

Digital Transformation and Artificial Intelligence-Assisted Auditing: The Role of Technology in Internal Audit Processes in 2025

Dijital Dönüşüm ve Yapay Zekâ Destekli Denetim: 2025'te İç Denetim Süreçlerinde Teknolojinin Rolü

ABSTRACT

Recently, artificial intelligence (AI) technologies and digital transformation concepts have led to changes in internal audit activities. While traditional audit techniques are usually performed without much use of technology, new digital audits complete these processes by using technological infrastructures. This transformation changes the way auditors work and thus creates a new value system in audit processes. This new value system is the artificial intelligence-assisted audit system. Artificial intelligence-assisted audit systems help to detect potential risks that may occur in enterprises at an earlier stage. Thus, it will increase the reliability of the financial reporting of enterprises. It will significantly reduce the time spent to detect errors and irregularities in businesses. It will also enable auditors to focus on value-added activities instead of routine and time-consuming operations. In particular, situations such as incorrect analysis in audit activities, ethical problems that may occur, etc. appear as negative situations arising from technological developments and artificial intelligence. In addition, the existence of dangerous situations such as the loss of the importance of security and confidentiality in audit activities creates the necessity to establish and establish new control mechanisms in terms of technological systems. This study aims to determine the effects of artificial intelligence and technological systems on internal audit activities, especially auditing. For this purpose, field research was conducted in the literature. The study concludes that digital transformation and artificial intelligence contribute to making internal audit functions more efficient and reliable, but also bring new risks.

Keywords: Digital Transformation, Artificial Intelligence, Internal Audit, Audit Technologies

ÖZ

Son dönemde yapay zekâ (AI) teknolojileri ve dijital dönüşüm kavramları iç denetim faaliyetlerinde değişimlere yol açmıştır. Geleneksel denetim teknikleri genellikle teknolojiden çok fazla yararlanılmadan gerçekleştirilirken, yeni dijital denetimler teknolojik altyapıları kullanarak bu süreçleri tamamlıyor. Bu dönüşüm denetçilerin çalışma şeklini değiştirmekte ve böylece denetim süreçlerinde yeni bir değer sistemi oluşturmaktadır. Bu yeni değer sistemi yapay zekâ destekli denetim sistemidir. Yapay zekâ destekli denetim sistemleri, işletmelerde oluşabilecek potansiyel risklerin daha erken bir aşamada tespit edilmesine yardımcı olmaktadır. Böylece işletmelerin finansal raporlamalarının güvenilirliğini artıracaktır. İşletmelerdeki hata ve usulsüzlükleri tespit etmek için harcanan zamanı önemli ölçüde azaltacaktır. Ayrıca denetçilerin rutin ve zaman alan işlemler yerine katma değerli faaliyetlere odaklanmasını sağlayacaktır. Özellikle denetim faaliyetlerinde hatalı analizler, oluşabilecek etik sorunlar vb. durumlar teknolojik gelişmeler ve yapay zekâdan kaynaklanan olumsuz durumlar olarak karşımıza çıkmaktadır. Ayrıca denetim faaliyetlerinde güvenlik ve gizliliğin önemini yitirmesi gibi tehlikeli durumların varlığı teknolojik sistemler açısından yeni kontrol mekanizmalarının oluşturulması ve kurulması gerekliliğini doğurmaktadır. Bu çalışma, yapay zekâ ve teknolojik sistemlerin başta denetim olmak üzere iç denetim faaliyetleri üzerindeki etkilerini belirlemeyi amaçlamaktadır. Bu amaçla literatürde saha araştırması yapılmıştır. Çalışmada dijital dönüşüm ve yapay zekânın iç denetim fonksiyonlarının daha verimli ve güvenilir hale gelmesine katkı sağladığı ancak yeni riskleri de beraberinde getirdiği sonucuna ulaşılmıştır.

Anahtar Kelimeler: Dijital Dönüşüm, Yapay Zeka, İç Denetim, Denetim Teknolojileri

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Introduction

Audit plays an important role in improving risk management processes, ensuring financial reliability, and assessing the effectiveness of internal control mechanisms (Albrecht et al., 2021). Digital transformation makes audit processes more transparent, efficient, and reliable. In recent years, AI-supported audit tools have been widely used to minimize error rates and increase the effectiveness of risk analysis (Brown & Wong, 2023). Technologies such as the use of big data and machine learning have facilitated forward-looking forecasting and real-time analysis rather than the evaluation of historical data.

It is imperative for auditors to understand the basic principles of AI correctly and comprehensively, to ensure awareness of the activities and roles they should perform, to identify and prevent technological risks, to evaluate the opportunities that may arise and to keep up with this great change (Ali et al., 2022). This situation leads to the formation of new competencies of professional members and the sustainability of trainings for the use of these competencies becomes very important. Many researchers have carefully examined that the auditing profession is undergoing a significant transformation process with the integration of new technologies and artificial intelligence (Issa et al., 2016; Gepp et al., 2018). In particular, researchers believe that these new technologies will improve the quality of audit activities through enhanced audit coverage, reduced activity times, and thus increase the quality of audit activities (Nonnenmacher et al., 2021). These new technologies are also used to facilitate change in the business processes of companies (Chiu et al., 2014). These changing business processes generate large amounts of data, making traditional audit methods obsolete. This has been proven by four major accounting firms as a result of their research. The ease of use of artificial intelligence technologies, especially in investment and external audit activities, has been stated (Sun & Vasarhelyi 2018).

The development of this field has been directly influenced by advancements in artificial intelligence technology and the broadening of the scope of internal audit functions. This increasing importance of internal audit has led to continuous change and development in the assessment of activities. The Institute of Internal Auditors (IIA) defines internal auditing as an autonomous and objective assurance and consulting activity. The main purpose of internal audit is to increase the added value of businesses and to maximize efficiency in operations. The IIA has redefined the procedures and methodologies for conducting fraud audits where there is concern about the

authenticity and legality of financial audits. Accordingly, developments in science, technology, and marketing in businesses are constantly transforming and require internal audit functions to be continuously integrated with information technology (Li et al., 2020). Digitalization has brought many challenges to for the field of internal audit. To address these challenges, internal audit activities are increasingly adopting data-driven methodologies. In particular, the use of artificial intelligence (AI) techniques, such as neural networks, is just one approach to address these challenges.

The extant literature on digital transformation and artificial intelligence (AI) emphasizes the profound impact of technology in various sectors, especially in internal audit processes. The evolution of health information management, as discussed below (Stanfill & Marc, 2019), illustrates how advances in AI and data management are reshaping professional roles in the healthcare sector. Their analysis underscores the imperative for health information management professionals to adapt to technological innovations, which in turn impacts internal audit practice by requiring a more technical skill set and a focus on data integrity. Building on this foundation, Velarde (2020) explores the broader impact of AI within the Fourth Industrial Revolution, suggesting that while AI offers opportunities for enhanced productivity and innovation, it also raises concerns about business change and ethical considerations. This dichotomy underscores the need for internal auditors to exercise vigilance with regard to the impact of AI technologies on organizational structures and workforce dynamics, particularly in relation to compliance and risk management.

Moreover, the research of Du et al. (2020) in the domain of digital forensics underscores the significance of artificial intelligence (AI) in enhancing investigative procedures, a notion that holds particular pertinence for the field of internal auditing as organizations progressively depend on technological solutions for the management and analysis of data. The challenges associated with training AI models and ensuring their accuracy are analogous to the auditing profession's need for reliable data and methodologies to assess compliance and operational effectiveness. (Colavizza et al., 2021) explore the transformation of archival practices through the application of AI, reflecting on how digitalization necessitates new workflows and the automation of recordkeeping. This transformation is of critical importance for internal auditors, who must navigate the complexities of managing vast amounts of digital data while ensuring that audit trails remain intact and verifiable. Furthermore, the discourse is enriched by the contributions of (Khaliq et al.,

2022), who explore the transformative impact of AI on software testing, a domain intimately connected to internal audit processes. Their findings underscore the imperative for auditors to comprehend both the capabilities and limitations of AI, as these technologies become integral to software development and deployment, thereby influencing risk assessment and control measures.

In the context of the construction industry, (Singh et al., 2023) identify the challenges and opportunities presented by AI technologies, emphasizing the need for a data-driven approach to decision-making. This viewpoint is of paramount importance for internal auditors, who are tasked with assessing the efficacy of AI implementations within the context of organizational frameworks and ensuring that such technologies are aligned with strategic objectives. Álvarez-Foronda et al. (2023) propose a model for integrating data analytics into internal audit processes, emphasizing the importance of aligning human resources with technological advancements. Their work addresses a critical gap in the literature by suggesting that internal auditors must embrace data analytics to enhance the efficiency and effectiveness of audit functions. Lastly, (Ranjbar et al., 2024) highlight the readiness of healthcare organizations to adopt AI, revealing significant gaps in infrastructure and workforce capabilities. The findings underscore the significance of a comprehensive digital transformation strategy to mitigate risks associated with AI, a necessity for internal auditors tasked with evaluating the integrity of organizational processes and the quality of care provided. Collectively, these articles offer a comprehensive overview of the evolving landscape of digital transformation and AI in the context of internal auditing, emphasizing the necessity for auditors to adapt to technological advancements while maintaining rigorous standards of accountability and transparency.

Digital Transformation and Audit

Auditing plays a vital role in ensuring the financial reliability of businesses, improving risk management processes, and assessing the effectiveness of internal control mechanisms (Albrecht et al., 2021). The adoption of AI-assisted auditing tools has received significant attention in recent years and has enabled reducing error rates, improving fraud detection, and maximizing risk analysis (Brown & Wong, 2023). Despite the significant changes that the audit profession has experienced over the past 150 years, the core principle of auditing remains constant: the provision of an independent third-party expert opinion on the reliability and fairness of financial information presented by management, as well as its compliance with applicable accounting standards and relevant legislation.

Consequently, auditing is regarded as an information-intensive set of activities involving the gathering, organization, processing, evaluation, and presentation of data with a view to generating a reliable audit opinion (decision). This final audit opinion is typically an amalgamation of the audit judgments (based on pieces of relevant, appropriate, adequate, and convincing audit evidence) on different aspects of the financial statement (Omoteso, 2012).

The assessment of an organization's activities in terms of their effectiveness in ensuring compliance with established regulations is the purpose of internal audits (Cular et al., 2020). The term "internal auditor" refers to an employee, typically located within the internal audit department of an organization, who is responsible for the execution of the internal audit function. The importance of internal audit as a function within organizations has been well documented (Jiang et al., 2020). The Institute of Internal Auditors was set up in the USA in 1941 and this has had a big effect on the field (Anderson et al., 2017). The focus on the interests of the internal audit function has moved from traditional auditing to a role that adds value, with the aim of helping management to achieve its strategic objectives (Mahyoro & Kasoga, 2021). Eining and Dorr (1991) did a study where they let 191 advanced accounting students try to make audit decisions to see if the company's internal control system was good enough. This investigation was conducted with the objective of examining the impact of an expert system (ES) on experiential knowledge acquisition. The study revealed that of the four groups to which the research subjects were classified for the exercise, participants allocated to the two expert system groups performed significantly better than the other two groups.

Big data analytics facilitates the analysis of large data sets by auditors, thereby eliminating the need for manual analysis methods. In contrast to the random sampling employed in traditional auditing methods, big data analytics enables the comprehensive examination of all data sets, facilitating the immediate detection of potential anomalies (Johnson & Smith, 2024). Consequently, the financial reliability of companies is enhanced by the earlier detection of errors and irregularities. Furthermore, audit processes supported by big data analytics have been shown to strengthen decision-making mechanisms based on more real-time and immediate analysis (Demir & Çelik, 2024).

In response to the rapid technological adoption within the auditing practice, the International Auditing and Assurance Standards Board (IAASB) formed a technology-working group to source feedback from various stakeholders (regulators, oversight bodies, accounting

firms, academics, and professional bodies, among others). The stakeholders observed that “data is being used differently than in past audits” with resultant “legal and regulatory challenges”. While the stakeholders did not regard the current standards as “broken,” there was a consensus that “practical guidance” was required to reflect the digital era in which the profession currently finds itself. Regulators called for a revision of standards in a “way that reflects current technology”.

Artificial Intelligence Audit

The field of auditing has historically lagged behind in terms of business adoption, yet it remains of paramount importance for partial automation, given its labor-intensive nature and the diversity of its decision structures. Several accounting firms have announced substantial investments in artificial intelligence. The role of AI in audit processes is known to have important functions in many activities such as the rapid detection of errors and fraud, risk assessment, and applications in predictive analytics. Compared to traditional audit methods that typically rely on sampling for data analysis, AI-enabled systems have the ability to perform more comprehensive assessments by processing entire data sets. This increases the accuracy of results and facilitates early detection of fraud and irregularities. The inclusion of AI in audit processes has been found to increase reliability and accuracy in operations by minimizing human errors.

Consequently, independent auditors must verify the outputs of AI-supported systems in audit processes (Kaya, 2023). AI-based audit systems offer great benefits in terms of speeding up audit processes, increasing accuracy, and managing risk more effectively. However, in order to use these technologies effectively, auditors need to be knowledgeable about artificial intelligence and constantly monitor the accuracy of the algorithms that develop these systems. With the increasing use of AI in the audit process in the future, it will become a critical requirement for auditors to adapt to the technology and develop solutions to ethical issues. The integration of artificial intelligence focused audit systems with big data analytics facilitates auditors to make more accurate predictions. In particular, machine learning enables the prediction of future risks by analyzing historical data. These technologies enable auditors to make risk-based decisions through instant analysis, allowing them to identify and assess risks more quickly and precisely. As a result, audit activities become more dynamic and audit quality improves. In addition to these advantages, some challenges arise in the integration of artificial intelligence technologies. For example, biases, inaccurate data analysis, and artificial intelligence making

decisions that may lead to ethical problems, and the reliability of audit processes are some of these challenges (Yılmaz & Korkmaz, 2022). When training artificial intelligence, it should be taken into account that these technologies may make erroneous decisions if the data is incomplete or inaccurate.

Benefits and Risks of Artificial Intelligence-Assisted Auditing

It is reasonable to expect that, over a reasonable period of time, AI for auditing will combine functions drawn from many disciplines and applications. These will realize the complementarity of many types of audit functions. These will enhance the competencies and effectiveness of the assurance function (Lassa, 2012; Zhu et al., 2014). For instance, the capacity for extensive database storage, the precision of structured data access, the agility of sensing and response, and the capability for rapid and precise computation with voluminous data sets are characteristics that, when integrated, give rise to a form of intelligence. The discourse surrounding the intelligence of a device is inherently defined by its capabilities, process performance, and economic considerations (Issa et al., 2016).

AI-enabled inspection systems increase the efficiency of inspection processes by providing speed and efficiency in data analysis. The use of AI-enabled systems has been found to provide many significant advantages, including reducing audit activity time and costs. The data collection and processing stages of traditional audit processes are accelerated by artificial intelligence technology, reducing the need for human labor and reducing audit costs. This leads to a more equitable reduction in audit costs for all business groups. Thus, businesses have more comprehensive and reliable audit services at lower costs (Mazars, 2024). In this context, regulatory bodies require AI-based audit systems to be designed in accordance with the principles of transparency and accountability (Yılmaz & Korkmaz, 2022).

There are many advantages to using artificial intelligence in audits. These include efficiency, effectiveness, consistency, structure for audit tasks and improved decision-making. Other advantages are making and communicating, enhanced staff training, and the development of expertise in novices. Decisions are also made more quickly. However, there are several potential issues associated with the utilization of artificial intelligence-based systems. These include the protraction of decision-making processes due to the exploration of a greater number of options, the substantial financial investment required for system construction, updating and maintenance, the impediment of novices' learning

processes, and the stagnation of novel system development. The professional judgment skills of auditors are also at risk, as are the tools themselves, which may be transferred to competitors or used against the auditor in a court of law for over-reliance on the evidence of decision aids (Omoteso, 2012). Changchit and Holsapple (2004) developed and evaluated a program that could be useful for evaluating internal control effectiveness.

Concerns have been raised regarding the necessity of the human factor in AI-enabled auditing. While auditors' professional experience, foresight, and ethical decision-making skills are of great importance in traditional audit processes, AI-based systems have the potential to cause problems by eliminating the human factor. In particular, in cases such as auditing or ethical assessment of complex financial transactions, AI-based systems may lead to incomplete or inaccurate results. Consequently, in lieu of AI-supported systems operating in an entirely autonomous manner, it is imperative to devise a collaborative framework that integrates them with human auditors to ensure the efficacy of the audit process. The assumption of a supportive role by AI-based systems, working in conjunction with auditors, is regarded as a pivotal prerequisite for mitigating the risks associated with the system and enhancing audit quality (Demir & Çelik, 2024). AI adoption has been demonstrated to enhance audit efficiency and optimize customer communication and service quality. Additionally, AI has the capacity to automate time-consuming and routine tasks. Beyond the evident advantages AI adoption confers on business, it facilitates the integration of new technologies within organizational structures (Karmańska, 2022).

Artificial Intelligence-Assisted Audit in the Future

At the same time, the people whose job it is to make the rules have noticed that technology is being used more and more in inspections and have asked for people's opinions about how this is affecting things. They have also highlighted the need for additional standards to regulate the use of technology (Fedyk et al., 2022). The development of AI-enabled auditing in the future is expected to be significantly influenced by the intensive use of continuous learning systems. In particular, the integration of advanced data techniques into systems used in audit processes is expected to play an important role in the detection of financial fraud and irregularities. The utilization of technology in the domain of audit can be predominantly categorized as falling under the umbrella of data analytics. This term, as explained by the AICPA (2017), includes "the science and art of finding and analyzing patterns, spotting unusual activity, and extracting other useful information in data related to the subject of an audit through analysis, modelling and

visualization for the purpose of planning or carrying out the audit. The utilization of audit data analytics has been demonstrated to engender a number of benefits, including an enhanced comprehension of the operations of an entity and the risks associated with them, an augmented capacity for the detection of fraud and misstatements, and optimized communication with those who are charged with the governance of the audited entities. A wide range of data analytics tools are used by firms at various levels in inspections.

However, the emergence of AI-based audit systems also introduces novel challenges concerning regulations and ethical principles. New standards will need to be established for the transparency and accountability of AI. Regulatory bodies will establish new policies to increase the reliability of AI systems by more strictly supervising their integration into audit processes (Harrison, 2024). Audit authorities, especially in Europe and the United States, are working on regulations for the transparency of AI-enabled audits and developing guidelines that will enable auditors to use these systems more reliably (Gibson & Patel, 2025). The capacity of artificial intelligence to detect fraud will be enhanced by continuously learning systems, which enable the identification of novel fraud methods over time (Smith & Garcia, 2025). Furthermore, as the utilization of large-scale data analysis within audit processes increases, the application of predictive analytics is anticipated to become more pervasive and adopted as a critical component in risk management (O'Reilly, 2024).

In the forthcoming years, it is anticipated that the field of AI-supported auditing will undergo rapid development and expansion in terms of its application. However, in this process, it is imperative for auditors to enhance their competencies and give due consideration to ethical standards when integrating technological innovations into audit practices. The effective management of artificial intelligence systems is anticipated to enhance reliability within the auditing profession and contribute to a more effective digital transformation process (Williams & Zhang, 2024). Consequently, the adaptation to technology, the strengthening of the human factor, and the maintenance of ethical principles will continue to be critical elements in the future of AI-enabled auditing.

Many researchers have studies on the future applications of artificial intelligence in auditing. Among these studies Davenport and Raphael (2017) present an illustration of Deloitte's "Cognitive Audit" strategy, which encompasses the standardization of the audit process, the subsequent digitization of these standardized processes, the automation of the digitized tasks, the employment of advanced analytics

in the audit, and the utilization of cognitive (augmented) technology to transform the audit. Although AI has become more important in audits, Chan and Vasarhelyi (2011) said that its use might be limited to for complex decisions that need professional judgment, like checking management estimates. But they also said that advances in AI might make it possible to automate complex tasks in the future. Etheridge et al. (2000) look at the different AI techniques that could be used to check if a company is financially healthy. The paper shows how an AI can learn the links between different financial ratios to work out a company's financial health.

The present study finds congruence with the theoretical propositions advanced by Huang and Rust (2018) in their examination of the advent of AI within the service industry. Their theoretical framework posits that the replacement of jobs by AI occurs principally at the task level rather than the job level and that tasks of lower intellectual complexity, i.e., those that are more readily executable by AI, are the first to be replaced. The transition from human labor to AI-assisted tasks is characterized as an augmentation stage, leading to the eventual replacement of all tasks by the technology. In an ideal scenario, the auditor would possess knowledge regarding the specific AI artifact in operation, categorized as assisted, augmented, or autonomous, along with an understanding of its respective benefits and risks. The auditor would not relinquish their responsibility to the technology. Rather, they would regard the technology as a complement to their professional judgment, maintaining an appropriate level of skepticism.

The integration of Artificial Intelligence (AI) into auditing processes represents a rapidly evolving field that has garnered significant attention in recent years. A comprehensive review of the extant literature on this subject reveals an intricate interplay between technological advancements, ethical considerations, and practical implementations. Smith (2018) underscores the transformative capacity of data analytics in the context of auditing, noting that prominent accounting firms, collectively known as the "Big 4," are progressively adapting to technological advancements by leveraging data analytics to enhance the quality of their audits. Nevertheless, the extent to which auditors are prepared to adopt these tools, and the implications of such adoption for audit integrity, remains an open question. This seminal work provides a foundational understanding of the broader implications of AI in auditing. Subsequent studies have sought to provide further contextualization to this discussion by examining the ethical dimensions of AI technologies. The authors delineate between narrow and general AI, underscoring the need for

ethical standards to guide AI development and deployment. This prompts critical inquiries into the accountability and trustworthiness of AI systems, which are especially salient in the context of auditing, where decisions can bear substantial financial and ethical consequences. Belle (2019) contributes to this discourse by addressing the challenges of interpretability and accountability in AI decision-making. The capacity to comprehend AI-driven decisions is imperative for auditors, who are charged with ensuring compliance and ethical standards in their practices. This concern is echoed in the subsequent articles, which explore various applications of AI and their implications for the auditing profession.

The exploration of artificial intelligence (AI) in creative fields, as discussed by Cetinic and She (2021), offers a unique perspective on the versatility of AI technologies. While the primary focus of their study is on the artistic domain, the fundamental tenets of AI's capacity for pattern recognition and creative generation can be extrapolated to auditing, particularly in the context of anomaly detection and fraud prevention. In a similar vein, Colavizza et al. (2021) explore the socio-technical dimensions of AI, underscoring the imperative for equitable and inclusive practices in the integration of AI technologies. Their insights are particularly relevant to the field of auditing, where the ethical use of AI can help address deficiencies in traditional practices and promote a more comprehensive understanding of data. In a similar vein, Bubinger and Dinneen (2021) have directed their attention to the ethical considerations inherent in the application of AI within the context of libraries, a domain that finds notable parallels with the auditing environment. They contend that it is imperative to evaluate and mitigate the ethical risks associated with AI systems, a theme that is critical for auditors tasked with ensuring ethical compliance in their practices.

(Khaliq et al. (2022) underscore the substantial impact of AI on software testing, demonstrating how AI tools can augment efficiency and effectiveness. This is particularly salient for auditors, who are tasked with navigating increasingly intricate software environments and ensuring that auditing processes keep pace with technological advancements. The ethical risks associated with AI decision-making are further examined by Guan et al. (2022), who emphasize the potential for technology to conflict with human interests. This discourse is pivotal for auditors as they deliberate on the ethical implications of AI-driven decisions within their practices. Álvarez-Foronda et al. (2023) propose a model for implementing data analytics in internal audit processes, addressing the relationship between technology and human resources. Their work

underscores the necessity for auditors to adapt to new methodologies incorporating AI tools, enhancing the effectiveness of audit functions.

Muley et al. (2023) concentrate on the accountability frameworks necessary for AI in healthcare, which can inform similar frameworks in auditing. The call for clear regulations and stakeholder involvement is consistent with the need for robust auditing standards in the face of AI's evolving landscape. (Manheim et al. (2024) advocate for the establishment of AI Audit Standards Boards to address the ethical and societal risks associated with AI systems. This proposal underscores the critical need for ongoing governance and adaptation of auditing practices to ensure their continued relevance in an era of rapid technological change. Finally, Fabiano et al. (2024) explore the potential of AI tools to optimize the systematic review process, emphasizing the importance of maintaining human oversight. This notion of supplementing human expertise with AI capabilities is crucial for auditors as they navigate the complexities of modern auditing practices. In sum, the articles under consideration herein provide a comprehensive overview of the intersection between AI and modern auditing practices

Conclusion and Recommendations

The complexity and repeatability of audit engagements and the necessity of professional assessments have created an imperative for the audit profession to adopt new technologies. Artificial intelligence technologies and other technologies have started to be used in various sectors such as transportation, health, and security. In particular, leading accounting firms utilize these technologies in their audit processes.

With the emergence of artificial intelligence and digital transformation, internal audit practices have been differentiated and changed. Computer-aided artificial intelligence technology techniques have started to be used instead of traditional audit techniques. Thus, solutions have been found to the slow and sometimes inadequate activities in traditional audit techniques. However, the training of professionals is important for the correct and complete use of these technologies. Professionals who are not sufficiently trained will misuse artificial intelligence technologies and even cause incomplete and inaccurate audit activities due to this situation. Therefore, in order to use these new technologies effectively, auditors need to increase their technical knowledge and adapt to digitalization.

The results of the study show that it is certain that all computer-based technologies, especially artificial intelligence technologies, have created a radical change in the auditing profession. In particular, fast and less costly

audit activities are seen as an advantage for businesses. In addition, it has become necessary for auditors to continuously improve themselves for the use of these technologies. It has become a necessity to use technology-based techniques instead of traditional audit techniques in both audit activities and internal audit activities. Thus, the added value and audit quality provided by internal audit and independent audit will increase.

Etik Kurul Onayı: Çalışmada etik kurul onayını almasını gerektirecek herhangi bir araştırma, deney vs. bulunmamaktadır.

Katılımcı Onamı: Çalışmada anket veya denek kullanımı olmamıştır.

Hakem Değerlendirmesi: Dış bağımsız.

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