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CREATIVE ACCOUNTING TECHNIQUES: THE IMPACT OF ARTIFICIAL INTELLIGENCE

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ABSTRACT

This article reveals the transformative impact of AI on creative accounting techniques and examining how innovative algorithms and machine learning models are reshaping traditional accounting practices. As artificial intelligence technologies become increasingly sophisticated, they offer new tools for execution of creative accounting practices. The arrival of Artificial Intelligence has significantly transformed the landscape of accounting, introducing both opportunities and challenges in the realm of creative accounting. While AI can enrich transparency and accuracy in financial reporting by identifying irregularities and potential manipulations, it can also presents opportunities for more sophisticated and harder-to-detect forms of earnings management. Artificial Intelligence tools can helps fraud detection, offering unprecedented precision and speed and regulatory compliance. Though, the integration of AI also presents risks, particularly concerning the potential for sophisticated manipulation and the ethical implications of automated decision-making. This role of AI necessitates a closer examination of its ethical implications and the development of robust regulatory frameworks. This study discusses the risks and benefits related with artificial intelligence in accounting, emphasizing the need for balanced approaches that leverage artificial intelligence for improved financial integrity while mitigating its potential for abuse in creative accounting.

***KEYWORDS**: Artificial Intelligence, Technologies, Accounting and Opportunities.*

Introduction

In the fast evolving landscape of financial management, artificial intelligence is emerging as a powerful tool that reshapes the traditional accounting practices. Among its various applications, artificial intelligence's influence on creative accounting techniques is important. Creative accounting, characterized by the manipulation of financial records to present a favourable view of financial position of the company, poses substantial risks to stakeholder trust and transparency. With artificial intelligence's advanced capabilities in data analysis and pattern recognition, there is a dual-edged potential, and artificial intelligence can detect and prevent fraudulent practices. Artificial Intelligence can develop more sophisticated means of financial manipulation. This study sets the stage for an in-depth examination of how artificial intelligence is transforming creative accounting, and the requirement for regulatory frameworks to keep bound with technological advancements.

Review of Literature

Almasria, Samara, and Jrairah, (2021), the information system of accounting is play an important role in enhancing the value of external audit procedures by providing auditors with

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comprehensive, accurate, and real-time financial data. It incorporates various accounting functions, reducing the risk of errors, enabling seamless data flow and inconsistencies. This combination allows auditors to efficiently access and analyse financial records, facilitating in-depth examination of financial health of the company.

Bose, Dey, and Bhattacharjee, (2023), stated that AI tools will handle repetitive tasks like invoice processing, data entry, and reconciliation. Hence, the accountants can focus on more strategic activities. This is mainly valuable for detecting anomalies and forecasting financial performance that may indicate fraud or errors.

Salimi, and Damerji, (2021) revealed AI as a transformative force capable of enhancing accuracy, streamlining accounting processes, and providing valuable insights through advanced data analytics. The possible benefits of AIin accounting are widely acknowledged, successful adoption hinges on addressing these concerns and confirming that the technology is efficiently integrated into the accounting ecosystem.

Kureljusic, and Karger, (2023) investigate forecasting in financial accounting has been significantly enhanced by the advent of artificial intelligence which brings advanced capabilities to forecasting future financial performance and trends. AI algorithms, mainly those utilizing machine learning techniques, analyse vast amounts of financial data to identify the correlations. AI-driven predicting tools can integrate external factors such as market trends and economic indicators, providing comprehensive view of future financial scenarios.

IkinSolikin and Deni Darmawan (2023), shows artificial intelligence has improved the effectiveness of accounting by enhancing data accuracy, automating complex processes, and providing actionable insights. Artificial intelligence tec hnologies streamline routine accounting tasks like data entry, business processing and reconciliation and reducing the probability of human error. The integration of AI in accounting can supports regulatory compliance by ensuring adherence to standards and automating audit trails.

Jackson, and Allen, (2023) found that the adoption of technology in accounting has transformed the field, enhancing efficiency and accuracy. Modern accounting technologies, including automation tools, cloud-based systems, and advanced analytics, have streamlined traditional processes such as bookkeeping, auditing and reporting. Automation tools will help to reduce the time of data entry, minimizing errors, and allowing bookkeepers to focus on value-added activities.

Creative Accounting Techniques: The Impact of Artificial Intelligence

Research Model

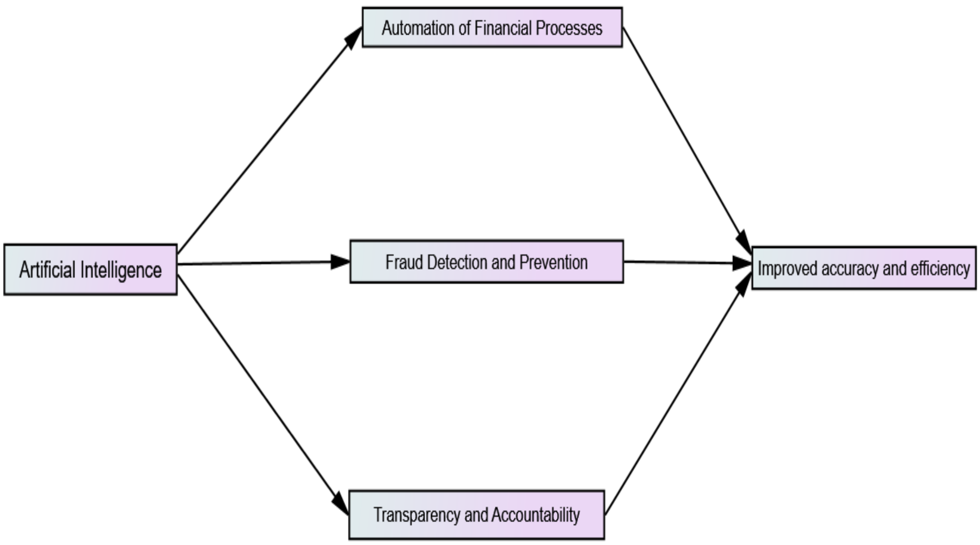

Figure 1: Research Model

Automation of Financial Processes

The automation of financial processes denotes a transformative shift in how organizations manage their financial operations and accounting. This automation accelerates these processes, reduces the risk of error, leading to more truthful and trustworthy financial data. Automation helps real-time financial reporting and analysis and empowering quicker decision-making. The advanced AI algorithms analyse large datasets to identify irregularities, trends, and patterns, which improves the accuracy of financial reports and supports more informed decision-making. Moreover, AI tools offer real-time insights and predictive analytics, supporting proactive financial management and more accurate forecasting.

Fraud Detection and Prevention

Fraud detection and prevention have become sophisticated with the advent of innovative technologies like machine learning and artificial intelligence. This will support organizations to analyse huge amounts of transactional data, identifying patterns and irregularities that may indicate fraudulent activity. This proactive fraud detection approach will enhances the ability to catch fraudulent activities early and reduces the likelihood of false positives.

Transparency and Accountability

Transparency and accountability are important pillars in maintaining trust and integrity within the organizational practices. Advanced technologies, such as real-time data analytics and block-chain, facilitate greater transparency by providing immutable records of transactions and constant visibility into financial operations. Accountability, involves organizations responsible for their actions and decisions, ensuring that financial practices adhere to established standards and regulations.

Improved Accuracy and Efficiency

The incorporation of innovative technologies in financial management has improved accuracy and efficiency. Automation tools, like AI and robotic process, streamline repetitive tasks such as reducing the possibility of human error and enhancing data precision. Efficiency gains are realized through reduced operational costs and faster processing times, freeing up valuable resources for strategic initiatives. The adoption of these technologies drives substantial improvements in accuracy of financial data and efficiency of financial operations, contributing to more effective financial management and organizational success.

Objectives

- To analyse how AI contributes to greater transparency in financial reporting.
- To determine the mediating effect of the factors of AI technologies.
- To Analyse the use of AI in accuracy and efficiency
- To analyse the role played by AI in automation of processes

Hypothesis

- There is an association between the factors of Artificial intelligence
- There is a mediating effect of automation of financial processes between artificial intelligence and improved accuracy and efficiency

Methodology

Sample size of this study is 113. The Cronbach's Alpha Value is 0.821, which surpassed 0.7 threshold. Consequently, the reliability of the questionnaire is proved. The KMO value stands at 0.710, which exceeds the 0.5 threshold. Therefore, it is categorized as an excellent level of adequacy.

Analysis and Interpretation

Table 1 -Descriptive Statistics

	N	Mean	Std. Deviation
Automation of Financial Processes	113	2.9882	.85789
Fraud Detection and Prevention	113	3.0619	.93494
Transparency and Accountability	113	2.9056	.86197
Improved accuracy and efficiency	113	2.94	1.046
Valid N (listwise)	113		

Mean

The mean scores for the variables such as Automation of Financial Processes (2.99), Fraud Detection and Prevention (3.06), Transparency and Accountability (2.90) and improved accuracy and efficiency (2.94). Among all the above variables, the highest mean score goes to Fraud Detection and Prevention. Thus, this study indicates that AI can help the organizations to Fraud Detection and Prevention.

Standard Deviation

The descriptive statistics table highlight the SD scores for four factors such as Automation of Financial Processes (0.857), Fraud Detection and Prevention (0.93), Transparency and Accountability (0.86) and improved accuracy and efficiency (1.05). It shows improved accuracy and efficiency has high SD and Automation of Financial Processes has low SD.

Correlation Analysis

Table 2: Correlations

	Automation of Financial Processes	Fraud Detection and Prevention	Transparency and Accountability	Improved accuracy and efficiency
Automation of Financial Processes	1			
Fraud Detection and Prevention	.699**	1		
Transparency and Accountability	.652**	.837**	1	
Improved accuracy and efficiency	.337**	.323**	.472**	1

Testing of Hypothesis 1

There is an Association between the Factors of Artificial Intelligence

The correlation coefficient of Automation of Financial Processes and Fraud Detection and Prevention is .699** which shows 69.9% positive relationship among Automation of Financial Processes and Fraud Detection and Prevention @ 1% level of significance. The correlation coefficient of Automation of Financial Processes and Transparency and Accountability is .652** which shows 65.2% positive relationship among Automation of Financial Processes and Transparency and Accountability @ 1% level of significance. The correlation coefficient of Automation of Financial Processes and Improved accuracy and efficiency is .337** which shows 33.7% positive relationship among Automation of Financial Processes and Improved accuracy and efficiency @ 1% level of significance.

The correlation coefficient of Fraud Detection and Prevention and Transparency and Accountability is .837** which shows 83.7% positive relationship among Fraud Detection and Prevention and Transparency and Accountability @ 1% level of significance. The correlation coefficient of Fraud Detection and Prevention and Improved accuracy and efficiency is .323** which shows 32.3% positive relationship among Fraud Detection and Prevention and Improved accuracy and efficiency @ 1% level of significance.

The correlation coefficient of Transparency and Accountability and Improved accuracy and efficiency is .472** which shows 47.2% positive relationship among Transparency and Accountability and Improved accuracy and efficiency @ 1% level of significance.

Consequently, H1: There is an association between the factors of Artificial intelligence.

Mediation Analysis

Effect of independent variable (AI) on dependent variable (improved accuracy and efficiency) without mediation variable.

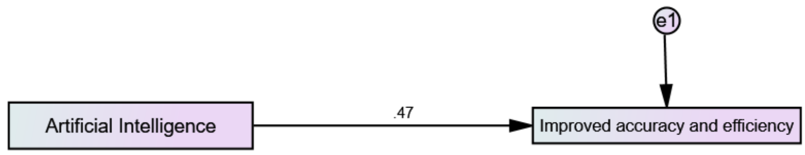

Figure 2: Without Mediation Effect

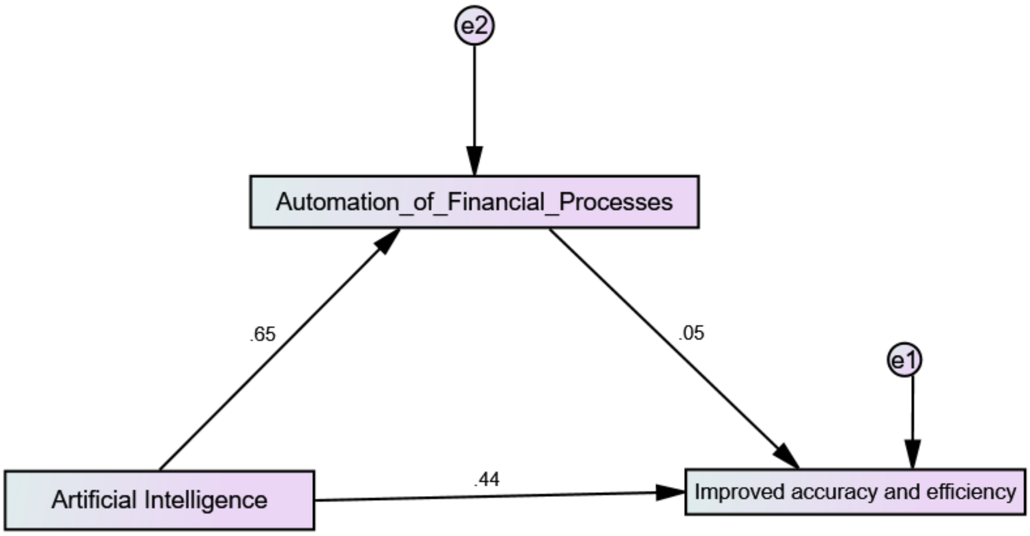

Figure 3: With Mediating Effect

Testing of Hypothesis 2

H_2: There is a mediating effect of automation of financial processes between artificial intelligence and improved accuracy and efficiency.

Table 3: Effect of automation of financial processes between artificial intelligence and improved accuracy and efficiency

Relationship			Effect without Mediator	Effect with Mediator
Improved accuracy and efficiency	←----	Artificial intelligence	0.470*	0.440*

Source: Primary Data

The mediation analysis shows that artificial intelligence affect improved accuracy and efficiency after the mediation variable controlled. The impact of AI on improved accuracy and efficiency with mediator and without mediator is significant @5% level. Hence, the mediation effect is partial.

Findings

The impact of AI on creative accounting techniques reveal complex interplay between enriched financial management capabilities and potential risks. The advanced data analytics and pattern recognition capabilities have improved the detection of irregularities and fraudulent activities. Artificial intelligence systems can analyse huge datasets to identify discrepancies and unusual patterns that might indicate manipulation. Though, these technologies can also be misused to develop more sophisticated creative accounting schemes, the ability of AI to process and interpret vast financial data can potentially be leveraged to obscure true financial positions and mislead stakeholders. Ensuring that AI technologies are deployed responsibly is crucial to maintaining the reliability of financial reporting and preventing their misuse in creative accounting practices.

Recommendations

- Organizations should implement healthy monitoring systems that use artificial intelligence to detect and prevent frauds and unethical practices, while ensuring these systems are regularly updated to counter evolving strategies.
- The companies need to invest in continuous training for accounting professionals to enhance their ability to work effectively with artificial intelligence technologies.
- The companies should promote a culture of transparency and accountability within the organizations.

- Companies need to conduct regular audits by external parties to ensure compliance with legal and ethical standards.
- Companies should implement internal controls, periodical monitoring and review mechanism, and in depth reporting mechanisms to strengthen accountability.

Conclusion

AI develops the accuracy, efficiency, and strategic value of accounting functions, transforming the role of accountants from data processors to strategic advisors and motivating to contribute to substantial improvements in organizational financial performance. Cloud computing, for instance, enables real-time access to financial data from any location, raising greater collaboration and flexibility. The integration of AI into accounting practices presents important opportunities and challenges in the realm of creative accounting techniques. Artificial intelligence’s advanced analytical capabilities enrich the detection and prevention of financial manipulation by identifying irregularities and improving the accuracy of financial reporting. This promotes greater transparency and helps to ensure that financial statements more accurately reflect an organization’s true financial position. The AI introduces the potential for more difficult and harder-to-detect forms of creative accounting, requiring vigilant oversight and healthy ethical standards. The benefits of artificial intelligence while mitigating its risks, is imperative for organizations to adopt comprehensive monitoring systems, invest in ongoing professional development and develop clear regulatory frameworks. The adoption of sophisticated artificial intelligence not only streamlines the audit process but also significantly promotes the quality and credibility of external audit outcomes. Artificial intelligence is revolutionizing the field of accounting by automating routine tasks, providing deep insights and enhancing data accuracy.

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