

Chapter 3

Impact of AI on Audit and Assurance

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ABSTRACT

The integration of artificial intelligence (AI) into auditing marks a transformative shift in finance, enhancing the conduct, assessment, and optimization of audits. AI-driven audits leverage machine learning, big data analytics, and automation to deliver more accurate, efficient, and reliable financial assessments. This paper explores AI's impact on corporate audits, particularly in risk assessment, compliance monitoring, and decision-making. AI enables a move from traditional practices to real-time reporting, predictive analysis, and automated fraud detection, addressing persistent challenges in manual processes. Compared to conventional methods, AI audits provide scalability, cost efficiency, and improved data integrity, while also

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raising concerns around data privacy, algorithmic bias, and ethical implications. The study offers insights into how AI is reshaping auditing—promoting transparency, refining resource allocation, and redefining audit functions in the digital era.

1. INTRODUCTION

With the development and growth of information management technology applications, the information management capabilities of modern intelligent companies continue to improve. Information management can not only improve the company's social productivity, but also promote the company's internal management benefits. Financial management system information management system is now widely used in companies, specifically for accounting, electronic bill storage, etc., which brings convenient and fast financial management system information management special tools for companies. Because the financial management system capabilities and methods of each company are different, most financial audits still need to be carried out by manpower, reducing the efficiency of financial audit work. Cash flow is the fate of modern enterprises. Scientific and reasonable cash flow is specifically planned and adjusted according to financial audits, so financial audits have vital practical significance for modern enterprises. The information management of financial audit can help accounting personnel and internal audit staff improve their work efficiency. The digital electronic audit system can conveniently and quickly carry out the statistical analysis of financial management system account data, provide the company with real and reliable financial audit data, and reduce the complicated operation pressure of accounting personnel and internal audit staff. The financial audit system software is closely related to the company's financial management system method, the specific content of internal audit, and the financial software used by the company. Therefore, the commonly used financial audit system software is difficult to match the financial audit business of all companies. Most medium and large companies basically develop financial audit system software independently. There are many financial audit software on the market. Some integrate the basic functions of internal audit into financial software, and some independently develop financial audit system software. However, the cost of commercial financial audit software is very high, which not only puts economic pressure on small and medium-sized enterprises but also requires that the content and procedures of financial audits be changed to adapt to commercial financial audit system software. With the scale increase of the company and the innovation of the enterprise operation and management mechanism, the scale and capacity of the financial management system of the company have kept improving, which puts forward higher requests for financial auditing. In particular, the financial scale and management method of an enterprise

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