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Artificial Intelligence and Philosophy of Humanism in Auditor Perceptions

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A B S T R A C T

This study aims to interpret the humanistic thinking of Chinese philosopher Confucius on the activity of integrating Artificial Intelligence (AI) into the process of auditing financial statements. The qualitative-interpretive method was used for research purposes through in-depth interview techniques which were addressed to informants from audit firms that had used AI. The validity of the information was tested using triangulation of data sources from different audit firm informants. The main findings show that as humans who have cognitive, moral and ethical abilities, auditors can collaborate with AI without worrying that the existence of this profession will be completely replaced by AI. However, excessive integration and tend to rely on auditors should be aware of so that high-tech assisted audit objectives such as AI work in harmony without eliminating the auditor's humanism such as skepticism and professional judgment that AI does not have. Social and ethical issues are challenges in the use of AI and solutions will continue to be sought. Therefore, the auditor always maintains critical thinking, especially on the elements contained in AI technology, namely system predictability, dependability, reliability, robustness, understanding, explanation of intent, usability, and user familiarity with AI technology.

A B S T R A K

Penelitian ini bertujuan memaknai pemikiran humanisme dari Konfusius ahli filsafat Tionghoa atas aktifitas mengintegrasikan Artificial Intelligence (AI) ke dalam proses audit laporan keuangan. Metode kualitatif-interpretif digunakan untuk tujuan penelitian melalui teknik wawancara mendalam yang ditujukan kepada informan dari kantor audit yang telah menggunakan AI. Keabsahan informasi diuji dengan menggunakan triangulasi sumber data dari informan KAP yang berbeda. Temuan utama menunjukkan bahwa sebagai manusia yang memiliki kemampuan kognitif, moral dan etika, auditor dapat berkolaborasi dengan AI tanpa khawatir keberadaan profesi ini akan digantikan sepenuhnya oleh AI. Akan tetapi, Integrasi yang berlebihan dan cenderung mengandalkan patut diwaspadai oleh auditor agar tujuan audit berbantuan teknologi tinggi seperti AI bekerja selaras tanpa menghilangkan sisi humanisme auditor seperti skeptisisme dan judgement profesional yang tidak dimiliki oleh AI. Masalah sosial dan etika menjadi tantangan dalam penggunaan AI dan solusi akan terus dicari. Oleh karena itu, auditor selalu memelihara pemikiran kritisnya terutama pada unsur-unsur yang terdapat dalam teknologi AI yaitu prediktabilitas sistem, ketergantungan, keandalan, ketahanan, pemahaman, penjelasan maksud, kegunaan, dan keakraban pengguna dengan teknologi AI.

1. INTRODUCTION

Forty years ago, each of the 'Big 8' firms had their individual IT audit software. Nowadays, they have transitioned to using ACL and IDEA. Similarly, large audit firms have developed Robotic Process Automation (RPA), which can potentially disrupt the traditional audit model. RPA, with its capacity to automate repetitive, rule-based tasks, is poised to revolutionize the role of auditors. It will replace mundane activities, allowing auditors to focus on higher-level cognitive functions, ultimately enhancing the quality of audits (Moffitt et al., 2018). AI-powered computers integrated into software systems can enhance efficiency

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and streamline human tasks by handling routine and repetitive activities. In computer science, machine intelligence is characterized as a flexible, rational agent capable of perceiving its environment and taking actions to maximize its chances of achieving a goal. In simpler terms, "artificial intelligence" refers to a machine's ability to replicate cognitive functions associated with human thinking, such as learning and problem-solving. According to a study by Issa et al. (2016), the world's top four audit firms are keenly aware of the potential and development of Artificial Intelligence (AI). Jon Raphael, Chief Innovation Officer at Deloitte Touche Tohmatsu Limited (Deloitte), envisions a smarter, more insightful, and efficient audit process through the effective application of cognitive technology. He sees it as the future of the auditing profession, one that is well-deserved by users of financial reports (Raphael, 2015). In March 2016, KPMG announced its collaboration with IBM Watson to integrate cognitive computing technologies into its professional services offerings. The concept is for auditors to use Watson for the analysis of vast volumes of financial data to identify irregularities. For instance, by augmenting human skills and judgment through the application of cognitive technology in assessing a bank's commercial mortgage loan portfolio, auditors can gain a more detailed and comprehensive understanding of a bank's credit files, thereby identifying potential audit exceptions based on loan ratings.

Simultaneously, Deloitte partnered with Kira Systems Inc., a contract analysis platform, to develop cognitive models capable of scrutinizing extensive sets of intricate documents. These models extract and organize textual information to facilitate more effective analysis. They also aid auditors in the demanding task of document review (Raphael, 2015). Likewise, other prominent accounting firms have demonstrated a keen interest in AI. Ernst & Young (EY) has been offering software that models human behavior since 2015, while PricewaterhouseCoopers incorporates DeNovo-like AI techniques into its operations. These tools assist analysts and clients in assessing the potential for disruption and the future utilization of specific financial technologies. With numerous AI initiatives underway in the industry and major accounting firms, it is crucial to weigh the costs and benefits associated with these endeavors. The same observation is echoed by the article's author (Issa et al., 2016). Several leading CPA firms have begun reevaluating their automation processes, integrating advanced automation technology with analytics and cognitive technology (see Figure 1).

Emerging technologies hold the potential for swifter, more cost-effective, and highly precise analysis of extensive datasets. This has led to an unparalleled adoption of these technologies across various business domains. Understandably, auditors are progressively turning to these emerging technologies, including sophisticated Artificial Intelligence (AI) systems driven by intricate algorithms. Therein lies the challenge that the role of humans who work as auditors in the future will be replaced by Audit Automation such as Robotic Process Automation, Blockchain Systems, Machine Learning, and Artificial Intelligence.

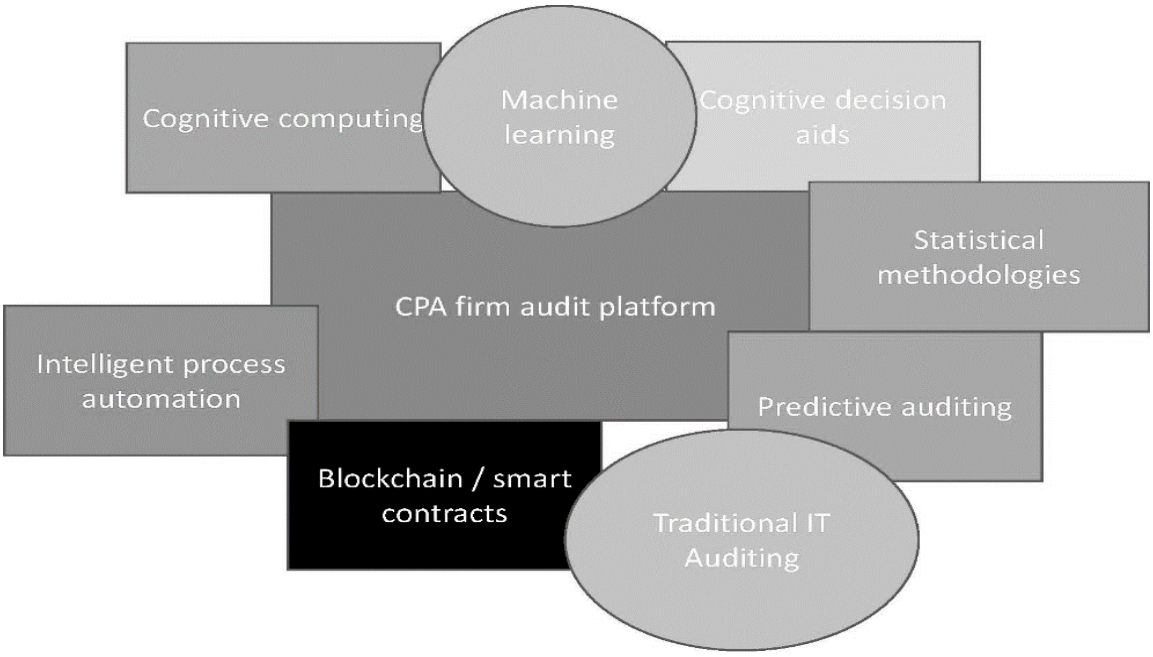

Figure 1. Schematic for the Component Elements of Artificial Intelligence (Source: Issa et al., 2016)

Previous literature has explored more about the use and use of this man-made high technology. However, there has not been any empirical study that explores the meaning of the existence of this technology in the context of the sustainability of the humanistic auditor profession using a Confucian approach, namely human values (Ju Chio), accepting nature as human beings who have self-limitations (T'ien), and the concept of harmonization (Yin Yang) guided by morals and ethics in life. Exploring the humanistic awareness of professional auditors is relevant to determine their readiness to keep pace with the progress of human civilization in science and technology.

2. THEORETICAL FRAMEWORK AND PROPOSITION

The results of the previous study (Satyawan et al., 2021) by taking the Covid-19 pandemic event in early 2020 were perceived by auditors from international network audit firms who were informants by explaining that the Covid-19 pandemic was an event that accelerated the role of technology in auditing, carry out an investment strategy in adaptive and skilled human resources in the use of technology supporting audit work, which can simplify, streamline and improve the quality of auditors. It was also stated that the use of technology can reduce audit limitations during a pandemic, "another lesson" perceived by auditors is awareness of the importance of transforming behavior or habits using high-tech digital audit methods and techniques (Satyawan et al., 2021).

It is the auditor's nature to be skeptical, work according to a code of ethics, and use professional judgment to deal with potential uncertainty risks in their audit assignments. The challenges the auditor faces in building mindsets and emotions as individuals in producing professional judgment in every decision that must be made are not only relying on or relying on static or repetitive situations. This condition is not found in AI, designed to follow a rigid algorithm without an element of emotion currently possessed by humans. Because of these problems, this raises a question in this study: to what extent is it explained by the auditor who is a direct participant in the use of AI technology to get a solution by combining the "mindset" of the AI system algorithm with Confucian thinking that is closely related to discussions of humanity, so that the teachings are often Confucianism is classified into the philosophy of humanism (Heriyanti, 2021). This research focuses on using a Confucian approach that is relevant to achieving conditions of change in the future as a result of efforts to fulfill human needs to achieve these virtues, where the progress of human civilization cannot be separated from the fruit of human thought through science and technology, outside the context of human values which are also reflected in the theology of various religions in the world.

According to the study (Fadli, 2021), philosophy and its derivatives, namely science and knowledge, are urgently needed amid the rapid development of digital technology in the Industrial Revolution 4.0 era without losing the essence and purpose of both. At this time, heterogeneous groups of people also raise complex problems related to human perspectives on the use of technology in every aspect of life, including the work of auditors, which will later be able to change the mindset of humans ("auditors") to patterns of life that are more sophisticated with technology such as Artificial Intelligence, Robotics, Deep Learning, Expert Systems, and others. Science is the axiological foundation for directing and controlling technological developments to produce a positive impact for the purpose of harmony, peace, and the need to make it easier for humans to achieve the virtues that were their original goals without clashing or contradicting philosophy with science and technology because both are the fruit of the development of human civilization itself. Likewise, it was stated in a study conducted by Puthukulam et al. (2021) that technology is an inevitable part of business and human life.

Proposition 1: It is positive to integrate AI into process auditing from an epistemological perspective
Proposition 2: It is positive to integrate AI into process auditing from an axiological perspective
Proposition 3: Why collaborate on AI technology within the framework of humanism

3. RESEARCH METHOD

This study uses a qualitative approach with an interpretive paradigm that aims to understand more deeply the nature and values of integrating AI into the current audit process, as well as the arguments built about the social meaning of the unique collaboration between AI and human intelligence. Of course, in the context of the auditor's work environment. To explore an in-depth understanding of this matter, the criteria for targeted informants are based on the following criteria (see Table 1): 1. The Key Person / Informant is a Partner level auditor and/or Audit Manager in his public accounting firm.

Table 1. List of Names and Positions in Audit Firms from Key Person Informants

Key Person (Initials)	Audit Firm	Auditor Position Level
ISH	One-Tier	Partner
AK	Second-Tier	Managing Partner
YWB	Second-Tier	Partner

This criterion has the basic consideration that the person in charge of organizational quality is determined by key personnel or referred to as the tone at the top. IFAC (2007) stated that the environment in which the audit team works significantly influences the mindset of its personnel and how they carry out their responsibilities. Good work culture and leadership within the company are the main drivers of audit quality to create a high-quality environment where every aspect of the audit process is invested and rewarded; and 2. One-tier category audit firms such as E&Y, PwC, KPMG, Deloitte, and Second-Tier Foreign Affiliated Audit Firms outside of BIG4, which are well known through public access from the audit firm's website and private access by directly confirming to informants about the utilization of AI resources (high technology audit) to support the audit process. To fulfill the clearance ethics of the subject of the informant, this study used the initials of the name of the informant and the audit firm after obtaining verbal approval from the informant to process and present the data obtained. Data collection was carried out for 20 days in November 2022 with a target of three key informants, carried out repeatedly for three interviews each on different days and times, both offline and online. The in-depth interview technique uses semi-structured questions to obtain specific and in-depth information. The data obtained will be processed for validity using the data synthesis method or triangulation by comparing the observed data with the data from interviews and different informants.

In-depth interviews were conducted periodically for each informant between 2-4 times from August to October 2022 via the media link Zoom, WhatsApp, and phone. Interviews with key informants were conducted with the concept of friendship or colleagues from public accountants who are members of the same professional association, namely IAPI. It is necessary to create comfort and understanding from the informant subject. The researcher conducted inductive reasoning by reading articles, websites, online news, YouTube, and other documentation from the audit firm where the subject informant works. The purpose is to understand the audit firm's environment in using high technology in the audit process, make specific observations, and then draw broad conclusions based on these observations. The Confucian approach, namely human values (Ju Chio), accepting nature as a human being who has self-limitations (T'ien), and the concept of harmonization (Yin Yang) guided by morals and ethics in life are used as an analytical framework in this study.

4. DATA ANALYSIS AND DISCUSSION

4.1. Epistemological Perspective of AI Technology Integration in the Audit Process.

Using emerging auditing technologies in the auditing process can automate many routine, repetitive tasks and help perform analytical reviews on large data sets, thereby increasing audit quality and efficiency (Carpenter & McGregor, 2020; Etheridge et al., 2000). Mr. ISH is a senior partner of a one-tier audit firm worldwide. Information systems and audit innovation topics have caught Mr. ISH's attention. In the initial interview regarding the subject of using AI in the audit process, he started the conversation by saying that the widespread use of technology automation in world business operations has triggered audit firms in the world, especially one-tier and second-tier, to adopt technology as a tool in the audit process. The response from the main person in charge of the audit firm is also due to the need for an audit market, the majority of which are go public companies listed on the stock exchange and also the financial support owned by the audit firm is relatively adequate for greater investment in the development of innovation and audit technology assisted by computer software. This includes financing the improvement of auditor competence to be able to use the high-tech audit equipment. The following is Mr. ISH's statement regarding the meaning of AI……..

> "…Artificial Intelligence is a computer system that performs tasks requiring human intelligence. It emphasizes the aspect of intelligence that is added to the system so that it can improve the accuracy of data analysis, to the speed of processing…"

Mr. AK and YWB mentioned a similar understanding of AI; both are partners of second-tier audit firms that have implemented AI technology auditing applications….the following is an explanation…

> "…Artificial Intelligence is a combination of hardware and software that works like the human brain, which can evaluate, decide, and carry out complex assessment processes based on available data. AI-powered computer software systems can improve performance and make life easier for humans who do routine and repetitive work…"

Mr. ISH added that the COVID-19 pandemic has contributed to the acceleration and increase in the use of AI technology in the audit process….following the explanation…

> "…a contingent factor that has resulted in an increase in the use of AI in the audit process is the Covid-19 pandemic; previously, we have also used our audit firm's AI-based audit software to handle the use of repetitive procedures or rules….currently, the software development team has carried out innovation to deal with obstacles in the audit work process the impact of the social-physical distancing policy, causing narrow space for auditors to gather and test the audit evidence needed from clients….the point is our audit firm is ready to adapt to uncertain situations using AI technology…."

In line with the statement from Mr. ISH, Mr. YWB also said that the COVID-19 pandemic has changed the behavior and mindset of auditors regarding the required adaptive abilities,...following the explanation...

> "…the impact of the Covid-19 pandemic has caused us, as part of those responsible for the quality of audit work at our audit firm, to have taken strategic steps to further increase the use of technology in audits. Such as Process Automation Robots that can help auditors automate repetitive and manual rule-based tasks…. there is also Deep Learning-based Software that has the ability to identify key risks and information in audit reports. Essentially, auditors who use them obtain information related to governance, risk management, and auditee compliance….in the end, we agree that technology is part of the audit process and quality improvement…"

Mr. AK also said that his audit firm has invested more at this time in developing audit equipment in the form of hardware and software to help the audit team carry out repetitive and manual work that has completely become automated; the following is his statement...

> "...our audit firm in Indonesia has benefited a lot from partnering with foreign affiliated audit firms...since the outbreak of Covid-19, we have received technical assistant support for auditor staff to increase their knowledge and skills in using these AI-based audit software..."

The statements by Mr. ISH, AK, and YWB align with the findings of research conducted by Puthukulam et al. (2021), which established a robust positive correlation between AI-assisted auditing practices and professional skepticism as well as judgment. The escalating investment by audit firms in Information Technology (IT) has yielded favorable outcomes for audit performance. IT has mitigated risks, streamlined audit processes, and notably facilitated the handling of extensive data sets, resulting in significant time savings. The utilization of AI not only enables the examination of all financial transactions within a business but also enhances audit efficiency. AI, a composite of hardware and software, emulates human cognitive processes to evaluate and make intricate judgments based on available data (Lombardi, 2012).

The core objective of AI is to emulate human natural intelligence in computers, enabling them to think intelligently akin to humans (Sutikno et al., 2011). AI-driven computer software systems enhance performance and simplify tasks for humans by executing routine transactions (Puthukulam et al., 2021). This emerging technology, which seeks to replicate human cognitive and judgmental abilities, offers a competitive edge to its adopters (Munoko et al., 2020). Consequently, all of the Big 4 Audit Firms have reported on their utilization of AI and have outlined plans for its ongoing implementation in various areas, including audit planning, risk assessment, transaction testing, analytics, and the preparation of audit working papers, among other applications. In their research, Sereati et al. (2020) introduced processors with artificial cognitive capabilities, a development that emerged in 2016. These processors were designed based on the Knowledge Growth System (KGS) algorithm, a novel AI concept centered on emulating the knowledge assimilation process in the human brain following the acquisition of new information from sensory inputs. KGS represents a pivotal approach within the emerging field of Cognitive Artificial Intelligence (CAI).

4.2. Axiological Perspective of AI Technology Integration in the Audit Process

AI technology allows auditors to work and analyze large volumes of financial data/transactions. Instead of just testing a sample, auditors can test 100% of company transactions. Thus, developing new technologies, such as AI, provides auditors with a deeper insight into company operations to understand and assess potential risks in each audit area. Auditors must be familiar with these new and updated technologies and be up to date with them so that they can improve audit efficiency (Puthukulam et al., 2021). Exploring the next topic of discussion with Mr. ISH, AK, and YWB is how AI can replace some of the tasks that are usually performed by auditors in the audit process without causing a deficiency in quality and ignoring the auditor's role of responsibility as a human being who has professional behavior where elements of morals and ethics are the main value of the policy that all auditors guide. The following is the view of Mr. ISH.…

> "...Artificial Intelligence may for some parties raise pros and cons, this is natural... the trigger can be due to our lack of understanding that the future of the auditor profession is agile with the integration of technology..."

The meaning of the phrase agile with technology integration in the context of the audit process is explained by Mr. ISH as a behavior that encourages individuals to move quickly and be adaptive to the dynamics and changes in the auditor ecosystem.

> "…in addition to changes in the skills and capacity of the auditors, changes in behavior and mindset are important factors…"

In line with the statement above, Mr. YWB added that the value factor to the stakeholders is presented when it is hoped that the quality of the audit profession today and in the future will increase with the use of AI-based technology, along with an explanation.…

> "…the existence of this profession depends on our understanding that the future of audit is determined by the audit quality that we offer to stakeholders…an audit will add value if it can provide information about the risks faced by entities…able to detect risk signals…for that our limitations as human beings are for several parts can be replaced by technology that supports the audit process…"

Mr. YWB further explored more deeply what it means for technology to support the audit process by replacing the limitations of auditors as humans…following the explanation.…

> "...as humans, sometimes we are not careful, due to physical fatigue, sometimes it is also caused by overthinking from the problems of individuals who are carried away at work, even though work professionalism is a quality priority, this situation cannot be ignored as a factor that interferes with the achievement of audit quality..the role AI is getting more sophisticated to help humans solve problems..in the end, there will be jobs that are replaced or taken over by AI…manual, algorithmic or patterned, repetitive work is predicted to be replaced by AI…"

However, there are still concerns that AI, in its development of capabilities, will rapidly approach human intelligence abilities, not only cognitive but empathic, as is known from a report by the McKinsey Global Institute. Currently, AI has been used in the automotive, education, and health industries. An explanation of the anxiety factor is revealed through the statement of Mr. AK...

> "…humans are worried that AI and changes in human behavior will replace their work roles to trust AI more than human experts or professionals…"

Furthermore, Mr. AK and ISH also reminded us of the worrying side of using AI in the audit process... the following are statements from both of them...

> "…the role of AI in the audit process can certainly be seen from two sides, apart from the benefits it generates in automating the activity of implementing audit procedures, where samples of audit evidence are collected, analyzed on a larger scale, and all data is tested in real-time…another side that still raises doubts for auditors on the use of AI, namely ethical and social aspects, as far as I know, there is no practical guide yet…"

Adding to this statement, Mr. AK, in the audit planning stage, always utilizes consulting activities that involve all members of the audit engagement team to coordinate and increase understanding of the use of AI-based audit software to avoid mistakes in generating professional judgment. The following is his statement...

> "...if the auditor uses AI in the audit process, but does not understand the reasons for his decision or action, this situation becomes prone to causing errors in the audit...as an illustration when the auditor makes a decision to select a sample and assess risk using the output from AI, however, the auditor does not know "mindsets" or programming algorithms that form the basis of the output produced by AI…or even more extreme, the behavior of auditors who rely too much on AI without emphasizing their professional caution…this endangers the auditor profession if later it is wrong to conclude the audit results…"

In its current development, it is feared that AI cannot be controlled or guessed by humans. On the other hand, the excessive use of AI in the audit process can lead to new mindsets within the auditor, which ultimately form behaviors or actions that have the potential to interfere with professional prudence as professional auditors. It is important to find answers to how auditors can rely on AI-based technology as a tool to assist the audit process without disturbing their professional care as stipulated in Auditing Standard 200 (Institut Akuntan Publik Indonesia (IAPI), 2021). Statements from key informants are in line with several studies that found concerns about the auditor profession regarding the use of AI in the absence of ethical and social guidelines developed by those in charge of quality in audit firms and the Auditor Professional Association (Kirkpatrick, 2016; Munoko et al., 2020; Parasuraman & Manzey, 2010; Samek et al., 2017; Wright, 2011).

Parasuraman & Manzey (2010) said that if AI is a "Black Box," it may be difficult for auditors using AI to justify the choice of a particular sample or process for audit testing purposes. In this situation, the auditor may exhibit automation bias and complacency, i.e., be less skeptical and believe in the accuracy of AI systems (Munoko et al., 2020; Wright, 2011). The results of his research explain that AI used to assist decision-making demonstrates analytical intelligence, which allows AI systems to learn from data and process information for problem-solving. This computational complexity demonstrates AI's significant capabilities at impossible speeds for humans. Thus, algorithm or AI complexity can result in a lack of transparency, a "precondition for public trust and confidence" regarding AI decision-making processes (e.g., what inputs are considered and why AI recommends certain actions). Lack of transparency risks undermining support for or interest in these AI-based technologies.

Kirkpatrick (2016) also found sentiment from AI developers that those who develop these AI systems are concerned that technical understanding is limited, so current regulations can easily have more "harmful" impacts than beneficial. The complexity of AI prevents regulators from getting to the bottom of it. If AI is too complex to understand, the next question that arises is how AI can be regulated effectively and controlled. In addition to issues related to social problems, as revealed by previous researchers, there are also ethical issues which were revealed from research results (Lu et al., 2018) observing that AI only carries out programs developed by humans, AI is a "doer" rather than a "thinker." The current level of intelligence exhibited by AI systems is considered "weak," where AI can perform (and possibly outperform) humans in a particular task but lacks the general characteristics of the human brain such as "self-understanding, self-control, self-awareness and self-motivation," this can result in violations of ethical principles such as security and non-maleficence. Therefore, considering this human AI, both AI developers and users will be able to determine their capabilities and limitations. Through this process, ethical issues that may arise from the purpose of using AI become clearer and more accountable (Munoko et al., 2020)(Pabubung, 2021). The following in **Figure 2** shows the ethical principles of risk with AI.

Ethical issues were identified through bibliometric analysis, the use of technology checklists (Wright, 2011), and the code of ethics for the auditing profession. Ethical and moral issues were identified through bibliometric analysis, the use of technology checklists (Wright, 2011), as well as the existence of a code of ethics for the audit profession as part of governance.

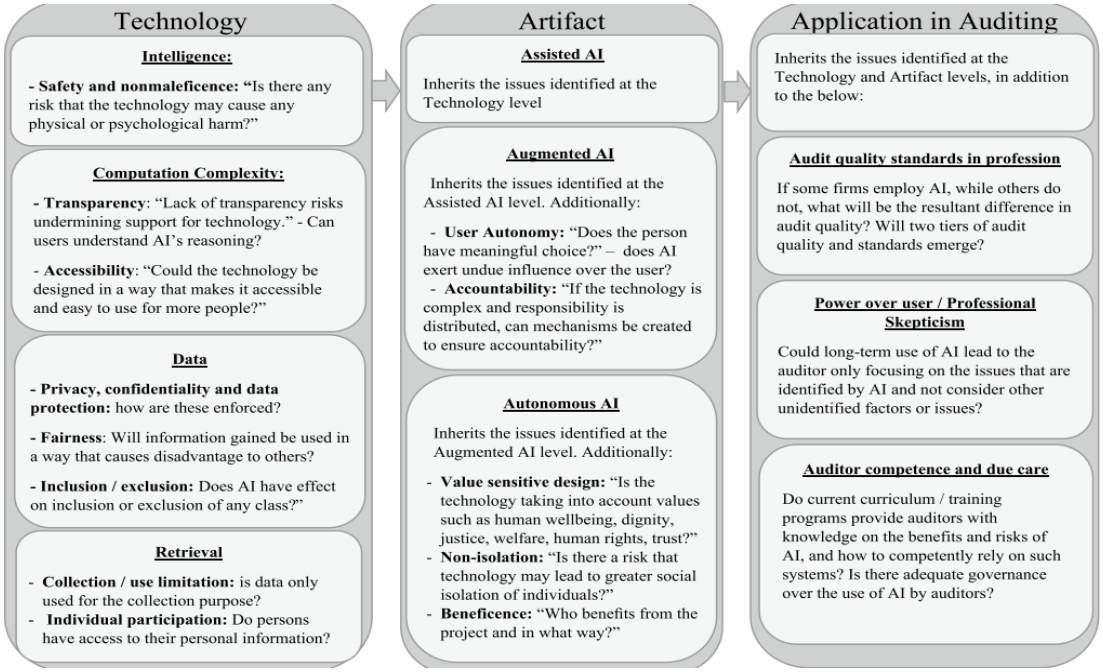

Figure 2. The ethical principles of risk with AI

It is what drives human existence within the framework of Confucian thought, which lies in the aspects of self-development or self-civilization (Ju Chio), moral example (T'ien), and the ability to make decisions that are in harmony between the dark (Yin) and light (Yang) sides of using AI is in the process of auditing. His ethics, then, is more of a benevolent ethic. This humanistic tendency will show that humans are the center of everything and that human abilities need to be developed in such a way that through their rational, creative power, they will be able to produce useful things to improve the quality of human life itself. The problems humans face are increasingly complex due to the progress of time. The progress of the times sometimes makes people forget the values of humanism (Heriyanti, 2021).

4.3. AI Technology Collaboration Within the Framework of Humanism

The subject of further exploration of meaning leads to the extent to which the existence of AI and humanism Auditors can work together to support each other to produce quality and increasing audits and make the auditor's role more humane by focusing on other aspects outside of technical, repetitive and administrative activities to work added value. In auditing, if the data that is known and accessed by the auditor increases, the auditor's ability to analyze will be more comprehensive. As stated by Mr. ISH, a harmonious collaboration between AI and auditors will be created while still being careful to maintain the professionalism of auditors without putting aside ethical and social issues from the use of AI. The following statement...

> "…AI is an application that is not necessarily perfect when it comes out. It needs to be continuously developed, its ability to provide analysis results for the entire population of data and can identify data outliers or exceptions…however its use allows auditors to work better and smarter, AI helps optimize time, the auditor focuses more on providing his professional judgment from a wider and deeper collection of data and documents…has more loose time to ask questions better and interacts more with the Board of Commissioners, Audit Committee, and Board of Directors of his audit client company…this is form of added value from the audit process…"

Furthermore, the statements of Mr. ISH and Mr. YWB have similarities in how the AI system and auditors should complement each other...the following are the statements...

> "... AI does things that are manual and repetitive in nature. AI work does not stand alone; it requires human involvement to accompany the work that AI takes over. For example, events outside of data programmed into the AI system it is different from the

> situation in the field, in there are spaces where humans can intervene in the role of AI to anticipate risks that are not expected to occur if auditors rely too much on AI…"

> "…Humans are social creatures where between humans need touches or psychological elements, such as a sense of empathy which AI currently does not have that thing…audit clients of auditors as fellow human beings need forms of humane communication so that the role of humans is not obsolete then keep learning to improve skills, think critically, increase creativity and innovation…those are human strengths that AI doesn't have…"

In response to the rapid adaptation of technology in auditing practice, the International Auditing and Assurance Standards Board (IAASB) established a technology working group and has frequently conducted focus group discussions to obtain feedback from various stakeholders (among others, regulators, oversight bodies, audit firms, academics), and related professional associations), the results are formulated as practical guidelines that help the auditor profession work in this digital era and standard revisions to be more in line with current technological developments. This explanation is in line with Mr. AK's opinion that…

> "...the trust factor in the existence of AI in assisting the audit process is very important for auditors to increase confidence in their work following auditing standards and the professional code of ethics..."

The opinion of the key person informant is in line with the results of research conducted by (Bisantz & Seong, 2000, Huang & Vasarhelyi, 2019), which revealed that individuals who use AI need to believe that AI will play a supporting role. The literature review he conducted informed about the factors of the established system that influence one's trust in decision aids. These factors include system predictability, dependability, reliability, robustness, understanding, explanation of intentions, usability, and user familiarity. Then, **Figure 3** represents about the impact of collaborative AI technology and humanism in the audit process. The researcher proposes the formulation of a constructive collaborative mindset among the roles of AI as follows: The Figure 3 illustrates how AI technology supports auditors in making subjective assessments regarding the selection of accounts and transactions to scrutinize, determining which procedures to execute, evaluating the robustness of internal controls, assessing the potential for fraud, appraising the risk of a going concern, and ultimately, formulating an overall audit opinion. Auditors are optimistic about the potential for this technology to enhance their performance. This improvement may encompass heightened precision and objectivity in auditor judgments, increased efficiency and productivity, and more seamless collaboration and transparency (Meredith et al., 2020; Barclay et al., 2021; Chen et al., 2009).

In case study research for professionals other than auditors, as conducted by Benhadj et al. (2019), the study assessed how the classroom environment can be influenced by integrating ClassDojo, a free online platform that helps enhance the learning experience. Common sense dictates that new technology can inject new life into classroom life, making students active, motivated, and re-engaged in classroom practices. Likewise, with the auditor profession in an era of rapidly developing technological advances, the old manual, conventional way of working is less attractive to the millennial generation of auditors who are always in

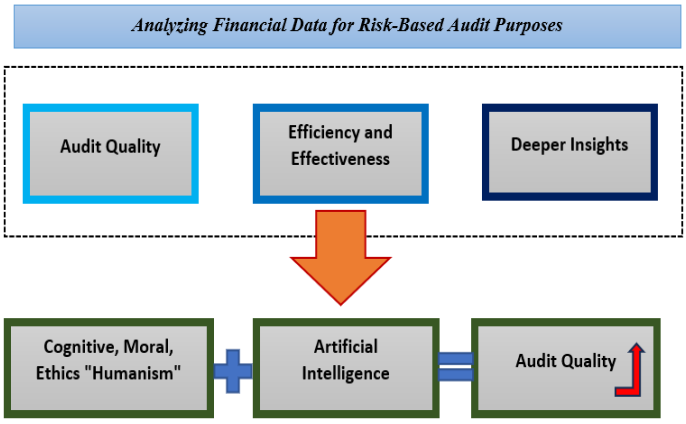

Figure 3. Collaboration Formula for AI Technology and Auditor Humanism

contact with the digital world, will result in demotivation or reluctance to have a career as an auditor in an audit firm. For this reason, it is time for audit firms to adapt more quickly to technological advances, including optimizing the use of AI in supporting audit work systems. Carpenter & McGregor (2020) mentioned the potential for technological innovation in the audit process, how these innovations can complement the traditional audit processes and audit firm procedures currently used, and secondly, by incorporating new technologies into the audit process and highlighting the main benefits that can be gained by switching from manual processes.

5. CONCLUSION

The results of this study provide an overview of what is perceived by audit practitioners who, in their audit firms, have used AI technology as a tool to assist the audit process without disturbing deficiencies in the attitude of skepticism, responsibility, ethics, and auditing standards that serve as guidelines for the auditor's profession trusted by the public who use and need the services of their profession. Confucianism became the basis of a "new" auditing approach to keep pace with man-made technological advances without threatening the social significance attached to the auditor's role in society. Interprets that AI is an audit tool in the form of an AI system that is not a complex human natural intelligence because it contains elements of knowledge, ethics, and morals that AI does not have.

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