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Can Artificial Intelligence (AI) Become an Active Assistant to the Finance, Audit, and Accounting Functions? A Credit Control Data Analysis Approach

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Abstract: This paper investigates the transformative role of the financial accountant/analyst and of Artificial Intelligence (AI) integration as a virtual assistant to the finance and accounting function of an organization, facilitating accurate financial analysis, interpretation, and presentation of key indicators while optimizing time efficiency. In today's fast-paced business environment, financial managers are tasked with navigating complex financial landscapes and providing timely insights to support strategic decision-making. Examining the challenges faced in performing financial analysis and interpretation while increasing data volumes and complexity, this research discusses how AI algorithms enable finance managers to automate data collection, analysis, and reporting tasks, thereby freeing up valuable time for strategic planning and decision-making. This research has been conducted by a financial specialist with more than 10 years of experience in the finance and accounting area interrogating a GenAI bot (ChatGPT bot – Finance Wizard), based on the given two years balance sheet and profit and loss financial statements data available for testing. The scope was to validate the analysis done by the AI bot and to assess the benefits of using such a bot within daily operations. The results are reliable enough to consider having AI as a reliable assistant for repetitive operations and some more complex ones. In conclusion, this paper asserts that AI integration as a financial accountant assistant holds immense potential for transforming financial analysis, interpretation, and presentation processes, thereby enabling financial managers to fulfill their strategic role as business partners and value creators, thus transforming also the strategic role in further development for achieving sustainability and organizational resilience. It calls for continued research by peers specialists.

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JEL Classification: M41 – Accounting; M42 Auditing

1. Introduction

In an era characterized by rapid technological advancements and evolving corporate landscapes, the integration of Artificial Intelligence (AI) within corporate governance frameworks presents a transformative opportunity. The common knowledge is that AI integration will become a reality sooner on a much larger scale than there is today. Professionals are already implementing different software, APIs, learning machines, and AI bots to automate daily processes to improve efficiency, which is a much-desired feature in a company becoming more robust and resilient. As businesses face increasing complexity in financial, audit, and accounting functions, AI technologies offer the potential for enhancing the sustainability and resilience of these critical areas. This paper explores the intersection of AI with corporate governance, specifically focusing on its role in supporting and potentially optimizing finance, audit, and accounting functions. Through a thorough examination of current implementations and theoretical models, this study investigates how AI can contribute to the strategic objectives of corporate governance, including compliance, risk management, and decision-making processes.

2. Literature Review

Artificial intelligence has the potential to eliminate employees, mistakes, errors, and misconduct behaviours in their interaction with each other. (Naqvi, 2020) There is a constant need for adaptation to the changing professional environment to increase effectiveness and proficiency in the corporate area leading to managing big data analysis, and higher financial, accounting, and auditing demands. (Adebiyi, 2023)

The preparation for AI integration in Accounting and Audit functions, brought forward by Industry 4.0 rests on the shoulders of regulatory bodies, education systems, and professional bodies by addressing the professional shifts and preparing the existing workforce and the future one for big data analysis, cloud computing, blockchain, machine learning, artificial intelligence (Hasan, 2022). Hassan also states that the academic world must redraft the concepts of the accounting curriculum.

Managerial accounting as an example of implementing AI rises the issue of ethics that need to be properly addressed, and by fixing them with the help of AI generates other ethical issues. (Vărzaru, 2022) AI-driven automation is bringing benefits to the accounting profession by improving financial reporting by reducing manual errors

and accuracy improvements, analysing big data sets, thus helping stakeholders to get real-time information to make informed decisions. (Adeyeri, 2024)

In terms of AI, ethics, and governance, the academic environment is militating for a comprehensive model of governance that should include the interaction between different forms of AI, between AI and employees, between employees because all these changes happening as they speak have a high impact on society, economics, and politics decisions and strategies. (Naqvi, 2020)

AI is also perceived as a threat and an opportunity by accounting professionals, but as the business processes may require it, professionals will undergo training for new skills, or advanced learning improvement as the basic operations may be replaced by AI-driven automatisms (Chang, Hsiao & Peng, 2022)

Predicting financial distress helps companies better financial risk management. (Liu, Fan, Xia & Pang, 2022) Academic research brings the attention towards the AI implication on efficient Financial Distress Prediction (FDP) being as a concern and on the agenda of financial institutions, corporate managers, investors, rating agencies, managers, shareholders, and other stakeholders. (Zhang, Wu, Qu & Chen, 2022)

Dealing with Big data and large volumes of articles, a bibliometric approach was used to assess the literature review by extracting from the Scopus database the academic articles having the keywords accounting and Artificial intelligence and then presented in Vosviewer for better clarity and understanding. The results generated are 2584 articles written from 1981 up to August 31st, 2024, 12 clusters generated, 131 items for authors keywords co-occurrence 5 times.

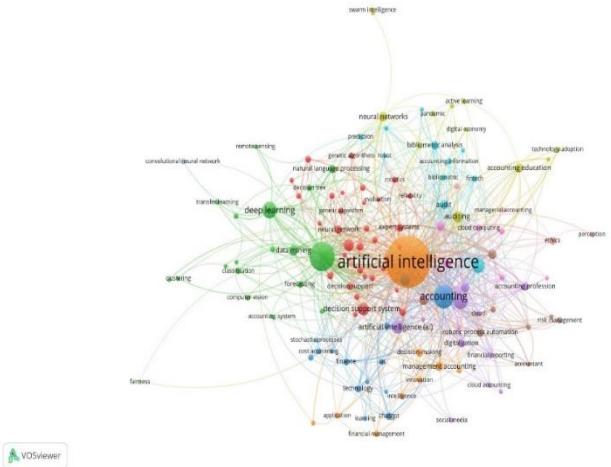

Figure 1. Vosviewer Analysis for Scopus Database on Keywords Accounting and AI

A second bibliometric analysis was performed in the Scopus database for keywords Accounting and ChatGPT, to identify the extent of the academic research in using ChatGPT to perform accounting tasks, as per the research of this paper. The result was 55 articles written in the year 2023 up to August 31st 2024, authors keywords grouped within 15 clusters, co-occurrence selected: 1.

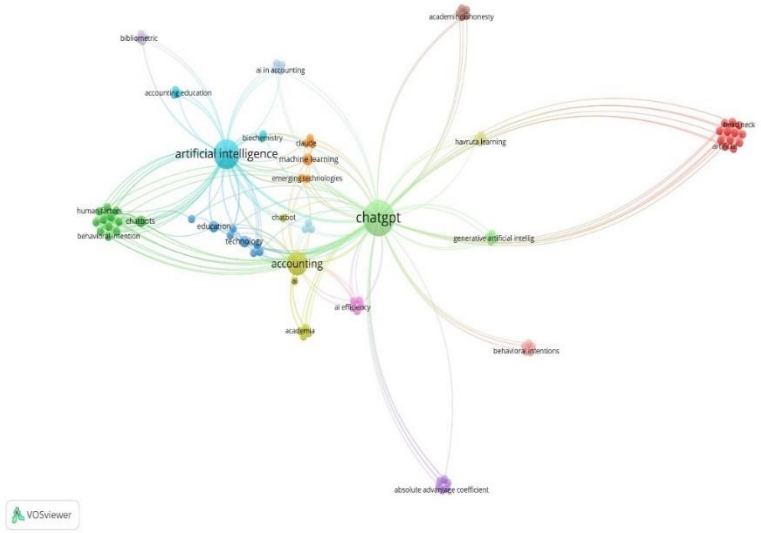

Figure 2. Vosviewer Analysis on Scopus Database by Keywords Accounting & ChatGPT

ChatGPT and AI writing tools in companies, education, and academic research are subject to endless debate. One opinion is that AI software is focused on the potential for efficiency increase, the other opinion is showing concern about the accuracy and quality generated by AI-generated content (Papakonstantinidis, Kwiatek & Spathopoulou, 2024).

A "change-inducing crisis" appeared due to AI's recent development in the accounting field and presents itself as an opportunity for accounting academic research to discover and threats posed by AI integration, but also to capitalize on the benefits and opportunities that arise with this evolutive step in the accounting profession. (Ballantine, Boyce & Stoner, 2024). ChatGPT provides an opportunity for academic studies, but also a risk, if the generated content is not being revised by a professional accountant (Abeysekera, 2024).

In the field of accounting management, ChatGPT brings increased accuracy, efficiency, and predictive capabilities for some accounting operations or routine tasks, thus improving accounting management practices, thus giving professionals

the opportunity to stay ahead of the technological developments in accounting. (Shchyrba, Savitskaya, Fursa, Yeremian & Ostropolska, 2024)

Generative AI, such as ChatGPT, already has implications in accounting, reporting, sustainability, audit, and assurance, so these implications need to be understood by the current society (de Villiers, Dimes & Molinari, 2024).

Built on the OpenAI architecture, ChatGPT has an evolving role within the accounting profession and has the potential to become a reliable source for analytical capabilities, applications in reporting, and financial risk management, yet ethical, risk, and educational are open for future explorations (Biancone & Chmet, 2024)l

ChatGPT is viewed as a solving process tool that can be effective in tax education, but some basic knowledge is required for the AI interrogation and then further on to assess the content generated that appropriately addresses the problem at hand (Stott & Stott, 2023).

3. Research

3.1. Method

The purpose of the research was to provide ChatGPT – Finance Wizard bot with a real finance and accounting task by making a step-by-step financial analysis for the decision to provide a client with a credit limit for payment term sales.

Hypothesis: Finance Wizard can make a reasonable financial diagnosis to decide to provide the analysed company a credit limit for purchasing goods by payment term or payment before delivery.

The research: First financial statements were chosen from a company in a financially distressed situation that would not be granted a credit limit, thus any purchasing would be on payment before delivery. Finance Wizard was asked to perform the same financial analysis as the credit risk specialist and validate the decision for payment before delivery.

The financial statements under analysis are presented below in Table 1 and Table 2.

Table 1. Company's Balance Sheet Financial Statement for Two Years

COMPANY's BALANCE SHEET		
Amounts in RON	**Year 2**	**Year 1**
Assets		
Non-Current Assets		
Tangible Assets	5,912,855	6,142,279
Intangible Assets	4,174	4,147
Other Non-Current Assets (deferred tax)	504,407	561,598
Other Non-Current Assets (guarantees on the long term)	15,411	17,652
	6,436,846	**6,725,676**
Current Assets		
Inventories	1,552,136	3,256,248
Trade Receivables	3,215,546	3,022,482
Other Receivables	1,688,252	1,607,485
Cash and Cash Equivalents	816,068	375,957
	7,272,001	**8,262,173**
Total Assets	**13,708,847**	**14,987,849**
EQUITY		
Share Capital	6,921,453	6,946,847
Differences from the revaluation of assets	2,490,077	2,499,213
Retained Earnings	(13,597,630)	(12,865,561)
	-4,186,100	**-3,419,501**
Non-Current Liabilities		
Long-term Bank Loans		
Deferred Tax Liabilities	178,566	177,679
	178,566	**177,679**
Current Liabilities		
Short-term Bank Loans	15,119,500	15,985,839
Trade Payables	2,501,131	2,202,829
Other Payables	8,761	16,223
Income tax and duties	86,989	24,780
	17,716,381	**18,229,671**
Total Equity and Liabilities	**13,708,847**	**14,987,849**

Table 2. Company's Profit and Loss Financial Statement

COMPANY's PROFIT AND LOSS		
Amounts in RON	**Year 2**	**Year 1**
Turnover (sales)	17,841,623	18,266,583
Cost of goods Sold	(16,323,345)	(16,823,880)
Gross Profit	**1,518,278**	**1,442,703**
Other income	138,339	81,943
Administrative Expenses	(525,397)	(458,844)
Distribution/Selling Expenses	(1,013,688)	(907,059)
Other expenses	(13,985)	(9,473)
Operating Profit (EBIT)	**103,547**	**149,269**
Financial Income	521,076	792,694
Finance Expenses	(1,356,693)	(1,740,708)
Profit before taxation	**(732,069)**	**(798,744)**
Income Tax Expense		(305,890)
Profit after taxation	**(732,069)**	**(1,104,634)**
Depreciation & Amortization Expenses	220,816	228,696
EBITDA	**324,363**	**377,966**

The first interrogation to the Finance Wizard bot was "Please provide a financial analysis for the presented financials".

The second interrogation was "Please make all the ratio calculations for the presented financials".

The third interrogation was "Please make a critical assessment of the financial status of the company by using the calculated indicators".

The fourth interrogation was "Please calculate an Altman Z-score and interpret based on the presented financials".

The fifth interrogation was "What rating would you provide the company based on the above data, using Standard & Poor's (S&P) rating model?"

The sixth interrogation was "Would you give a credit limit to this company?"

3.2. Results

The results came with an accurate analysis of the two financial statements, with some key insights and solid recommendations to improve the company's financial health for each interrogation. The answers of Finance Wizard chatbot are presented below:

3.3. Financial Analysis

Balance Sheet Overview:

Total Assets: There is a decrease in total assets from Year 1 to Year 2, primarily due to a significant reduction in current assets, especially inventories.

Equity: The company has negative equity, which indicates that liabilities exceed assets. This is primarily driven by large accumulated losses (retained earnings).

Liabilities: Current Liabilities: The company has significant short-term bank loans, which constitute most of its liabilities. Non-Current Liabilities: The deferred tax liabilities remain relatively stable.

Profit and Loss Statement:

Revenue: A slight decrease in sales, indicating stable but declining market performance.

Gross Profit: Despite the drop in sales, gross profit has slightly improved due to the lower cost of goods sold.

Operating Profit (EBIT): The operating profit has declined, reflecting higher administrative and distribution expenses.

Net Loss: The company is consistently operating at a net loss, but the loss has decreased in Year 2, mainly due to lower finance expenses.

EBITDA: A lower EBITDA in Year 2 suggests decreased operating efficiency.

Key Insights:

Liquidity Concerns: The decrease in cash and increase in short-term loans indicate liquidity challenges. The company relies heavily on short-term financing to sustain operations.

Profitability Issues: The consistent net losses and negative retained earnings highlight profitability problems, possibly due to high finance costs and expenses exceeding income.

Financial Stability: Negative equity and high short-term liabilities raise concerns about the company's financial stability, making it vulnerable to economic downturns.

Operational Efficiency: The declining EBITDA and EBIT suggest operational inefficiencies and rising costs, impacting overall profitability.

Recommendations

Cost Management: Focus on reducing administrative and finance expenses to improve profitability.

Debt Restructuring: Explore options to reduce short-term debt reliance, possibly restructuring loans to improve cash flow.

Revenue Growth: Implement strategies to increase sales, such as exploring new markets or enhancing product offerings.

Calculation of the ratios for liquidity, quick ratio liquidity, profitability, leverage, and efficiency:

1. Liquidity Ratios

Current Ratio=Current Assets/Current Liabilities

• Year 2: 7,272,001/17,716,381=0.41

• Year 1: 8,262,173/18,229,671=0.45

Quick Ratio=(Current Assets−Inventories)/Current Liabilities

• Year 2: (7,272,001−1,552,136)/17,716,381=0.32

• Year 1: (8,262,173−3,256,248)/18,229,671=0.27

2. Profitability Ratios

Gross Profit Margin=Gross Profit/Turnover (Sales)×100

• Year 2: 1,518,278/17,841,623×100=8.51%

• Year 1: 1,442,703/18,266,583×100=7.90%

Operating Profit Margin=Operating Profit (EBIT)/Turnover (Sales)×100

• Year 2: 103,547/17,841,623×100=0.58%

• Year 1: 149,269/18,266,583×100=0.82%

Net Profit Margin=Profit after Tax/Turnover (Sales)×100

• Year 2: −732,069/17,841,623×100=−4.10%

• Year 1: −1,104,634/18,266,583×100=−6.05%

3. Leverage Ratios

Debt to Equity Ratio=Total Liabilities/Total Equity

• Year 2: 17,716,381+178,566−4,186,100=−4.26

• Year 1: 18,229,671+177,679−3,419,501=−5.38

4. Efficiency Ratios

Inventory Turnover=Cost of Goods Sold/Average Inventory

• Year 2: 16,323,345/1,552,136+3,256,2482=7.92

• Year 1: 16,823,880/3,256,248+3,256,2482=5.17

Receivables Turnover =Turnover (Sales)/Average Trade Receivables

• Year 2:17,841,623/3,215,546+3,022,4822=5.74

• Year 1:18,266,583/3,022,482+3,022,4822=6.04

5. Solvency

Debt to Equity Ratio

Year 2: -4.27

Year 1: -5.38

Assessment: The negative debt to equity ratio is alarming and indicative of a highly leveraged company with negative equity. This implies that liabilities exceed assets, which can be a sign of financial distress and potential insolvency.

6. Cash Flow Analysis

EBITDA

Year 2: 324,363 RON

Year 1: 377,966 RON

Assessment: Positive EBITDA indicates that the company generates positive earnings before non-cash expenses. However, the decrease from Year 1 to Year 2 suggests declining operational performance.

Summary:

• *Liquidity Ratios*: Both current and quick ratios are below 1, indicating potential liquidity issues;

• *Profitability Ratios*: Margins are low, with consistent negative net profit, highlighting significant challenges in cost management;

• *Leverage Ratios*: Negative equity leads to high negative debt-to-equity ratios, signalling financial instability;

• *Efficiency Ratios*: Improved inventory turnover in Year 2 suggests better inventory management, while receivables turnover has slightly weakened.

These ratios reflect ongoing financial challenges, especially in profitability, liquidity, and leverage.

Based on the calculated indicators, a detailed critical assessment of the company's financial status is presented below. The company exhibits several financial weaknesses:

1. *Profitability:* The company struggles with low and negative profit margins, indicating poor cost management and insufficient revenue generation.

2. *Liquidity:* Both the current and quick ratios are well below 1, signalling significant liquidity challenges that could lead to difficulties in meeting short-term obligations.

3. *Solvency:* The negative equity position is a critical concern, highlighting a risk of insolvency and financial instability.

4. *Operational Efficiency:* While there is some improvement in inventory turnover, the overall efficiency metrics reveal areas needing substantial improvement, particularly in receivables management.

5. *Cash Flow:* The positive but declining EBITDA suggests that while the company is generating earnings, its operational efficiency and cost control are deteriorating.

Recommendations

Profit Margin Improvement: Implement strategies to increase sales revenue and control costs more effectively. Consider reviewing pricing strategies and cost reduction programs.

Liquidity Enhancement: Improve cash flow management by optimizing inventory levels and accelerating receivables collection. Explore short-term financing options to bolster liquidity.

Debt Management: Restructure debt to improve the equity position and reduce financial leverage. This might involve negotiating better terms with creditors or seeking equity investment.

Operational Efficiency: Continue improving inventory turnover and focus on enhancing receivables collection processes. Consider investing in technology to streamline operations.

Strategic Planning: Develop a comprehensive turnaround plan focusing on improving profitability, liquidity, and solvency. Engage in regular financial health check-ups and adjust strategies as needed.

The Altman Z-Score is a formula used to predict the probability that a firm will go into bankruptcy within two years. It combines five financial ratios using a weighted average approach. The formula for private firms is:

$Z=0.717\times A+0.847\times B+3.107\times C+0.420\times D+0.998\times EZ = 0.717 \times A + 0.847 \times B + 3.107 \times C + 0.420 \times D + 0.998 \times EZ=0.717\times A+0.847\times B+3.107\times C+0.420\times D+0.998\times E$

Where:

A=Working Capital/Total Assets

B=Retained Earnings/Total Assets

C=EBIT/Total Assets

D=Book Value of Equity/Total Liabilities

E=Sales/Total Assets

Altman Z-Score Calculation for year 2:

Z=0.717×(−0.7619)+0.847×(−0.9920)+3.107×(0.0076)+0.420×(−0.2341)+0.998×(1.3014)Z = 0.717 \times (-0.7619) + 0.847 \times (-0.9920) + 3.107 \times (0.0076) + 0.420 \times (-0.2341) + 0.998 \times (1.3014)Z=0.717×(−0.7619)+0.847×(−0.9920)+3.107×(0.0076)+0.420×(−0.2341)+0.998×(1.3014) Z=−0.5466−0.8402+0.0236−0.0981+1.2991Z = -0.5466 - 0.8402 + 0.0236 - 0.0981 + 1.2991Z=−0.5466−0.8402+0.0236−0.0981+1.2991 Z≈−0.5777Z \approx -0.5777Z≈−0.5777

Interpretation: An Altman Z-Score below 1.8 indicates a high risk of bankruptcy. With a Z-Score of approximately -0.5777, the company is in a very distressed financial position and faces a significant risk of bankruptcy if corrective actions are not taken.

Recommendations:

1. *Immediate Financial Restructuring*: The company should consider restructuring its debt and seeking ways to improve its equity position.

2. *Cost Management*: Implement aggressive cost-cutting measures to improve profitability.

3. *Revenue Enhancement*: Explore new revenue streams or strategies to boost sales.

4. *Liquidity Improvement*: Improve liquidity through better working capital management and securing short-term financing.

5. *Operational Efficiency*: Focus on improving operational efficiency to enhance cash flow and profitability.

The Standard & Poor's (S&P) credit rating model evaluates a company's creditworthiness based on a variety of financial and business factors. S&P's ratings range from AAA (highest quality, lowest risk) to D (default). Here's how to determine a rating for the company based on the provided data and financial ratios:

Key Factors for S&P Rating: profitability, liquidity, solvency, operational efficiency, financial performance trends, qualitative factors (industry position, management quality, economic environment).

Detailed Analysis:

Profitability

Gross Profit Margin: Low (8.51% in Year 2)

Operating Profit Margin: Very low (0.58% in Year 2)

Net Profit Margin: Negative (-4.10% in Year 2)

Liquidity

Current Ratio: 0.41 in Year 2 (Below 1, indicating liquidity issues)

Quick Ratio: 0.32 in Year 2 (Severe liquidity issues)

Solvency

Debt to Equity Ratio: Negative (-4.27 in Year 2, indicating negative equity and high financial risk)

Total Liabilities to Total Assets: 1.306 in Year 2 (Very high leverage)

Operational Efficiency

Inventory Turnover: Improved but still concerning (7.60 in Year 2)

Receivables Turnover: Declined (5.74 in Year 2)

Financial Performance Trends

Revenue: Slight decrease (17,841,623 RON in Year 2 from 18,266,583 RON in Year 1)

EBITDA: Decreasing (324,363 RON in Year 2 from 377,966 RON in Year 1)

Net Income: Negative and improving slightly (Loss of 732,069 RON in Year 2 vs. loss of 1,104,634 RON in Year 1)

Qualitative Factors

Industry Position: Not specified, but trade businesses often face tight margins and competitive pressures.

Management Quality: Not specified.

Economic Environment: Assumed to be challenging given the financial metrics.

S & P Rating Model Assessment: based on the financial data and ratios provided, the company exhibits significant financial distress.
Negative Profit Margins: Indicates ongoing operational losses.

Low Liquidity Ratios: Signals difficulties in meeting short-term obligations.

High Leverage and Negative Equity: Suggests potential insolvency risk.

Declining EBITDA: Reflects weakening operational performance.

S&P Rating Estimation: Given the above assessment, the company would likely fall into the lower rating categories. Here is a general mapping of S&P ratings to financial health indicators:

AAA to AA-: Strong financial health, very low risk of default.

A+ to A-: Good financial health, low risk of default.

BBB+ to BBB-: Adequate financial health, moderate risk of default.

BB+ to BB-: Speculative, higher risk of default.

B+ to B-: High risk of default, poor financial health.

CCC+ to CCC-: Very high risk of default, severe financial distress.

D: In default or expected to default.

Likely Rating: Given the company's negative equity, low liquidity ratios, negative profit margins, and high leverage, it would likely be rated in the CCC+ to CCC- range by S&P, indicating very high risk of default and severe financial distress. This rating reflects the company's precarious financial position and the significant risk it faces in terms of solvency and liquidity. Based on the financial analysis and the S&P rating estimation of CCC+ to CCC-, the company is in a state of severe financial distress with high default risk.

Credit Limit Decision: Given the above considerations, extending a credit limit to this company would be highly risky. The company's financial distress and high default risk suggest that it may not be able to repay any credit extended to it.

Alternatives and Recommendations:

Collateral: Secure the credit against collateral to minimize risk.

Short-Term Credit: Offer only short-term credit with strict repayment terms.

Higher Interest Rates: Compensate for the high risk with higher interest rates.

Regular Monitoring: Implement stringent monitoring of the company's financial status.

Credit Insurance: Consider credit insurance to protect against potential default.

However, the prudent decision, given the company's current financial health, would likely be to not extend a credit limit until there is a significant improvement in its financial stability.

4. Discussions

The results obtained help determine whether the Finance Wizard bot can effectively support the accounting profession by providing reliable assessments of financial statements, ratio calculations, interpretations, scoring, ratings, and decision validation. For each interrogation question the chatbot provided the basis of the calculations according to international well-known established formulas for ratios, then provided all the numbers in the formulas, performed the calculations, interpreted the results and offered conclusions and recommendations, thus providing to be a helping tool for decision making assistance and showed its potential for educational and training programs. Zadorozhnyi and al, 2023, state that improvements have been made to accounting tools by using AI chatbots and are changing the social and information processes. (Zadorozhnyi, et al.; 2023)

The results demonstrate the ChatGPT Finance Wizard AI system can already automate many routine financial analysis and reporting tasks with a high degree of accuracy. For basic financial statement data, it was able to perform calculations, identify trends, discuss implications, and present findings in standard formats. This validation of its analytical capabilities suggests AI has the potential to significantly enhance efficiency in finance functions through automation.

Nicolau underlines that AI-based technology integration brought significant transformation within accounting and audit methodology, thus providing a more efficient and accurate audit. (Nicolau, 2023) While AI can be a reliable assistant, employees are still needed for complex analysis involving a synthesis of both quantitative and qualitative factors over time. The strategic role of the financial professional as a business partner cannot be fully replaced. AI is best viewed as a productivity tool rather than a substitute for the expertise of accounting and audit specialists at this stage.

Due to their reliability in providing help in the finance and accounting function, Jayasuriya and Dow, from the University of Auckland Business School, created a chatbot to help with the administrative tasks for the undergraduate courses in finance and accounting. The chatbot presented reliable results, even if the interrogation was based on specific keywords. (Jayasuriya & Dow, 2023) Khairunisa and Suyatmini from Universitas Muhammadiyah Surakarta, Indonesia, write about implementing an AI-based accounting learning chatbot for students majoring in financial accounting and institutions. (Khairunisa & Suyatmini, 2024) In Mariupol State University, a chatbot was implemented in education as a tool for teaching "Mathematical modelling of socio-economic systems". Shabelnyk and colleagues view the use of chatbots in modern education as an effective approach to enhancing students' opportunities to become competent professionals. They argue that integrating chatbots into educational settings not only supports individual learning

but also enables organizations to deliver high-quality training, tailored feedback, and interactive learning experiences (Shabelnyk, et al.; 2021).

Regular re-training of AI models on larger, more diverse datasets will be needed to continuously enhance their capabilities over time. Standards also need to be developed around transparency, oversight and accountability in AI financial services. With appropriate applications and safeguards, the integration of AI promises to transform and elevate the finance function.

Alshurafat indicates that human expertise and new technology like ChatGPT, developed by OpenAI, must balance out. Still, chatbot's reliability as an accounting tool must come together with standards, and training regulations, to provide usefulness for the accounting professionals. (Alshurafat, 2023)

While AI can be a reliable assistant, humans are still needed for complex analysis involving a synthesis of both quantitative and qualitative factors over time. The strategic role of the financial professional as a business partner cannot be fully replaced. AI is best viewed as a productivity tool rather than a substitute for human expertise at this stage.

Berdiyeva and her colleagues argue that the traditional systems in finance and accounting are rapidly becoming obsolete, driven by the evolving demands of the industry and the increasing complexity of financial processes. They emphasize the urgent need for modernization and digitalization, highlighting how new technologies—such as AI, automation, and data analytics—are reshaping the field (Berdiyeva, Islam & Saeedi, 2021).

Manigandan and Alur (2023) built a bibliometric review for chatbots and virtual assistants in business, management, and accounting. They discovered the keywords "Chatbot", "conversational agent" and "virtual assistant" to have been used in most of the publications where the 378 articles were published, showing the increased interest of the scientific, education and accountants' communities. (Manigandan & Alur, 2023).

5. Conclusions and Recommendations

In conclusion, this study provides empirical validation of an AI assistant's ability to reliably perform standardized financial analysis and reporting tasks based on basic income statements and balance sheets. The ChatGPT Finance Wizard AI system was able to accurately calculate key metrics, identify trends, discuss implications and present findings in standard report formats.

The Finance Wizard chatbot performed successfully all the interrogations of the finance and accounting specialist and came to the same decision that the company in distress should not be granted a credit limit for payment term purchasing. Even if

recommendations were not asked from the chatbot, it provided healthy conclusions and recommendations to help improve the financial health of the company for which the financial statements have been analysed.

While AI showed potential as a virtual financial analyst for routine work, it was still limited compared to employee's expertise in depth of analysis, consideration of alternative viewpoints and strategic decision-making. For now, AI is best utilized as a productivity tool to automate basic, repetitive tasks rather than a replacement for experienced professionals. The degree of successful help from using a chatbot depends also on the professional expertise of the used who builds the interrogation questions.

As AI training datasets and techniques continue to advance, financial assistants with increasingly sophisticated analytical capabilities can be developed. With appropriate governance, AI promises to transform finance functions by improving efficiency, accuracy and strategic decision support. However, the employees' skills of judgment, synthesis and strategic thinking will remain indispensable for the highest-level roles. The future likely involves augmented human-AI collaboration rather than full automation or replacement of professionals. Continued research is needed to explore innovative, responsible applications of AI in finance, audit and accounting fields.

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