporting Using AI: Estimation of Clinical Impact. *Radiology*, 307(3), e222268.
- Schraeder, K. (2023, November 29). *Thriving in the AI-Driven Landscape: The Shift to Advisory Services for CPAs*. <https://www.dryrun.com/blog/thriving-in-the-ai-driven-landscape-the-shift-to-advisory-services-for-cpas>
- Segarra, P. (2023, November 2). *LinkedIn*. <https://www.linkedin.com/pulse/future-lawyers-age-ai-adapting-change-sidehustle-law-8g48e/>
- Shine, I. (2023, May 17). *These are the jobs that AI can't replace*. World Economic Forum. <https://www.weforum.org/agenda/2023/05/jobs-ai-cant-replace/>
- SNS Insider. (2023, May 5). *Artificial Intelligence (AI) in Accounting Market to Surpass USD 39.57 Billion by 2030 owing to Rising Need for Faster and More Accurate Accounting in Private and Public Firms*. <https://www.globenewswire.com/en/news-release/2023/05/05/2662590/0/en/Artificial-Intelligence-AI-in-Accounting-Market-to-Surpass-USD-39-57-Billion-by-2030-owing-to-Rising-Need-for-Faster-and-More-Accurate-Accounting-in-Private-and-Public-Firms-Resear.html>
- Spiegel, J. (2023, August 30). *How advisors are increasing efficiency and impact with AI*. BlackRock. <https://www.blackrock.com/us/financial-professionals/insights/how-advisors-use-ai>

- Spivack, S. (Apr, 20 2023). *Human Touch: An Essential Connection between Patients and Doctors*.
<https://blogs.einsteinmed.edu/blog/2023/04/20/human-touch-an-essential-connection-between-patients-and-doctors/>
- U.S. Bureau of Labor Statistics. (2023a, September 6). *Accountants and Auditors*.
<https://www.bls.gov/ooh/business-and-financial/accountants-and-auditors.htm>
- U.S. Bureau of Labor Statistics. (2023b, September 6). *Lawyers*.
<https://www.bls.gov/ooh/legal/lawyers.htm>
- Warren, Z. (2023, August 15). Impact of AI on law firms of every size. *Reuters*.
<https://legal.thomsonreuters.com/blog/ais-impact-on-law-firms-of-every-size/>
- Weiser, B. (2023, June 22). ChatGPT Lawyers Are Ordered to Consider Seeking Forgiveness. *The New York Times*.
<https://www.nytimes.com/2023/06/22/nyregion/lawyers-chatgpt-schwartz-loduca.html>