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The Role of ChatGPT in Transforming Financial Operations: Insights into AI Integration

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Master in Management

Supervisor:
PhD, Leandro Luís Ferreira Pereira, Associate Professor with Habilitation

ISCTE – Instituto Universitário de Lisboa

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BUSINESS
SCHOOL

Department of Marketing, Strategy and Operations

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Resumo

À medida que a Inteligência Artificial (IA) se torna mais proeminente, as funções financeiras estão prontas para a transformação para permanecerem relevantes. No entanto, a integração da IA nas finanças empresariais está a avançar a um ritmo cauteloso, permitindo que os pioneiros garantam uma vantagem competitiva. O ChatGPT da OpenAI oferece uma base sólida para os primeiros a adotar a IA, graças à sua facilidade de utilização e influência social generalizada. Este estudo explora a forma como os profissionais de finanças estão a incorporar o ChatGPT nas suas funções, utilizando uma abordagem qualitativa que inclui uma revisão da literatura e entrevistas com 20 profissionais de finanças diversos. Os resultados revelam que o ChatGPT pode simplificar tarefas repetitivas, permitindo que os profissionais se concentrem em actividades estratégicas e promovendo a inovação ao facilitar a utilização de ferramentas avançadas. No entanto, é necessário enfrentar desafios como a resistência à mudança, a segurança dos dados e a fiabilidade. Consequentemente, o estudo sugere que os decisores devem aproveitar o ChatGPT para melhorar as competências tecnológicas dos profissionais do sector financeiro, assegurando simultaneamente uma abordagem equilibrada que combine os pontos fortes da IA com uma supervisão humana eficaz.

Palavras-chave: Finanças; IA; Inovação aberta; Estratégia; Modelo UTAUT; Parceiro de negócios.

Classificação JEL : G39 ; O33.

Abstract

As Artificial Intelligence (AI) becomes more prominent, finance functions are poised for transformation to remain relevant. However, AI integration in corporate finance is advancing at a cautious pace, allowing pioneers to secure a competitive advantage. OpenAI's ChatGPT offer a robust foundation for early AI adopters, thanks to its user-friendliness and widespread social influence. This study explores how finance professionals are incorporating ChatGPT into their roles, using a qualitative approach that includes literature review and interviews with 20 diverse finance professionals. The findings reveal that ChatGPT can streamline repetitive tasks, enabling professionals to focus on strategic activities and fostering innovation by facilitating the use of advanced tools. However, challenges such as resistance to change, data security, and reliability must be addressed. Consequently, the study suggests that decision-makers should leverage ChatGPT to enhance the technological skills of finance professionals while ensuring a balanced approach that combines AI's strengths with effective human oversight.

Keywords: Finance; AI; Open Innovation; Strategy; UTAUT model; Business Partner.

JEL Classification System : G39 ; O33.

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1. Introduction

In the fast-evolving landscape of business, open innovation has catalyzed a paradigm shift urging organizations' operations to transition from closed innovation strategies towards more inclusive and collaborative approaches. Relying solely on internal intellectual resources often translates into unsustainable development, higher costs, and greater risks (Chen et al., 2015). By adopting open innovation, organizations can leverage external resources and knowledge thereby enhancing their core competitiveness (Bai & Li, 2020). The fast advancement and widespread utilization of advanced artificial intelligence tools strongly contributed to the influence of collaborative innovation strategies across many sectors. Artificial Intelligence (AI) technologies like the chatbot OpenAI's ChatGPT, represent a significant facet of this influence (Bouteraa et al., 2024). Chatbots are designed for understanding and generating human-like language via apps, websites, smartphone apps, or on devices that respond to voice commands. What distinguishes OpenAI's ChatGPT from all previous models that have been made available is its capacity for understanding, learning, and reasoning at a human level but also its commitment to open collaboration and the ethical development of AI technologies. For instance, such a model can acknowledge its errors, question the user's false assumptions, and even deny improper requests (Chatterjee & Dethlefs, 2023). Hence, it aims to guide the progress of AI while mitigating risks and maximizing societal benefits.

Open AI is at the forefront of the AI market growth given the massive interest and use it gathers. According to Elad (2024), it is expected to rise in value up to USD 2,745 billion by 2033. Such expansion highlights its huge potential for growth and its increasing practicability across all sectors, particularly the finance sector. Indeed, Generative AI is being gradually integrated into the processes and practices of finance functions. Thanks to models like ChatGPT, generative AI has transformed finance by handling massive datasets, automating processes, and delivering insightful data. This multi-talented tool can help with a wide array of tasks thanks to its conversational AI model (Forbes, 2023). For instance, it can simplify duties such as data input, reconciliation, and financial analysis. In fields where accuracy and promptness are crucial, these kinds of advancements are essential (Rane, 2023). Furthermore, AI chatbots can positively impact the economy by creating new job opportunities within financial operations and boosting the productivity, efficiency, creativity, and competitiveness of businesses, enabling them to thrive in an increasingly fast-paced and evolving global landscape (Bouteraa et al., 2024).

For introducing new AI technologies successfully to new markets or user bases, scholars contend that the understanding of the technology diffusion process is critical. Recognizing the characteristics of different adopter categories helps in tailoring communication and engagement strategies to address specific needs and concerns, facilitating smoother adoption (Bouteraa et al., 2024). The Unified Theory of Acceptance and Use of Technology (UTAUT) and The Technology Acceptance Model (TAM) are often cited in the literature concerning ChatGPT usage because they provide a strong motivational foundation for understanding how people behave when using technology. However, The Technology Acceptance Model (TAM) only suggests technology adoption is driven by perceived ease of use and perceived usefulness (Malatji et al., 2020). On the other hand, UTAUT offers a more comprehensive approach, incorporating factors like performance expectancy, effort expectancy, social influence, and facilitating conditions (Bouteraa et al., 2024). In other words, UTAUT acknowledges that technology adoption is influenced not just by individual beliefs but also by social and organizational contexts, providing a broader understanding of how and why technologies are adopted.

Despite such strong theoretical foundations, bridging the gap between OpenAI's Chat GPT and finance operations remains complex. The available literature on the matter is relatively scarce as scholars tend to study the tool's impact on other disciples such as education (Lo, 2023), academic scholarship (Morocco-Clarke et al., 2024), healthcare (Samala & Rawas, 2024), medicine & biological sciences (Eysenbach, 2023), creative arts (Zhu et al., 2024), and law (Shackelford et al., 2023). Moreover, those studies mostly conducted literature reviews or compared the output of ChatGPT from human writing in general.

Additionally, the integration of Chat GPT into finance operations is progressing at a cautious pace. This slow integration, as observed in finance—a field inherently defined by stringent regulatory demands, critical data security concerns, and a conservative stance toward technological innovation (Rane, 2023)—presents a distinctive context for investigation and a matter of interest for various stakeholders, including organizations, regulators, policymakers, and researchers. Based on this literature gap, this study aims to investigate the convergence between AI and Finance operations by looking at the role of Chat GPT in transforming finance operations and fostering innovation.

This paper has several sections. A literature review is given in Section 2. The research methodologies for the qualitative are described in Section 3. The qualitative data analysis results are presented in Section 4. Lastly, Section 6 offers insightful information regarding how finance professionals embrace ChatGPT in their practices and processes.

2. Literature Review

2.1 AI in Finance Operations

Financial operations encompass a wide range of activities that are crucial for the management of organizations and markets. These operations form the backbone of the economic infrastructure, enabling entities not only to survive but also to thrive in competitive environments. According to Dixon (2011), finance operations serve five primary economic functions. These include: (i) offering a payment system that facilitates the exchange of goods and services, (ii) creating a framework for pooling funds, or mobilizing savings, for large-scale, indivisible projects, (iii) enabling the allocation of economic resources across different times, regions, and industries, (iv) assisting in the management of risk, and (v) providing solutions for challenges related to asymmetric information and motivational conflicts between savers (providers) and borrowers (users) of capital.

However, the integration of Artificial Intelligence (AI) has significantly reshaped the way these financial functions are executed, marking a significant shift from traditional manual processes to automated, intelligent systems capable of complex decision-making and predictive analytics. While this evolution enhances efficiency and redefines roles and strategies within the financial sector, it also introduces potential threats to the future of certain financial management professions. For instance, the creation of new positions like Data Scientists or IT experts responsible for analyzing data from information systems, touches dangerously upon the areas of responsibility of the management controller (Khan & Umer, 2024). This shift is underscored by the automation of certain calculation tasks, the elimination of manual data entry, improved access to information, and more efficient tools. Additionally, today's consumers are hyperconnected, more demanding and exhibit highly unpredictable decision-making behaviors which challenge finance managers from understanding the business environment, analyzing it correctly, and creating reliable benchmarks and forecasts. As a result, the adoption of AI in finance operations has become essential for maintaining competitiveness and relevance (Met et al., 2020). Furthermore, this trend suggests that AI can serve as a powerful complement to human expertise, driving efficiency and fostering innovation by introducing new methods for problem-solving, process optimization, and generating insights that were previously beyond the reach of traditional approaches. Belhaj (2023) notably advocates that AI should function as a

strategic business partner in finance, aiding financial professionals to better anticipate future trends and effectively navigate the evolving market landscape. Dong et al., (2023) also suggest that professionals aided by these advanced tools are likely to outperform their counterparts who do not use them. However, such collaboration is not an easy matter. AI is expected to fundamentally transform the culture and internal processes of businesses forcing finance professionals to evolve. As AI systems increasingly handle huge and diverse datasets—including structured, semi-structured, and unstructured data like audio files, images, videos, and social media comments—traditional finance functions will need to open out and shift their focus from relying solely on internal data to a more integrated approach that combines both internal and external data sources. Hence, financial functions would not only aim to optimize costs but also seeks to uncover the origins of added value which requires advanced analytical skills across various domains, including finance, marketing, and even psychology. This approach aims to forge a hybrid DNA of finance and technology, essential for thriving in today's dynamic economic landscape (Belhaj, 2023).

In the context of such collaboration, a few recent research highlights the benefits and challenges of AI in aiding financial professionals. Krause (2023) examines the benefits of generative AI in finance, including increased operational efficiency and analytical accuracy. Furthermore, he emphasizes the importance of generative AI tools like Chat GPT in discovering trends and themes in financial data and investigates the potential of Large Language Models. Nonetheless, Khan and Umer (2024) point out several potential challenges, including information inaccuracies, privacy and security issues, opaque decision-making processes, labor displacement, and the need for new skill sets among finance professionals, as well as ethical and legal concerns. Addressing these challenges demands a multi-faceted approach that includes technological solutions, regulatory frameworks, but also industry best practices to maximize the benefits of AI while mitigating its potential risks, as outlined by Rane (2023).

2.2 Theoretical Frameworks for AI Adoption in Finance

The predispositions to implement and embrace technology have been broadly investigated by scholars. The most well-known models and theories include the Technology Acceptance Models (TAM), the Diffusion of Innovations Theory (DOI), and Unified Theory of Acceptance and Use of Technology (UTAUT) (Bouteraa et al., 2024). TAM’s primary focus includes

perceived usefulness and ease of use for understanding the factors influencing the acceptance and use of new technologies. However, Malatji et al. (2020) state that TAM overlooks a number of critical aspects such as user's resistance to change, specific industry needs like compliance and ethical considerations in finance, etc.… Similarly, Kiwanuka (2015) argues that the DOI theory is oversimplifying by assuming technology adoption passes through linear stages while it is often observed that potential adopters often move back and forth between stages.

To fully grasp the factors driving the adoption of AI technologies, specifically ChatGPT, within the context of open innovation in the finance sector, the Unified Theory of Acceptance and Use of Technology (UTAUT) offers a robust theoretical framework (Bouteraa et al., 2024). Indeed, Shachak et al., (2019) state that the UTAUT model is considered the most advantageous. More specifically, Souiden et al. (2020) argue that the model has a high explanatory power and ability to predict, which categorizes it as the most comprehensive framework for describing the technology diffusion of Chat GPT in Finance functions (Bouteraa et al., 2024). In a nutshell, this model was specifically developed to analyze and predict the adoption and utilization of new technology across different sectors or industries. It evaluates key factors such as performance expectancy (usefulness), effort expectancy (ease of use), social influence, and facilitating conditions, which are considered the primary drivers of technology adoption (Venkatesh et al., 2003). The efficacy of the UTAUT model in studies of financial technology adoption has been well-documented, demonstrating its ability to accurately forecast user behavior toward novel technological solutions. For instance, Souiden et al. (2020) confirmed that UTAUT serves as a robust and flexible framework for investigating how individuals embrace new IT systems across various domains and settings. Additionally, Bouteraa et al. (2024) have developed an enhanced version of the UTAUT model, proving to be highly predictive in assessing the integration of ChatGPT within the banking industry. However, it is important to note that, despite the widespread recognition of the UTAUT model's validity, finance operations have been largely overlooked and have not been assessed through this framework. This oversight highlights the need for more focused research to explore how AI technologies like ChatGPT can be effectively integrated into finance operations, which present unique challenges and requirements distinct from those in banking.

2.3 Deep Dive: ChatGPT' Impact on Finance Processes

ChatGPT is an advanced language model created by OpenAI, capable of producing human-like responses to text inputs (Dong et al., 2023). "ChatGPT" refers to both the OpenAI's chatbot application and the underlying models that power its capabilities, specifically the Generative Pre-trained Transformer architecture (Dong et al., 2023).

OpenAI's Chatbot application uses artificial intelligence (AI) and natural language processing (NLP) technology to interpret and reply to user input in a human-like manner (Khadija et al., 2021). NLP also enables chatbots to understand nuances, idioms, and cultural references of human language (Chaves & Gerosa, 2021). This is performed by utilizing machine learning algorithms, statistical models, and linguistic norms (Hussain et al., 2019). Therefore, today's chatbots rely heavily on advanced machine-learning algorithms and natural language processing techniques (Menon & Shilpa, 2023). They can understand complex language, context and learn from previous interactions to refine their responses over time (Menon & Shilpa, 2023).

The GPT (Generative Pre-trained Transformer) architecture model was first introduced by OpenAI in 2018 (Antaki et al., 2023). It is a kind of transformer-based neural network that has been trained on a significant amount of text data to generate cohesive and grammatically correct text (Manodnya & Giri, 2022). Then, OpenAI released the GPT-2 model in 2019 which sparked great interest for its ability to write high-quality language that was frequently impossible to differentiate from human-generated text (Stiff & Johansson, 2022). The GPT-3 model, launched in 2020, was a significant upgrade in improving language generation for commercial use thanks to training via large conversational dataset. In 2022, GPT-3.5 was introduced with improvements enabling it to better grasp the conversational environment and generate more natural-sounding responses. This version became immensely popular after its release and reached one million users in merely five days while other famous applications like Instagram took 2.5 months to reach the same number of users (Dong et al., 2023). Finally, in March 2023, OpenAI launched GPT-4 trained on more recent data offering enhanced understanding, better handling of complex tasks, and multimodal capabilities. GPT-4 accepts text, speech, and image data as input. Additionally, it is able to extract text and other data from web pages, search on the Internet if instructed to do so, which allows it to provide more current information beyond its knowledge cut-off date. In May 2024, OpenAI also launched GPT-4o, providing GPT-4-

level intelligence with faster and improved capabilities across text, voice, and vision. Lastly, “GPT-4o Mini” got released in July 2024, as a compact and cost-effective version of the GPT-4o model. Such improvements secure increasingly safe and appropriate responses, along with better scalability for commercial use. Therefore, OpenAI has continuously shown upgrades over the years with newer and more capable models.

These improvements lead to a wide array of potential applications, especially within finance operations. One of the main economic functions of Finance operations is to make it possible to model and project the future results of their company which is precisely the area ChatGPT can make a major breakthrough. A few studies have demonstrated how Chat GPT is employed in specific tasks of finance operations.

According to George et al. (2023), the Finance field is heavily burdened with data entry and meticulous record-keeping responsibilities. Generative AI models, such as ChatGPT, are increasingly being integrated into financial systems to automate these tasks. These AI systems are adept at comprehending and processing a wide range of financial documents, including invoices and receipts, which significantly cuts down the time and effort required for manual data entry. This shift not only boosts efficiency but also greatly reduces the likelihood of human errors, thus enhancing the accuracy and reliability of financial records. The integration of AI in these processes allows financial professionals to focus on more strategic tasks, potentially transforming the role of finance departments into more analytical and advisory functions.

Alkaissi and McFarlane (2023), Wang et al. (2023) found that Chat GPT also plays a crucial role in enhancing fraud detection and prevention strategies within the financial department. These AI systems are capable of analyzing vast amounts of transactional data to uncover patterns and anomalies that may suggest fraudulent activities. By continuously monitoring transactions and flagging suspicious activities in real-time, these systems enable financial institutions to respond swiftly and decisively. This immediate response is vital for protecting assets and securing accounts against unauthorized access and potential financial losses. Furthermore, the implementation of AI in fraud detection not only improves the accuracy and efficiency of monitoring systems but also adapts and evolves with emerging fraud techniques, ensuring that financial institutions remain one step ahead of fraudulent actors.

Chat GPT is also becoming increasingly indispensable in financial planning activities such as budgeting, forecasting and predictive analytics. It can delve into vast quantities of historical data and market trends to generate precise predictions about stock prices, market dynamics, and potential investment opportunities. By harnessing the predictive power of AI, financial analysts can gain deeper insights, enabling them to make well-informed decisions. Thanks to the capabilities of generative AI, they can even identify subtle patterns and correlations that might elude human analysts. This level of analysis is particularly useful in volatile markets where traditional models might struggle to predict rapid changes (Rathore, 2023).

Rane (2023) has shown that financial analysts use insights from Chat GPT to optimize investment portfolios by accurately assessing risk and potential return. The conversational model on which chat GPT is based enables its users to collect personalized financial recommendations that are explained clearly and based on historical data and market trends, to help them navigate complex markets with greater confidence and precision.

Lastly, compliance and timely reporting are essential components in finance. Generative AI plays a pivotal role in helping organizations navigate the complexities of regulatory documentation and in the production of detailed, comprehensive reports. These AI systems are designed to stay current with the latest regulatory changes, allowing them to automatically adjust their analyses to ensure that businesses remain compliant with all legal requirements. Furthermore, generative AI models enhance the efficiency of creating regulatory reports by streamlining processes, which significantly reduces the time and resources required by financial institutions. This technological advancement not only improves accuracy in compliance management but also provides a strategic advantage in regulatory planning and execution (Ali & Aysan, 2023).

The integration of AI technologies like ChatGPT in finance marks a pivotal shift towards more dynamic, responsive, and technologically advanced finance support functions. This literature review highlighted the convergence of AI and finance, the applicability of the theoretical frameworks in understanding technology adoption and identified the observed implications of Chat GPT in finance operations with the available literature.

While there is a growing interest among scholars in exploring the implications of such technologies in finance, the literature research specifically focusing on the integration and use

of ChatGPT within the finance roles remains limited. This gap presents an opportunity for further investigation into how finance professionals are partnering with ChatGPT in an attempt to improve efficiency, innovation and overcome business challenges. Such research is critical for understanding the strategic and operational implications of deploying these innovations in financial support functions. Hence, this study endeavors to shed light on the future trajectory of strategy and innovation in finance, offering implications for both theory and practice through a methodical examination of finance professionals' attitudes and intentions.

Table 2.1: Review of the Literature and Highlighted issues

Author(s), Year	**Main Topics**	**Main issues**
Belhaj, 2023	Analysis of the impact via the integration of Artificial Intelligence and Big Data on management controller professions.	Lack of a comprehensive representation of the various finance operation positions and their current AI integration practices. Moreover, the findings are based on future events and not proven facts. Real world application stemming from qualitative data provide a study of unique applications of AI tools in different organizations thus capturing different patterns of implementation, challenges, and innovative strategies.
Krause, 2023	Applications, benefits and challenges of generative AI in finance.	This study might not cover all aspects of Chat GPT's functionality or shortcomings, particularly image processing, processing data coming from other tools or tutoring users. Additionally, AIs are rapidly evolving,

		and findings become outdated as new models of GPT, and techniques have been developed since.
Dong et al., 2023	Review of the literature on ChatGPT and related Large Language Models (LLMs) in accounting and finance to understand the current state of research in these two areas.	Additional research is required to explore finance professionals' perspectives on the ideal balance between AI and human expertise collaboration. This is crucial to maximize performance while ensuring a sensible integration of AI tools.
George et al. 2023	ChatGPT AI's Impact on Several Business Sectors	Study predominantly based on theoretical analysis and projected applications which fails to explore the dynamics of human-AI collaboration and the necessary skill adaptations for effective integration.
Bouteraa et al., 2024	Open innovation and ChatGPT's acceptance in the banking sector	Further research is required on the integration of ChatGPT within finance operations through the lens of the UTAUT model, which have unique challenges and requirements distinct from those in banking.
Khan and Umer, 2024	ChatGPT's application challenges and solutions in finance institutions.	Study based on the outcomes of previous studies with untested solutions. The outcomes from a qualitative study would provide much more validity, reliability, and insights of the challenges brought by ChatGPT and how to manage them.

3. Research Methodology

3.1 Research context

This study is set in a context where companies must embrace technological advancements to remain competitive. Artificial intelligence (AI), particularly technologies like ChatGPT that leverage natural language processing, is transforming industries by expanding application possibilities. This is especially relevant in finance operations, where an extensive range of tasks can be easily carried with the help of AI enhancing decision-making and operational efficiencies. Finance functions are therefore strongly encouraged to adopt these tools to stay ahead of the competition.

By employing an empirical approach, this research seeks to capture the current dynamics of how finance professionals are utilizing the latest iteration of ChatGPT, GPT 4o. It also aims to delve into their perceptions and challenges regarding the role of ChatGPT in advancing finance operations. The ultimate goal of these interviews is to uncover the specific strategies that financial operations are implementing in response to the rapid advancements in artificial intelligence.

3.2 Research Questions & Objectives

The key research question of this research is to understand the integration of OpenAI's ChatGPT in finance operations by examining their acceptance and usage. To launch the research, three research questions were formulated:

1. How can ChatGPT be effectively integrated into existing financial operations to enhance efficiency and foster innovative practices?
2. How do finance professionals perceive the role of ChatGPT in complementing human expertise within financial operations?
3. What challenges do finance professionals encounter when incorporating ChatGPT into financial operations, and how do these impact their workflow?

The first research question investigates the effective integration of ChatGPT into existing financial operations and addresses several gaps as the literature emphasizes the need for digital transformation in finance. Dong et al. (2023) highlight a lack of empirical data and real-world ChatGPT's applications in finance, emphasizing the need for comprehensive empirical research. Real world applications collected from qualitative data may reveal how operations develop innovative and unique implementations of the tool in various contexts. Similarly, Krause (2023) points to the rapid evolution of AI and limited scope in current studies, particularly in image processing and data integration, offering new research opportunities. Belhaj (2023) identifies the necessity for a detailed representation of various finance roles and their AI integration practices. Therefore, this research aims to fill these gaps by providing practical insights and real-world applications of ChatGPT in diverse finance functions.

To assess the integration of ChatGPT within finance operations, the second question aims to understand finance operations' view and acceptance toward ChatGPT, a topic that has not yet been thoroughly evaluated in the literature using the Unified Theory of Acceptance and Use of Technology (UTAUT) model despite its validity (Bouteraa et al., 2024). Additionally, existing studies by George et al. (2023) and Dong et al. (2023) emphasize on negative perceptions toward ChatGPT, warning that overdependence on AI without human oversight can lead to significant risks, particularly for complex tasks. George et al. (2023) mentions the potential dominance of AI technologies like ChatGPT, arguing that its current sophistication is still limited compared to human intelligence. These reassurances are based on theoretical applications and projected impacts which raise the need for further research with real-life data supported by a structured and comprehensive framework.

Lastly, the third research question aims to uncover the practical difficulties and barriers that finance professionals encounter when adopting ChatGPT. Khan and Umer (2024) reveal several gaps pertinent to understanding the challenges faced by finance professionals. It lacks detailed insights into the specific challenges professionals encounter in their workflows. Additionally, while it discusses the rapid evolution of AI, it does not delve into the practical impacts these challenges have on daily financial operations and how they affect workflow efficiency and adaptation strategies. By addressing these gaps, this research will provide a

comprehensive understanding of the practical difficulties and impacts encountered with ChatGPT in finance operations.

3.3 Research Technique

This study employed a qualitative exploratory approach to examine finance professionals' perceptions in contexts where ChatGPT is implemented and developed. The approach begins with an extensive literature review using sources such as Web of Science, Scopus, Science Open, and Google Scholar. This review enhanced the study's theoretical and contextual knowledge and provided a basis for the design of the questionnaire.

The questionnaire integrated both open-ended and direct questions to gather data. Open-ended questions allowed for the collection of detailed, descriptive responses, providing depth and contextual richness. Direct questions ensured consistency and specificity across participants, contributing to the comparability and focus of the data collected. Additionally, the selection of participants was based on targeted sampling criteria, aiming to include finance professionals from diverse roles, companies, and industries. This diversity ensures a variety of perspectives and experiences in ChatGPT adoption. Interviews were conducted either face-to-face or via digital platforms, depending on the availability and preferences of the participants. Each session, expected to last approximately 20 minutes, allowed for an in-depth exploration of all pertinent topics.

Following data collection, text mining and thematic analysis techniques were applied to identify patterns, extract insights, and enable an in-depth analysis of the collected data. Text mining facilitates the efficient processing and analysis of text data by converting it into quantitative data, enabling the discovery of hidden patterns and trends (Miner et al., 2012). Thematic analysis allows researchers to systematically identify, organize, and offer insights into key themes within qualitative data (Braun & Clarke, 2006). These methods are widely recognized for their ability to handle large volumes of qualitative data and extract meaningful insights, supporting a comprehensive understanding of the integration of ChatGPT within financial operations.

Consequently, the triangulation method was intentionally chosen to enhance the reliability of results by combining different data sources and viewpoints (Denzin, 1978). By triangulating word cloud results with detailed thematic analysis, it develops a nuanced understanding of the various dimensions of the integration of ChatGPT in finance operations. This methodological approach ensured that the findings were grounded in data and corroborated through multiple analytical lenses.

3.4 Pre-test of techniques / instruments

In this study, a qualitative research approach was adopted to address the research questions. J. Collis and R. Hussey (2003) suggest that this approach is appropriate for smaller sample sizes and yields descriptive results. It enables unrestricted exploration of the research topic and participant responses. This flexibility is particularly relevant to this study on artificial intelligence, where much of the existing literature focuses on theoretical frameworks and expectations rather than on empirical evidence. Furthermore, the decision to utilize qualitative interviews in the methodology is driven by a fundamental interest in uncovering the subtle nuances of the subject matter thanks to their flexible format. Before initiating the interviews with the actual study sample, the interview protocol underwent a critical pre-test phase. This involved conducting a trial interview with a test participant to ensure the reliability and effectiveness of the interview questions. The purpose of this pre-test was to refine the questions, assess the clarity and flow of the conversation, and identify any potential issues that might arise during the actual data collection.

3.5 Sampling Strategy

The sample comprised 20 participants selected intentionally. They include both men and women aged between 23 and 40 years old located in Paris. They operate in various levels and professions of finance, and they use ChatGPT 4o at least once a week. This sampling strategy aims to encompass individuals with a diversity of experiences, interests, and job responsibilities so that a broad spectrum of perspectives is captured in the adoption of ChatGPT of finance professionals. A time horizon was also used to gather data over a one-month period.

While the purposive sampling method employed in this study allows for the exploration of targeted perspectives and facilitates depth in the investigation, the potential biases inherent in this approach must be acknowledged. First, the intentional selection of participants might lead to selection bias as the diversity intended in the sample might still omit other relevant demographics or professional experiences not captured within the selected participants. In this context, the study will provide a thorough characterization of the sample to prove the quality and relevance of the information gathered.

3.6 Research Instrument

Finance professionals were contacted as part of this Dissertation to gather qualitative data. Here is the research instrument that was used to conduct the interviews.

Research Study: The Role of ChatGPT in Transforming Financial Operations - Insights into AI Integration

Institution: University Institute of Lisbon

This interview guide is part of an ongoing study examining the impact of artificial intelligence, specifically ChatGPT, on financial operations. Our research aims to uncover how AI integration is reshaping the landscape of finance, focusing on efficiency, accuracy, and the evolving role of human oversight.

For Further Information, Please Contact:

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Introduction:

Before we start, could you briefly introduce yourself and your background and current role in finance operations?

****Participant's answer****

Section 1: ChatGPT's Integration and Current Practices

1) Can you describe how was ChatGPT introduced into your daily tasks?

****Participant's answer****

2) Since its initial implementation, have you adopted any additional approaches to utilizing ChatGPT, such as assisting with new tasks or facilitating the adoption of other AI tools?

****Participant's answer****

Section 2: Finance Professionals' Perceptions Toward the Role of ChatGPT

3) What changes have you noticed in the efficiency or accuracy of financial operations since integrating ChatGPT as a business partner?

****Participant's answer****

4) What do you think is the optimal collaboration balance between human expertise and such AI tools?

****Participant's answer****

Section 3: Barriers and Challenges

5) What are the most significant challenges you faced when integrating Chat GPT into your daily tasks?

****Participant's answer****

6) How do you manage potential reliability issues with Chat GPT in your work?

****Participant's answer****

Section 4: Future Perspectives and Recommendations

7) How do you think the role of AI like ChatGPT could evolve in financial operations in the future? (*ex: what adaptations do you think are necessary for financial professionals to effectively work with emerging AI technologies like ChatGPT*)

****Participant's answer****

Conclusion:

Would you like to add or discuss more about the topic?

****Participant's answer****

Thanks for your participation.

4. Results and Discussion

This chapter aims to integrate empirical data with established theories to effectively support the study's findings and arguments. It presents a qualitative analysis of the interviews conducted, using data processing techniques to derive results and insights. The analysis employed text mining and thematic analysis methods, utilizing tools such as Microsoft Office Excel, wordclouds.com, databasic.io, and mymap.ai.

4.1 Sample Characterization

A detailed characterization of the interviewees is provided to produce a comprehensive analysis of the collected evidence. This approach helps to address the research objectives and offers valuable insights into the integration of ChatGPT within finance operations.

The data collected from twenty individuals was analyzed based on the following variables: Company & Sector of Activity, Job Position, Seniority, and Hierarchy. Starting with the first variable, Figure 4.1 provides an overview of the distribution of participants across different industry sectors. The Fashion & Luxury Goods sector is overwhelmingly represented, constituting 70% of the participants. The Financial Services sector accounts for 15%, while Beverages, Consulting and Advisory Services, and Energy and Industrial sectors each represent 5% of the participants.

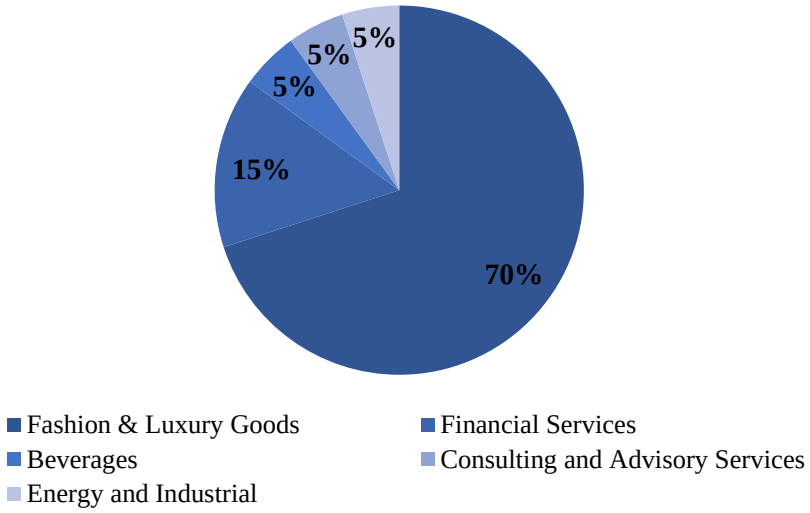


Figure 4.1: Sector of Activity

Figure 4.2, which illustrates the distribution of the participants among the various companies they are working for, shows a similar trend. The data reveals a significant skew towards Louis Vuitton, which contributes approximately 70% of the participants. Conversely, the remaining companies, including Schneider Electric, Moët Hennessy Diageo, Finetic, EY, BNP Paribas Group, and AXA Investment Managers, each account for only one participant. The unbalanced distribution in the sample could suggest that the study's findings will be particularly relevant to this sector and the limited representation of other sectors could restrict the findings applicability to a broader range of industries. However, Bouteraa et al., 2024, found that ChatGPT's model was specifically developed to guarantee its adoption and utilization across different sectors or industries, thereby validating the generalizability of this study's findings. Additionally, finance operations are a support function with very similar tasks across various sectors, facilitating the mobility of finance professionals between industries and internal operations. This is further supported by the background stories of participants, many of whom have worked in multiple sectors and positions.

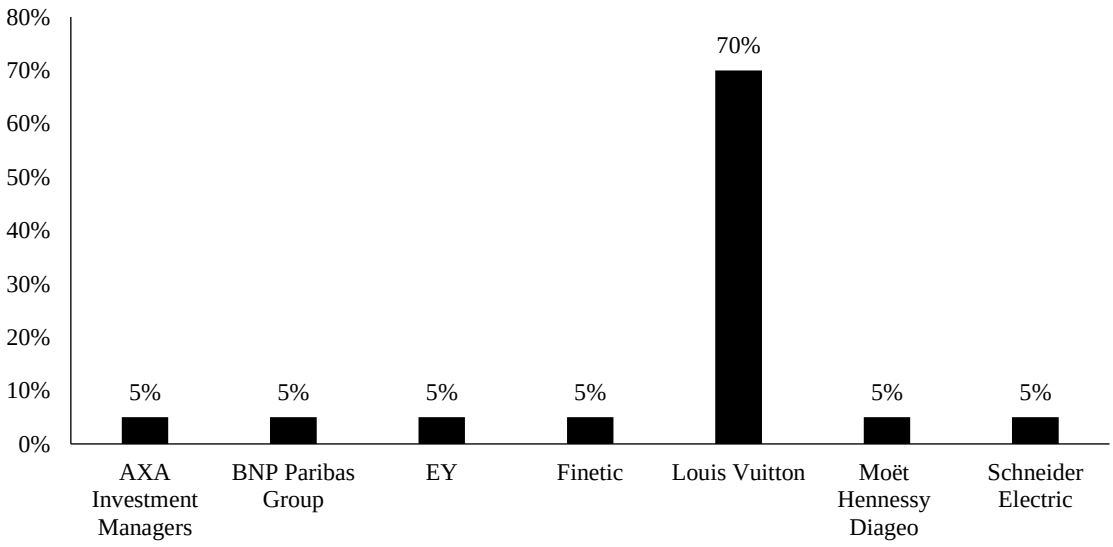


Figure 4.2: Number of participants per Company

In contrast, the Figure 4.3, which illustrates the distribution of participants based on their roles within finance operations, presents a more balanced representation. The roles represented include Business Control (35%), Consulting (15%), Data Management & Reporting (15%), Audit (15%), Sustainable Finance (10%), Finance Control (5%), and Finance Management (5%). This balanced distribution suggests that the study provides comprehensive insights into

the integration of ChatGPT across various functional areas within finance. Moreover, these findings are expected to offer valuable insights applicable to a broad range of organizational contexts given the mobility of finance professionals across industries.

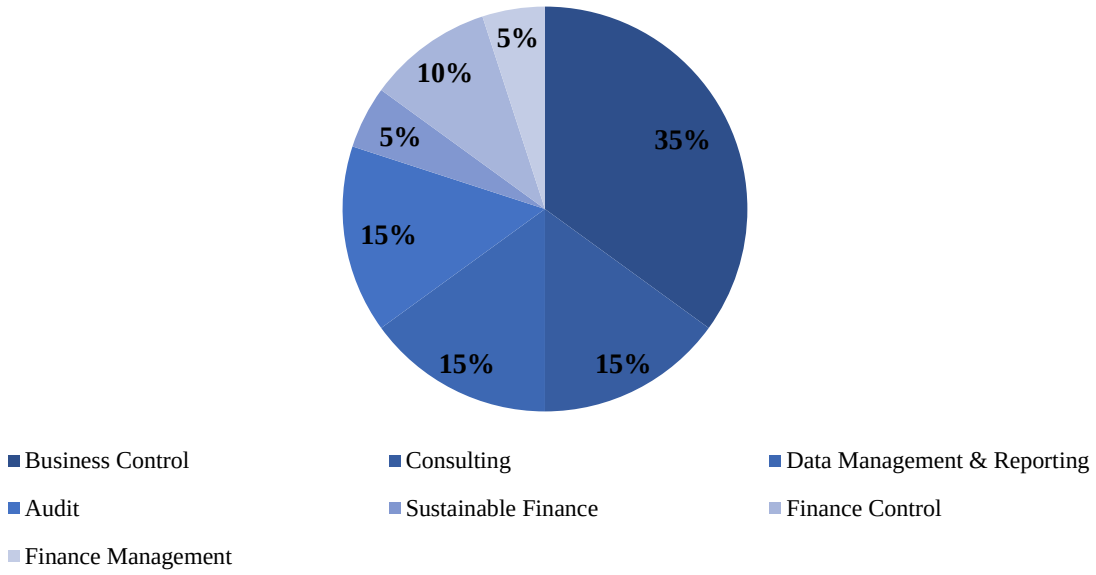


Figure 4.3: Distribution of Participants' Finance Specialties

In terms of professional experience, the scatter plot (Figure 4.4) illustrates the distribution of participants based on their years of experience. A significant concentration is observed among those with 1 to 2 years of experience, with the highest frequency at 1 year, where six participants are recorded. As experience increases, the number of participants decreases sharply, with very few having more than 5 years of experience. There are also a few outliers with higher levels of experience, including participants with approximately fifteen years of professional experience. This distribution highlights a balanced mix of early-career, mid-career, and highly experienced professionals, providing a broad perspective on the integration of ChatGPT in finance operations across different career stages.

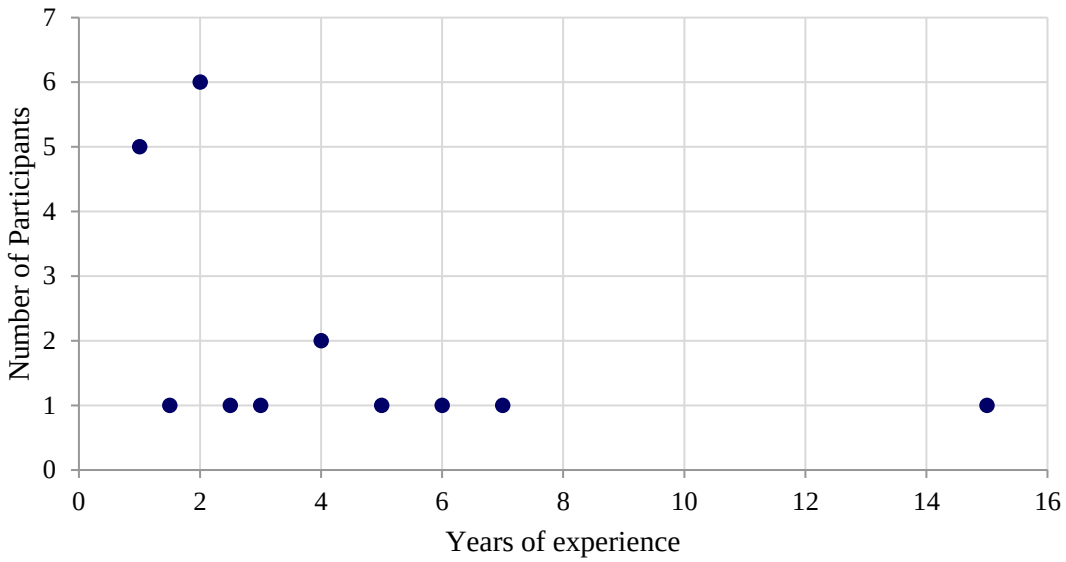


Figure 4.4: Number of participants per years of professional experience

Finally, the seniority levels of the sample in the Figure 4.5 reveal that the majority of participants are in the "Confirmed" position, comprising 40% of the sample. This is followed by "Senior" positions, which account for 25% of participants. "Junior" positions make up 20% of the sample, while "Top Management" represents 10%. Interns constitute the smallest group, with 5% of the participants. This distribution indicates a significant representation of mid-level and senior professionals in the study, providing insights from experienced individuals across various hierarchical levels within organizations.

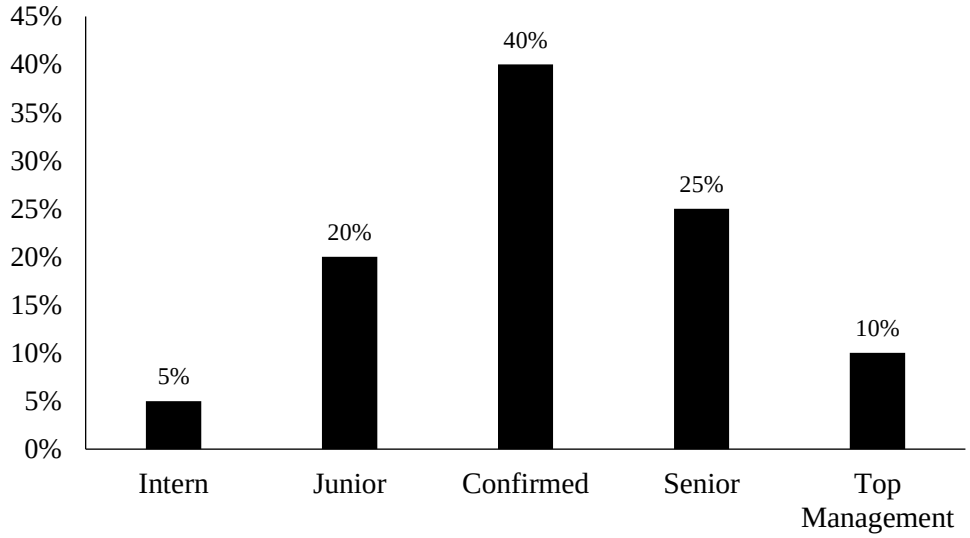


Figure 4.5: Hierarchical Position of participants

Through the analysis of the responses, key themes and subthemes were identified to better understand how finance operations integrate ChatGPT and what it entails. As depicted in Figure 4.6, the predominant themes fall into five categories: Implementation and Usage, Efficiency and Productivity, Challenges, Optimal Collaboration, and Future Prospects.

Implementation and Usage: ChatGPT has been introduced to a variety of financial tasks, such as data analysis and report generation. Many participants highlighted the seamless integration of ChatGPT with other tools like Power BI and Excel, which has streamlined data visualization and analysis processes, reducing the need for extensive coding knowledge and enhancing overall efficiency.

Efficiency and Accuracy Improvements: The majority of participants noted significant improvements in handling repetitive tasks, allowing them to focus on more strategic activities. They reported increased speed and quality of information retrieval, which has led to time savings and a reduction in errors. The quality of financial analyses and reports has also improved due to the AI's assistance in drafting and refining content.

Challenges: Participants identified several challenges in integrating ChatGPT, including data security concerns, reliability of AI outputs, resistance to change among employees, and the learning curve associated with effectively using the tool. To address these issues, measures such as cross-verifying AI outputs and implementing comprehensive training programs have been employed.

Optimal Collaboration: Participants emphasized the importance of finding a balance between AI and human expertise. AI is effective in handling routine tasks, thereby freeing up human professionals to concentrate on more complex and strategic activities. However, human oversight remains crucial for tasks that require nuanced judgment and expertise.

Future Prospects: Many participants believe that the role of AI in finance will continue to expand, with tools like ChatGPT taking on more advanced analytical tasks and providing predictive modeling. To keep pace with these advancements, financial professionals will need to develop new skills in AI management and data analysis. Additionally, addressing ethical considerations such as data privacy will become increasingly important.

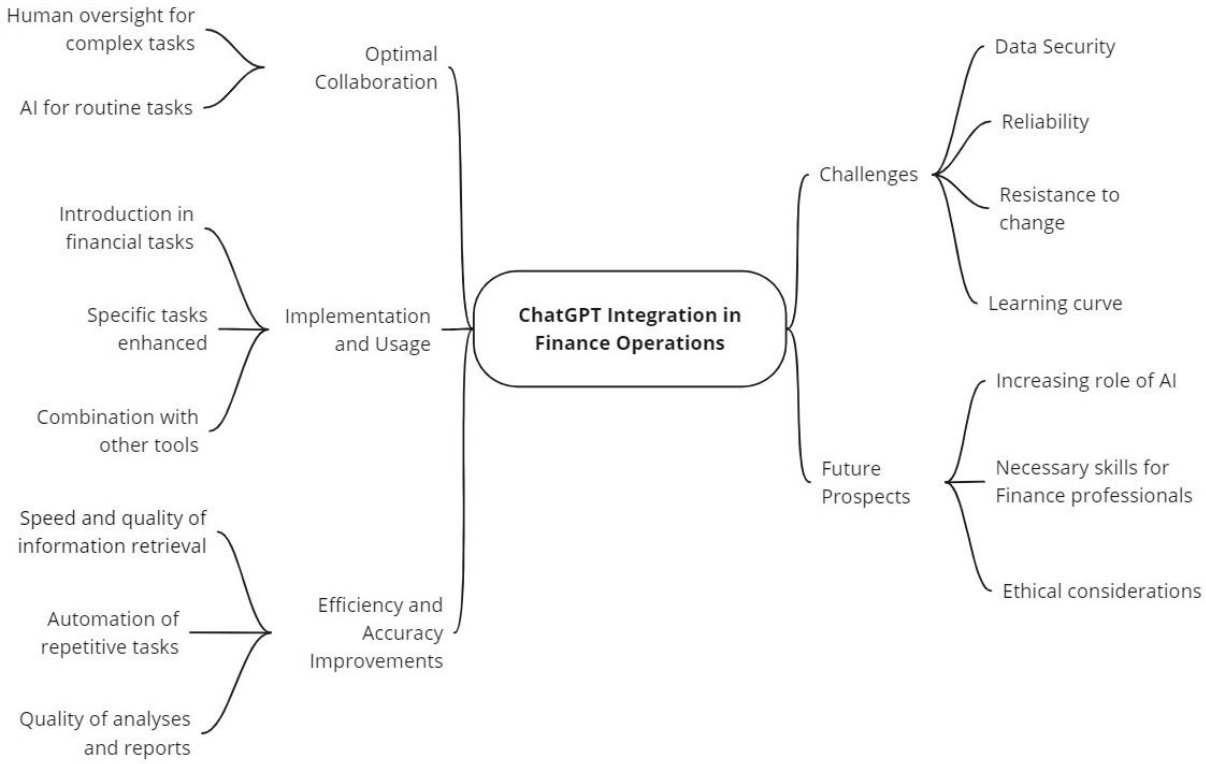


Figure 4.6: Mind Map – key themes and sub-themes

To support our findings, an analysis of words' frequency is also presented in Table 4.1, 4.2 and Figure 4.7 to identify the key words related to the efficiencies, the innovative insights presented by GPT 4o as well as the perceptions and the challenges encountered by the participants.

In Table 4.1, "Data analysis" and Financial Reports" appear most frequently, indicating their central importance. Other significant themes include "More efficient" and "Reliability issues," reflecting the focus on efficiency gains and concerns about AI dependability. The recurrence of "Decision-making" and "Strategic thinking" underscores AI's impact on enhancing these processes, while "Training sessions" suggests the need for continuous skill development.

In Table 4.2; "Efficiency and accuracy" leads the bigram list, emphasizing AI's benefits. Concerns about the "Balance between human" expertise and AI is also prominent. Phrases like "Strategic decision-making" and "Skills in AI" highlight the importance of strategic use of AI and the need for relevant competencies in the workforce.

Table 4.1: Bigram: Value

N-gram	Frequency
Data analysis	19
More efficient	11
Reliability issues	9
Decision-making and	7
Financial reports	5
Sensitive data	5
Training sessions	5
Strategic thinking	5
To create	4
And advisory	4

Table 4.2: Trigram: Value

N-gram	Frequency
Efficiency and accuracy	10
The reliability of	9
Other AI tools	8
Balance between human	6
Potential reliability issues	5
With data analysis	5
Strategic decision-making and	5
Focus on strategic	5
Skills in AI	5
Repetitive tasks and	4

The word cloud in Figure 4.7 offers complementary perspective by showing hidden themes and patterns in the data that might not be immediately apparent through the previous methods. For instance, the terms Coding" and "Formatting" in Figure 4.7, reflecting the wide array of GPT's applications used by the participants. The frequent mention of "Chat", "Collaboration" and "Partner" shows to AI's implication in the communication landscape of financial operations.

Moreover, it also provides a visual confirmation of recurring themes, adding an additional layer of analysis to support conclusions as seen "data," "tasks," "information," "ChatGPT," and "reliability" indicating the central focus areas.



Figure 4.7: Word cloud

4.2 Discussions and Findings

The integration of ChatGPT into financial operations represents a significant opportunity to enhance efficiency and innovation. This study synthesizes findings from qualitative interviews with professionals working in finance operations, offering a comprehensive view of this integration in finance operations.

RQ1. How can ChatGPT be effectively integrated into existing financial operations to enhance efficiency and foster innovative practices?

Interviewees consistently emphasized ChatGPT's potential to enhance operational productivity, with "Data Analysis" and "Financial Reports" being the most frequently mentioned applications (Table 4.1). Indeed, as depicted by the existing literature (Krause; 2023), ChatGPT's ability to process financial documents, detect errors, and update records can seamlessly integrate into existing financial operations, especially if organizations set up new methods and workflows to boost its use. For instance, by establishing automated workflows

with tailored prompts, prompt tutoring or prompt libraries, organizations can significantly boost its integration.

Moreover, it was also found that finance professionals are keen on deepening their understanding of the tool, as seen with the words “learning” (Figure 4.7), “Training sessions” (Table 4.1) and “learning curve” (Figure 4.6). Specially, they are increasingly eager to explore its full range of applications, which further supports its effective integration within finance operations. For instance, “Other AI tools” was mentioned eight times (Table 4.2), indicating that ChatGPT users often combine it with other tools. For example, ChatGPT 4o’s ability to process various data types—images, text, and numbers—from many platforms like Excel and Power BI allows finance professionals to quickly identify trends and build predictive models in seconds, thereby enhancing efficiency as well as innovative in financial practices. Hence, it gives access to sophisticated analyses like forecasting, risk assessment, and budget planning thus facilitating timely and enhancing decision-making (George et al., 2023). A few participants also mentioned using this technology alongside other tools as a tutor to help them navigate complex applications or software like Excel, Power BI, Power Query, SQL, and Python. One participant claimed, “I use it for more specific tasks such as coding on MySQL, DAX and VBA instead of searching on forums.”, as also depicted by the word “coding” in Figure 4.7. Another participant stated “This tool helps in discovering the diverse landscape in AI. I have learnt how to use ChatGPT to create my own Python application Chatbot”. These statements demonstrate how this tool can be utilized in diverse ways, enabling users to leverage their knowledge of other tools, business intelligence systems, or AI technologies to develop innovative processes, ideas, and outcomes. This introduces fresh perspectives to the literature, which has traditionally focused on tasks aimed at improving basic efficiency (Belhaj, 2023).

The tool's user-friendly feature, particularly enhanced by its chatbot, significantly contributes to its effective integration into financial operations. By interpreting and responding to user inputs in a human-like manner (Khadija et al., 2021), finance professionals have reported improved speed and accuracy in information retrieval, resulting in cost and time savings, as well as a reduction in errors—key aspects highlighted by the terms "efficiency" and "accuracy" (Figure 4.7). This enhancement also encourages frequent, even "daily" use (Figure 4.7). One Senior Financial Auditor noted, "AI can drastically reduce the time spent on small business

cases by providing detailed answers and definitions, allowing us to focus on more strategic tasks." This observation supports the findings of Ali & Aysan (2023), emphasizing that the integration of AI not only streamlines routine tasks but also allows financial professionals to shift their focus toward more strategic and value-adding activities. Lastly, its chatbot feature and inputs in “human-like manner” (Khadija et al., 2021) also emerged as ways to innovate internal communication and collaboration, as already depicted by Figure 4.7 with the key theme “optimal collaboration”. Participants especially described ChatGPT’s role as a virtual assistant, handling tasks like e-mails writing, scheduling, document management, and internal communications. This observation introduces a new perspective in the literature, as existing research has not thoroughly explored how ChatGPT can enhance internal communication in finance operations. Scholars like Dong et al. (2023) primarily aimed to synthesize the expanding body of working papers without addressing the communication impact of the tool while it is critical for efficient workflows and communication with other departments.

RQ2. How do finance professionals perceive the role of ChatGPT in complementing human expertise within financial operations?

As mentioned previously, interviewees consistently recognized ChatGPT's potential. Financial analysts observed that ChatGPT can effectively manage repetitive tasks allowing them to focus on more advanced analysis, thereby making their roles more engaging and intellectually stimulating. Additionally, the numerous mentions of “skills in AI” (Table 4.2) and “training sessions” (Table 4.1) indicates that finance professionals are eager to develop proficiency in AI tools. These observations reflect a positive perception of AI as a complementary asset to their expertise. Moreover, this trend shows no signs of slowing, as participants indicated that companies such as Louis Vuitton have already begun offering "training sessions" (Table 4.1) to teach best practices for prompt writing with Generative AI. Evaluating these statements through the UTAUT model’s key constructs confirms a strong acceptance and seamless integration of AI within finance operations, highlighting a positive alignment between AI adoption and the professional development of finance practitioners. Indeed, performance and effort expectancy are high due to the efficiency gains and their openness to trainings and technical infrastructure shows facilitating conditions, thereby ensuring the successful deployment and long-term use of ChatGPT in finance (Bouteraa et al., 2024). Finally, its huge social influence gathering millions of users as well as its system through

conversational language, reducing the complexity traditionally associated with financial software, indicates the rights support and conditions for acceptance and positive perception within finance operations.

Beyond the four constructs of the UTAUT model, the participants also expressed their perception that ChatGPT's role is empowering other significant areas of financial operations. The occurrences of the words “To create” and “Advisory” in Table 4.1, as well as “Coding” and “Formatting” in Figure 4.7, reflect the diverse applicability of ChatGPT in finance operations. “Advisory” (Table 4.1) suggests its use in financial planning activities such as budgeting, forecasting, and predictive analytics, by analyzing vast quantities of historical data and market trends to generate precise predictions about stock prices and market dynamics (Rathore, 2023). It also confirms ChatGPT’s advisory role in optimizing investment portfolios by accurately assessing risk and potential return, supporting the findings of Rane (2023). The term “To create” (Table 4.1) refers to ChatGPT’s capability in generating regulatory reports efficiently, incorporating the latest market dynamics, and providing insights that support strategic planning and execution, as noted by Ali & Aysan (2023). Additionally, “Coding” and “Formatting” (Figure 4.7) were emphasized as participants used the tool in conjunction with other software, particularly in automating repetitive tasks and producing better reports. These observations expand ChatGPT's role as a "business partner" within finance operations, offering a broader perspective than previously discussed by the existing literature (Belhaj, 2023; Alkaissi & McFarlane, 2023; Wang et al., 2023), which primarily positioned ChatGPT as a tool for management control or for handling a limited scope of financial tasks.

Words like "Collaboration" and "Partner" (Figure 4.7) further indicate that ChatGPT is seen as a facilitator of teamwork and communication among finance professionals, suggesting that AI tools are viewed not only as analytical instruments but also as partners in the collaborative processes. Junior finance professionals especially highlighted ChatGPT's role in facilitating team collaboration. By providing accessible analyses and guidance, ChatGPT democratizes access to complex financial insights, enabling less experienced team members to contribute more effectively.

Despite recognizing the usefulness of ChatGPT, interviewees also expressed concerns about its future impact, as highlighted in Figure 4.6 with the sub-theme “Ethical

Considerations". The primary concern raised was the risk of over-reliance on the technology. In other words, ChatGPT should be viewed as a tool that complements human expertise, ensuring a balanced and effective collaboration. They stressed that while ChatGPT can generate relevant insights, human expertise is crucial for contextual understanding. A risk manager commented, "AI is a powerful tool, but it lacks the contextual awareness for deep financial topics and intuition of experienced professionals. Human judgment must remain central." This echoes literature cautioning against AI over-reliance (Dong et al., 2023). Participants also highlighted the "reliability issues" (Table 4.1) due to the risks of errors or biases in AI-generated outputs, underscoring the need for human review. A compliance officer stated, "ChatGPT has a bigger impact on efficiency than accuracy. Hence, human review is essential to avoid costly mistakes.", which again aligns with George et al. (2023) suggesting that AI still lacks critical elements like emotional intelligence.

RQ3. What challenges do finance professionals encounter when incorporating ChatGPT into financial operations, and how do these impact their workflow?

Integrating ChatGPT into financial operations presents both opportunities and challenges that decision-makers must carefully navigate. On one hand, this technology has the potential to significantly enhance finance operations at many levels. Highlighting these benefits is essential for encouraging adoption. On the other hand, the practical challenges of implementation cannot be overlooked.

Data and information management is critical theme, as emphasized by the terms "Data" and "Information" in Figure 4.7 and Figure 4.6. It points ChatGPT's data handling capabilities in enhancing decision-making processes and operational efficiency. However, it also refers to the potential issues of the reliability and accuracy of ChatGPT content, a common theme depicted in Figure 4.7 as well as in the literature (Khan and Umer, 2024). A risk manager explained, "AI might not always provide the most current or accurate information, which can lead to errors in decision-making." This sentiment aligns with existing critiques in the literature, which caution against over-reliance on AI without adequate human oversight (Khan and Umer, 2024). Consequently, finance professionals need to cross-verify ChatGPT's outputs, adding an extra layer of review to their workflow and potentially slowing down processes. By overlooking this crucial, errors can lead to wrong business decisions impacting the organization at a larger scale.

Another challenge identified by interviewees is data security and privacy, as seen with the high frequency of the word “Sensitive data” or “Reliability” in Table 4.1 and Table 4.2. Financial operations involve managing sensitive and confidential information, making robust security measures essential. This concern reflects a broader apprehension within the literature, which highlights the significant risks associated with AI integration in finance due to potential vulnerabilities in data security (Rane, 2023). These concerns impact the workflow as certain companies tend to forbid or discourage the tool’s use thereby affecting the overall performance. Others, like EY and LVMH decided to set up their own Generative AI chatbots, although it is not as performant as ChatGPT 4o. Such initiatives are also risky as they require important investments that businesses of smaller sizes will not necessarily be able to afford (Belhaj, 2023).

Additionally, terms like "Implementation," "Experience," and "Work" (Figure 4.7) underscore the practical challenges of integrating ChatGPT into existing systems. For instance, interviewees also discussed the human factor, more particularly the resistance to change among staff, as seen in Figure 4.6. Introducing ChatGPT into financial operations represents a significant shift in how tasks are performed, leading to apprehension, lack of trust and resistance from employees accustomed to traditional methods. A FP&A Analyst observed, "There's a cultural resistance to adopting new technologies, as many staff members are skeptical about the reliability of AI." However, experts suggest a strong correlation between technical and financial innovation, implying that without financiers innovate, economic growth will slow (Karagiannaki et al., 2017), making it critical to counter this trend of resistance. This requires additional training and change of management initiatives to ensure a smooth transition. This, in turn, impacts workflow by diverting time and resources toward training and acclimatization efforts.

Given these challenges and impacts, decision-makers should view ChatGPT not only as a tool to streamline operations but also as a strategic asset for enhancing the technological proficiency of finance professionals. Providing the necessary awareness, support, and resources, such as training and hands-on experience with ChatGPT, can help build trust and facilitate integration. Once adopted, organizations have the opportunity to upskill their teams, equipping them with the knowledge and expertise necessary to operate in an increasingly AI-driven financial landscape. However, it is essential that this integration of AI is approached

with a balanced strategy. While ChatGPT and similar technologies excel at handling repetitive and data-intensive tasks, the importance of human oversight cannot be overstated. Decision-makers should ensure that AI complements, rather than replaces, human judgment, particularly in areas requiring nuanced understanding and strategic insight. This balanced approach not only maximizes the strengths of both AI and human intelligence but also mitigates potential risks associated with this technology. By fostering a collaborative environment where AI tools enhance human capabilities, organizations can drive innovation while maintaining the critical human element in financial decision-making.

5. Conclusion

The integration of ChatGPT into financial operations offers notable potential for enhancing efficiency and fostering innovation, as indicated by qualitative interviews with finance professionals. The findings reveal that ChatGPT can significantly streamline operations, particularly in data analysis, reporting, and internal communication. By automating routine tasks, ChatGPT allows finance professionals to focus on more strategic and stimulating activities, thereby improving overall productivity and decision-making processes. These observations corroborate existing literature on the efficiency gains afforded by AI integration in financial operations. However, the study adds an additional layer by revealing real world practices as well as revealing that integrating ChatGPT into finance operations contributes positively to innovation. By guiding finance professionals in using advanced AI tools like Python without requiring a data scientist, ChatGPT empowers them to independently explore and leverage cutting-edge technologies. These applications, in turn, promote innovation by enabling employees to develop new skills, implement creative solutions, and drive technological advancements within the organization.

Additionally, it was also found through the lens of the UTAUT model that ChatGPT can be successfully and sustainably integrated into finance operations, thanks to its overall positive perception by users encouraged by efficiency gains, user-friendly implementation, social influence and the availability of facilitating conditions. Moreover, the model helped in discovering new factors influencing the perception of finance professionals such as self-empowerment through the acquirement of skills in new technologies and improved communication within teams.

Nonetheless, resistance to change among staff poses a cultural barrier that must be addressed through effective change management and training initiatives. It was also found that challenges such as data security and reliability are significant. It is important to note that AI models, including ChatGPT, can inherit and amplify biases present in their training data. In financial operations, such biases could lead to unfair treatment of individuals or misinformed decisions instead of enhancing efficiency and fostering innovative practices, thereby affecting the study's reliability and the AI's utility. Ensuring robust data protection, maintaining human oversight, and integrating ChatGPT with existing systems while adhering to regulations impact

workflows by adding layers of security, verification, and compliance checks. To address these concerns, decision-makers should view ChatGPT as a strategic asset and start increasing awareness and acceptance of AI technology through effective presentation strategies, educational campaigns, and demonstrations. By doing so, organizations can build a more adaptable workforce capable of navigating the complexities of AI-driven tools while ensuring a balanced approach that combines AI's strengths with effective human oversight. This dual focus on technology and human expertise will help mitigate risks, reduce biases, and ensure that AI serves as a reliable complement to human decision-making.

Overall, this research makes a significant contribution to the convergence of generative AI and finance by addressing a crucial gap in the existing literature. The findings provide valuable practical insights for financial management professionals, organizations, legislators, and researchers, offering actionable recommendations for developing open and sustainable strategies. It also shares innovative practices applicable in diverse finance functions and industries while preventing on the limits and potential bias of the tool.

From a theoretical perspective, this study contributes to the existing body of knowledge by applying and expanding the Unified Theory of Acceptance and Use of Technology (UTAUT) model to the context of finance operations. By evaluating the acceptance and integration of ChatGPT within finance through this model, the research provides new insights into the factors that influence AI adoption in this specific domain, thereby enriching the understanding of technology adoption in finance. Future research could also explore the long-term impacts of ChatGPT integration on finance operations, to provide valuable insights into the sustainability and scalability of AI in finance.

6. Limitations

During the research process, several limitations were identified. Firstly, the study was based on interviews with only 20 finance professionals, which may not represent a sufficiently large sample to accurately reflect the entire population of finance professionals. The limited sample size restricts the ability to generalize the findings to the entire finance industry, as it may not fully explore the diversity of roles and perspectives.

The qualitative nature of the research, while providing in-depth insights, also poses a limitation. The findings are based on the subjective experiences and interpretations of the interviewees, which may add bias and limit the objectivity of the conclusions. Additionally, this approach makes it difficult to quantify the impact of AI tools like ChatGPT across the finance sector.

Furthermore, the rapidly evolving nature of AI technologies presents a temporal limitation. The conclusions drawn from this study may quickly become outdated as new advancements in AI tools and their applications in finance emerge. Moreover, the focus on finance operations in a single country (France) may limit the generalizability of the results to other industries or regions. Future research would benefit from a larger, more diverse sample size and could incorporate longitudinal studies to track the ongoing impact of AI integration in finance over time.

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