

# Artificial Intelligence Driven Accounting: Benefits, Risks, And The Road Ahead

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**Abstract:** The digital revolution has peaked with AI infusion in the workspace. This has caused immense convenience to the people who use AI tools for their everyday tasks. The same has potential risks associated with AI's existence. This study explores the use of AI in accounting, auditing and finance sector and how it could impact the accounting procedures and financial operations. This is an exploratory study based on secondary data collected to give analytical evidence to the theoretical ideas proposed. This study proposes to answers the questions like can we use AI to detect accounting frauds? Will it raise complications? The study also proposes AI Deception Cycle (AI-DC) where AI enters into a puzzle created by itself and fails to work on it. This study aims at identifying major challenges and offer theoretical ways that accounting and finance experts can practice in order to mitigate risks as they exploit the use of AI effectively in their operations.

**Keywords:** Artificial Intelligence (AI), Machine Learning, Expert Systems, Automation, Robotic Process Automation, Risks, Challenges, AI Deception Cycle (AI-DC)

## 1 Introduction And Background

The Artificial Intelligence (AI) trend we see in digital space is not just a short-lived fad amongst millennials. This has been developed curiously by the tech-giants to grow their business by addressing contemporary business challenges. The Big-4 of accounting sector - KPMG, PwC, EY, and Deloitte - have heavily invested in technological innovation and are using AI in various ways in accounting and auditing. (1) As businesses grow, they would bring new challenges. All new problems cannot be solved with old solutions we have. This emerged the need for AI. AI has been recognized for its potential to enhance interpretability in predictive models. Hu (2019) discusses how AI can aid in understanding complex interactions within data, which is particularly beneficial in fields such as healthcare and finance where decision-making relies heavily on data analysis. This need for interpretability underscores the necessity of AI in making informed decisions in scenarios characterized by uncertainty and complexity (2).

The AI has proved by now (2024) to be most effective in certain areas to reduce the repetitive tasks and creative assignments. BCG describes, 'The Generative AI in fintech space is going to reinvent business partnering,

transform the core business processes and mitigate risks. Generative AI will eventually collaborate with traditional AI forecasting tools to create reports, explain variances, and provide recommend<sup>1</sup>ations, thereby elevating the finance function's ability to generate forward-looking insights' (3). These developments shall augment the workforce to reduce the time taken for routine tasks and use the residual time for better decision making and research. The time saved by AI is enormous. It can also work for creative assignments (4). The workforce, esp. in accounting and auditing, dropout by large scale companies itself is a proof of how effectively this system can work! The study by Cameron Modisane (2024) explored how auditors have taken advantage of AI and RPA – Robotic Process Automation to make their jobs easier and mitigate audit risk (5). A study conducted by Kokina and Davenport argued that the auditing field will be affected the most by AI. (6) This study has explored all the possibilities AI could make to accounting, auditing and finance professionals ahead.

There are challenges that are listed ahead of its use. The developers do not conceive it as 'problems' of the AI system. They address it as a 'temporary challenge' which can be overcome with the times to come. There can be

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several types of failures/ errors. The first error can be failure to imagine properly about AI systems and the other error type can be committed while generating AI systems (7). However, in future, after the successful implementation of AI systems may bring lot of benefits. But there are also the users whose 'intentions' may not be correct. As Hu et. al. (2020) states, 'our work can bring both beneficial and harmful impacts and it really depends on the motivation of the users' (8). Similarly, Clarke (2019) speaks about 'Hazards of Prophecy' where the humans may commit the errors due to lack of imagination capacity (7). Arnold et.al. dictate 'There is an increasing number of calls to put in place processes that require researchers, designers, and practitioners to reflect on, anticipate, and communicate possible failures and harmful effects from the technologies and the applications they develop or enable. Some of these calls have been realized through structured documentation and checklists aiming at codifying a range of responsible AI principles.' (9). This study further deep-dives into the possibilities and threats.

### **Need of the study:**

Despite the mentioned developments, there are some challenges which are not yet addressed which I would like to highlight.

The AI developments throughout the world is growing at a high momentum in all sectors. There is no regulatory authority to 'regulate' the growth. This has proposed higher risks of accounting fraud. There can be a system developed and implemented with fraudulent intentions in the beginning itself. The problem of such system development is solved with another problem in hand. Thus, cybercrime is an obvious threat.

Ethical concerns have been questioned often in digital space. Rosaline Tandiono describes the important ethical issues - bias and fairness, transparency, accountability, privacy, security, human displacement, ethical design and data security (10) Mylrea & Robinson, (2023) gave AI Trust Key Pillers, 'fairness, robustness, privacy, explainability, transparency' (11) Despite these issues mentioned, there are further unattended challenges the world needs to focus at such as – data quality, lack of skilled persons etc.

### **1.1 Objectives of the Study:**

- To explore the advantages and limitations of integrating AI in accounting and finance.
- To study the key challenges in AI integration.
- To conceptualise the future challenges that users/ developers of AI integration may face.
- To introduce AI Deception Model.

### **Limitations of the study:**

- This is only an analytical study which is based on the other research articles and does not support any empirical evidences to the ideas proposed.
- The AI Deception Cycle Model (AI -DC) is only a theoretical model proposed here and needs further research to support its stated risks in the financial sector. This is the first study on a novel idea of AI-DC.
- Although all efforts were made to collect the available data and research, there is a probability of overlooking some research data which may have an impact of this study topic.

### **Research Questions:**

Since this is an exploratory study, there cannot be an exhaustive list of questions that can be taken under consideration. However, following questions have been tried to answer.

- How AI integration in accounting can be taught to the learners?
- How AI integration with Accounting, Auditing and Finance would impact the current practices and processes?
- Can we use AI to detect accounting frauds? Will it raise complications?
- Will this AI integration bring key challenges that remain unsolved for ages to come?

### **Literature Review:**

While studying the relevant papers, the keywords used were - Artificial Intelligence (AI), Expert Systems (ES), Machine Learning (ML), Robotics, Automation of Business Processes, Robotic Process Automation (RPA), AI Memory Collapse, AI Loop of Outcomes and Accounting Education. The limitation of time or geographical scope was not considered. The study was conducted in two stages. First, Accounting Education on Automation of Business of Processes were searched and analysed. Second, AI integration in Businesses and Accounting Processes was considered. This review was made using high standard journals and searched through Google Scholar, SCOPUS and Web of Science.

There are good numbers of literature available on the 'Automation of Accounting / Financial Processes'. Since the Enterprise Resource Planning (ERP) software is essentially an automation software, there are enough research literature available. However, the AI concept is new to the world, there is not much literature available on the web. Yet, all relevant papers have been considered.

### 1.1.1 *The Accounting, Automation and Education Era: up to 2012.*

The AI integration in accounting dates back to 1957 where Aurthur Carlson speaks about automation in accounting systems. Conclusion of the article is that ‘while automation in accounting and finance offers significant benefits in terms of efficiency and accuracy, it also presents challenges that need to be addressed. These include ensuring data security, maintaining ethical standards, and managing the transition for the workforce’(12). R.A. Wilson and A. Sangster (1992) in their article, ‘The Automation of Accounting Practice’ state that, there are reasons why accounting information automation should be a general concern. They had findings of an empirical examination of computerization amongst a number of different accounting groups with different working environments (13).

There are several articles which highlight to focus on accounting education to skill-up the accountants to make sure they upgrade with the newest technology and increase their productivity. The students, teachers, workers must get used-to with the expert systems. The pedagogy has to be practical rather than just theoretical classroom setting and this ensures, students to understand the business problems more easily and comprehend the severity of the event (14) (15) (16) (17). The case-method proved to be more effective (18) (19).

### 1.1.2 *The ML and AI Era: 2012 onwards:*

The Machine Learning techniques are used extensively to explore the risks in accounting and financial sector, credit scoring and predict bankruptcy. A comprehensive study by Lin et.al. (2012) showcased how the new algorithms can perform complex tasks in decision making process. This aids an advantage over traditional statistical methods (20) A book called ‘The Second Machine Age’ (2014) highlights that there is a need to leverage AI thrive as that creates ‘winner-takes it all’ economy. Accountants need to be skilled in decision making and interpreting AI generated data (21).

Thomas Davenport (2016) in his book describes, “many knowledge work job tasks are at risk of being automated. This includes roles such as accountants, where tasks like audits and tax preparation can be automated (22). A study on automation by Miklos A. Vasarhelyi; Alexander Kogan; Brad M. Tuttle (2015) analysed, “Big Data significantly enhances audit analytics. The integration of structured and unstructured data sources allows for more comprehensive and real-time analysis, improving the accuracy and efficiency of audits” (23). Blockchain technology can significantly enhance transparency and reduce fraud in accounting. By providing a tamper-proof and decentralized ledger, blockchain ensures that all transactions are recorded accurately and can be verified by all parties involved (23)

AI in accounting presents challenges like ethical concerns and resistance to adoption. AI can automate the process of data entry by using optical character recognition (OCR) to extract relevant information from documents such as leases, invoices, contracts, receipts, and so on (24) There is also the need for continuous human oversight to ensure that AI applications align with professional standards and regulatory frameworks. This highlights the balance needed between leveraging AI’s capabilities and maintaining professional accountability” (25)

All literature reviewed speak about one important thing. AI integration in any profession will bring tremendous benefits accompanied by several challenges which human may face in the near future. These benefits and challenges are studied as below.

## 2. The Study

AI is certainly bringing in the joy for large business owners as the technology is infusing productivity and at much lower cost in the long run. No doubt it requires hefty investment in the initial days, it will reduce the labour cost and cost of duplication of work through automation. There are several studies that are conducted throughout the world to define how AI will (should) grow to bring optimum utilisation from it. This technology has an impact on almost all the profession.

According to a study conducted in 2023 analysed “69 Percent of Accountants said AI has a positive impact on the profession. 79 percent of those say it’s beneficial to have AI assist them with their job. 64 percent—not believing AI will eliminate their jobs. The technology over time will streamline at least 10% of the tasks performed by 80% of workers, and half of the tasks done by 19% of workers, the researchers said.” (26).

A press release by S&P Global (2023) reported, ‘Revenues of generative artificial intelligence (AI) technology offerings are forecasted to reach \$3.7 billion in 2023 and expand to \$36 billion by 2028 with a compound annual growth rate (CAGR) of 58 percent from 2023 to 2028’ (27). OpenAI (2023) reported, “80% of Fortune 500 companies have already adopted ChatGPT and it shows unprecedented demand for ChatGPT inside organizations” (28) This shows how positive the environment is with the AI integration.

Accountant may automate the tasks of audits and taxes, financial advisors may bring ‘robo-advisors’, financial asset managers may automate trading and investing in funds like index funds (22).

**Table 1.** AI Task Type Analysis

Task Type	Human Support	Repetitive Task Automation	Context Awareness and Learning	Self-Aware Intelligence
Analyse Numbers	BI, data visualization, hypothesis-driven analytics	Operational analytics, scoring, model management	Machine learning, neural networks	Not yet
Digest Words, Images	Character and speech recognition	Image recognition, machine vision	Q&A, natural language processing	Not yet
Perform Digital Tasks	Business process management	Rules engines, robotic process automation	Not yet	Not yet
Perform Physical Tasks	Remote operation	Industrial robotics, collaborative robotics	Fully autonomous robots, vehicles	Not yet

Source: Thomas Davenport, 2016. (22)

Table No.1 shows the task type and whether the AI has achieved it or not. Although the data belongs to 2016, there are enough evidences that the AI has not yet achieved Self-aware intelligence (29)

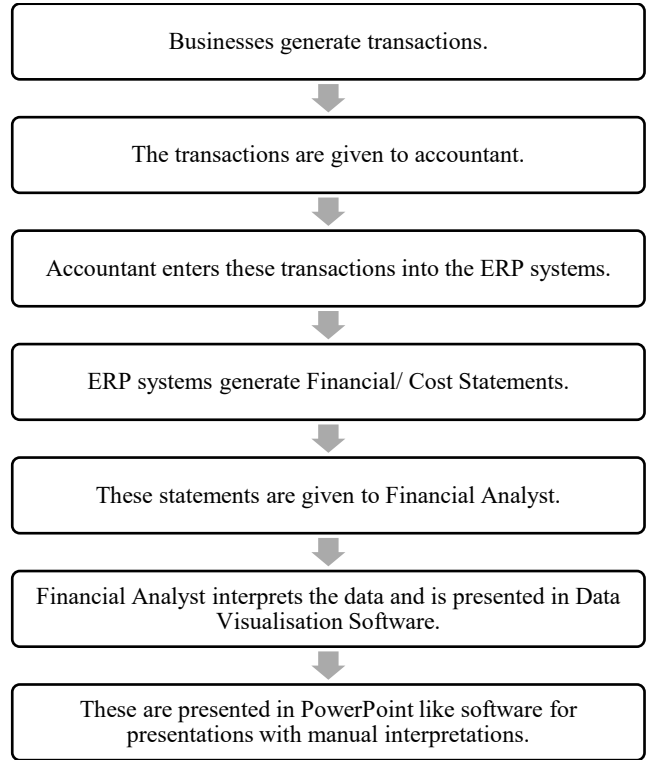
AI Integration would certainly benefit the contemporary businesses in following ways:

**1. Automation and RPA:**

For any organisation, improving efficiency and productivity is the top-most priority to align the tasks to the deadlines. AI generates reports by itself and automate the tasks. One way to get this done is RPA – Robotic Process Automation. All the repetitive tasks and rule-based tasks can be completed by RPA (30) These software bots have properties like – accurate, consistent, reliable, scalable, transparent and provide quality reports (30)

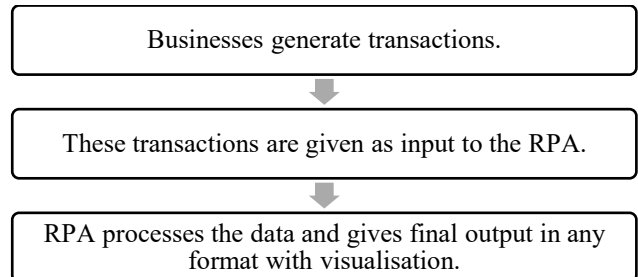
RPAs are the software that automate business process workflows. These are not hardware robots. Without AI, these robots cannot interpret tasks and make decisions. These RPAs are equipped with OCR - Optical Character Reading capabilities. Today's accounting firms download the transaction details and enter the data into their ERP system manually. This takes lot of time and efforts. It also includes costs and labour. This can be automated with RPA. Imagine the transactions generated are directly generating financial statements with insights.

**2. RPA Process:**



**Figure 1.** Current Accounting Process using Automation.  
Source: Author's Compilation

**What RPA can do?**



**Figure 2.** RPA Process.  
Source: Author's Compilation

Integrating RPAs with Generative AI (GAI) and Internet of Everything (IOE) is the complete configuration for the tasks. This should be coupled with some external tools to elevate productivity. It provides synergetic experience that also minimises waste through scaling with multiple bots. This thorough study was conducted by Wei Lo; Chun-Ming Yang; Qiansha Zhang; Mingyuan Li (2024) in different business scenarios such as manufacturing unit, supply chain unit, healthcare diagnosis, data entry automation, invoice processing, order fulfilment, inventory management, energy optimisation, customer service support and governance. However, the challenges faced were – the process is complex and requires technical expertise, compatibility and interoperability issues, data protection, bug fixes and regular updates required lot of time and expertise. Compliance with industry-specific regulations and standards may be more challenging when



integrating multiple technologies. The regulatory challenges cannot be ignored in any case (31).

### **3. The Current ERP System Working:**

The automation in accounting has brought a ground-breaking change in accounting and book keeping space. The automation works like this – Inventory Department (ID) has stock records that is maintained digitally. As and when Production Dept. requires materials, ID get a notification to send the materials. If the materials are reaching minimum level of stock, it gives a notification to Purchase Department to put on a purchase of stock. Relevant authorities purchase the stock to fill the godowns. Automatically, Accounting Books and relevant ledgers are updated with the above transaction. This system works with full enterprise at different business operations such as – marketing, HR, operations, logistics and so on.

### **4. Accuracy and Error Reduction:**

Since it is machine that is working, we may expect zero errors if the system works correctly and inputs are correct. But a study conducted by Najjar A, Ghanem M, Nakhil B (Aug 2024) had two perspectives – developer’s perspective and user’s perspective. Their study revealed that AI was accurate and efficient in developer’s perspective and inaccurate and inefficient in user’s perspective. It said, “AI was found significant in eliminating all six accounting errors that reduce tax reporting quality in emerging markets, namely, tax rate error, cutoff period error, error of principle, hiding transactions error, mathematical error, and manipulation error. However, from the user’s perspective, AI was not found significant to eliminate all those accounting errors, with no negative influence on the error of principle and mathematical error, which leaves tax reporting quality in emerging markets unguaranteed. This may harm the firms when being fined or suffering from reputational damage.” (32).

### **5. Reliability:**

Accuracy emphasises the reliability. If data is not accurate, it is not reliable. AI often collects data from outside the given dataset and brings in the analysis for all the data collected. There is less control over what AI takes as input since whole internet is open for it. Unlike ERP systems, AI integrates not only data from multiple financial and operational systems, but also a variety of external data. As a result, data security, privacy, and misuse issues become more prominent. (33)

### **6. Scalability:**

The article on scalable ecosystem integration emphasizes how businesses can rapidly scale AI through value enablement and expansion partnerships. Collaborating with large IT firms (e.g., Microsoft, IBM) for AI

infrastructure and with smaller specialized firms enables rapid innovation and cost-effective scaling. The ecosystem's openness, allowing reconfiguration of AI modules and integration with various partners, is crucial. This approach facilitates value creation by leveraging AI algorithms and data pipelines across broader ecosystems, enhancing learning and creating new revenue streams at low marginal costs (34).

### **7. RISKS AND CHALLENGES:**

Researchers at the University of Pennsylvania and OpenAI (2023) studied that the jobs of accountants and other professionals are at risk but they are not aware. “The technology over time will streamline at least 10% of the tasks performed by 80% of workers, and half of the tasks done by 19% of workers”, the researchers said (35). The study by Moss Adams surveyed, at least 89% of the people think that there is at least one limitation exist in the AI adoption. The study further revealed, “42% of respondents identified as a concern poor work quality; 41%, flawed data; 31%, cost; 26%, undetected bias; and 21%, ethical lapses.” (26).

The statements given by learned personalities may be highlighted to support the above statements.

- Bill Gates in ABC Interview (2013): “How can they not see what a huge challenge this is?” (36)
- Stephen Hawking in an interview with the BBC, December 2014: “The development of full artificial intelligence could spell the end of the human race.... It would take off on its own, and re-design itself at an ever-increasing rate. Humans, who are limited by slow biological evolution, couldn’t compete and would be superseded” (37).
- Elon Musk: “By 2029, AI is probably smarter than all humans combined” (29).
- Robert Schiller (Nobel Prize winner in Economics 2018): “It might turn out well... But, for me, the big thing is the uncertainty we face because of AI, it could be extremely disruptive” (38)

### **8. Data Security and Privacy Risks:**

AI often fails in handling sensitive financial data and the risks of breaches or leaks. AI may carry any data from the internet (unlike ERP), it can take away sensitive information outside. Also, for the managerial accounting, the data becomes irrelevant (33) It happened in 2019 that Amazon’s Alexa and Google Home’ Smart Assistant allowed hackers to look into the data and sensitive information was hacked (39). However, with an update, Amazon and Google fixed this error. Now imagine any such device which is kept alongside a Key Managerial Personnel (KMP), the data is always at risk.

### 9. Ethical Concerns and Bias:

Biases in AI algorithms that could lead to unfair financial decisions or misinterpretations. Since the programmers may run a program as per their understanding and ethical values, it may not be suitable to someone with conflicting interest. The decision making is very human thing in the businesses. AI integration may help, but only up to certain level beyond which humans have to interfere to take ethical decisions. Machines are after all machines.

Ethical issues generally arise with respect to Human Resource. When dealing with people, we need people and not machines. There is no such technology available which can deal with humans like humans. Machines can only be programmed so far. But there lies the twist. This itself called self-deciding intelligence which the science is trying to achieve. We can only hope that this should not overtake human brain.

### 10. Over-reliance on Technology:

The risk of over-dependence on AI tools is very high. No doubt there are ethical concerns about utility of the product. But the overreliance will have strong negative impact on human cognitive abilities. It leads to diminished creativity(40). Overreliance on AI will also bring privacy and security concerns(41).

### 11. AI hallucination:

The term first coined by Stephen Thaler in 1995 (42). AI hallucination became prominent around 2022 when AI models started generating incorrect or fabricated data. Such wrong outputs occurred due to data inaccuracies, biased sequences and encryption issues within large datasets (43).

### 12. Accountability issues:

When AI performs tasks, the results can be positive or negative; the question is who is responsible for the output received? The automated tasks may make mistakes and then the decision taken by machines/ humans using such output is also incorrect. There are accountability issues lying ahead of all the accountants and auditors (41).

### 13. Fraud and Misuse:

AI could be misused for fraudulent purposes, such as manipulating financial data or accounts. As mentioned earlier, the data over the internet is safe only until it is hacked. Once the hacker takes over the data can be leaked at all places. The patchwork made afterward does not bring back the data and privacy. For any organisation, accounting data is most sensitive and important data. Handing it over to AI without encryption will always have exposure to the security breach.

### 14. The vicious cycle of AI:

The generative AIs often tends to 'forget' their original work or the 'prompt'. The next generation of AI output is generally based on previous input. Thus, after a few steps, there comes a point where the AI system forgets the model. This is called 'Model Collapse'(44). This is a degenerative process where AI models lose information about original content. In any business setting, the AI cannot forget the business ideas and goals. Thus, generative AIs tend to 'fail' if it is not worked upon (45).

### 15. AI DECEPTION CYCLE:

In accounting and auditing, there can be 'users' who may use GenAI to prepare an accounting model which has less or no chances of making a fraud. A well-established ERP system is a best example. Now, a skilled accountant may use AI to break the system and find a fraudulent way to 'deceit' the system and commit a fraud. AI generally do not understand the commands that are given in what intention.

Similarly, an auditor may use AI to detect the fraud. Both the parties may use AI tools for opposing purposes. It becomes difficult to the machines to understand the 'intention' of the person using AI. Accountant may use it for maintaining accuracy and the other is using for detecting hidden discrepancies. This is how 'AI Deception Cycle' arises.

I define this AI deception cycle as 'any loop created by AI for users with opposing intentions.' This will help researchers, developers to work on such loops and streamline the results.

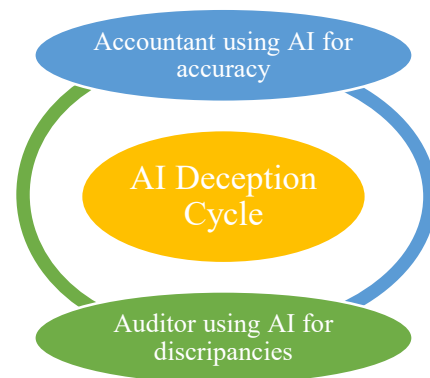


Figure No. 3: AI Deception Cycle

The human intelligence always works alongside the AI defences. There is always a need of human intelligence to enhance and update the AI systems to help combat such vicious loops. This AI Deceptive Cycle is a continuous loop of prevention and detection.

The scope of this AI Deception Cycle (AI DC) can be as vast as the significance of AI in any sector. The digital space or Information Technology (IT) sector can

get impacted with this AI DC. Programmers may use AI to create Malwares, Trojans, Rootkits etc. There can be different set of programmers who use AI to detect such Viruses and prevent it. Thus, the cycle continues. This is AI DC.

Lawyers find out the loopholes in the existing Legal system. Lawmakers / regulators respond by changing the law or filling the loopholes. Imagine using AI to find out the new interpretations for the same law and finding the loopholes. The lawmakers cannot give interpretations for all the sections of lawbook. In short, AI can help lawyers to find loopholes faster than humans. Consequently, they may exploit the gaps in law. Also, AI will help lawmakers to find out these gaps and fill. However, there can be general understanding of how to interpret the law. We cannot ignore the fact that there are 'n' ways to find out loopholes in the various laws. AI DC can make the system even worse rather than finding a solution. However, ethical use of AI may help in such cases.

There can be medical use for AI DC. Medical practitioners may use AI to diagnose the diseases and find a solution for the problems. Overtime, the viruses and bacteria evolve to resist the treatments. Medical practitioners find out a drug or vaccine to combat these new disease-causing pathogens. This cycle continues. AI may inappropriately analyse the data or predict inaccurately and may cause overdose or suggest inappropriate treatments.

Similarly, AI DC can be found in other areas of business, society, science and nature. The scope is very wide. There is a huge scope in this line for further research.

### **16. Compliance with Regulations:**

Since AI is a creative and generative system, there needs a strong compliance and regulation like Cyber Security laws. There is immense need of how these tools are used across the disciplines.

There are various countries working on regulating the AI development and use of AI, there is a need to work on these regulations and compliances. American Data Privacy and Protection Act (ADPPA) is a comprehensive act that is proposed to focus on how AI can be developed and used and establishes meaningful enforcement (46) There is a global regulatory tracker developed at US to regulate AI and aims to bring AI legislation. Currently, there are no comprehensive legislation existing in the US (47). The European regulation adopted the AI act recently. This is world's first comprehensive AI Act. The priority is to make AI sustainable, people friendly rather than machine friendly, safe and transparent. (48)

### **3. Results and Discussion:**

The overall study specified current use of AI in various disciplines especially in accounting, auditing and finance. Contemporary businesses have been using automation extensively to make their business productive and competitive to the fast-changing environment. The speedy growth must also comply with the sustainable development goals that UN proposes.

The current accounting staff need to be updated for the upcoming technological change. This could include training and reskilling of employees, setting up robust data governance policies, and ensuring compliance with industry regulations. These staff with updated skills shall work more productively. Their enterprises may develop their own best practices to train and employ such skilled accountants, auditors who will work as a strategist' and advisors.

Along with automation in ERP, today's accounting systems are using AI to 'analyse' the perfect stock levels in accordance with the market prices of goods. Switching from one inventory keeping method to another (FIFO, LIFO, HIFO etc.) is easier with automation. However, Accounting Standards do not permit such switching without any special reason. Anyhow, it becomes easier for the managers to decide on the stock levels and which market to purchase the stock. AI may also help in vendor analysis and management thereupon.

The role of accountant will change from just data processors to financial strategists and advisors. The manual accounting will change to automatic in the near future. Most of the data is entered automatically after the transaction completes. Such data is processed by systems and outcome are seen. The accountants will then should be able to process the output data to meaningful strategies with the help of AI. The interpretation of systems may not be suitable at times as there is risk of error by the machines. The accountant's role to check the data (input and output) will continue to stay.

This brings attention to another greater topic – human expertise collaboration with machines. Overdependence on machines may only harm the society rather than being just useful tool. There are risks associated with the machines and their working. There is also a risk of Cyber fraud which may cause due to over-reliance on machines. As per the study, AI can detect the frauds and also raise the complications. The AI Deception Cycle provides explanation to this statement.

The studies and experiments made till date, explain why there is a scope for AI to create unnatural problems. AI either completes the given task or it gives the results which turns around the topic. There is also a concept of memory loss in AI that shows how AI tends to

forget the first command and generates reports based on the previous or previous few prompts. There is also a scope to avoid this with right prompt engineering and programming. Yet, this creates the unsolvable issues that may remain with us until the next reform arrives in the AI sector.

#### 4. The Future Scope:

AI can help organisations to keep themselves updated and sustainable. AI certainly solves business problems in the current scenario. There are discussions of how AI can (correctly or incorrectly) interpret the business problems and gives a solution. Since AI is still in a developing stage, we can accept the errors that arises made by machines.

There is a greater question regarding the errors caused by AI. Whom to hold accountable for such errors? How do we solve the problem that is committed by AI? What can be the risks associated with the extensive use of AI? These questions seem to be vague. But the answer lies in the future. There can be solutions which are sector specific. There cannot be a general solution for customised problems.

There lies a big scope for AI to develop the processes in accounting and finance sector. The data collection, analysis, interpretation with visualisations are the areas where AI can develop. AI offers different options for decision making. Humans need to do the tasks further.

Following are the additional topics which are identified for future research.

- AI Deception Cycle – The empirical evidences are lacking. But we know that AI may generate puzzles for humans to work upon.
- Human Interference – The extent of human interference in the total automation of business processes in different sectors. There is always human assistance that is required for the decision making in the businesses.
- AI's analytical role – The AI can 'analyse' the data as it is programmed for. Analytical ability of machine is always debated. There is a need for the research in this area too.

#### 5. Conclusion

The contemporary businesses are complex and requires fast decision makers. Such decisions are arrived at by looking at vast data and interpretations. AI can help analyse such big data provide alternatives for the decision making. The studies provide that AI is transforming the accounting, auditing and finance processes since this is an upgrade to automation in the said sector. AI integration is

just an upgrade to the automation for the processes with analytical touch. This will require additional skill-based educational framework to skill-up the work-force. These skilled labours will work on the interpretation and decision making.

At any instance, the importance of balancing AI-driven automation with human judgment, while considering the ethical and regulatory implications that cannot be ignored. A few studies have already reflected the importance of human interference in the whole business processes as the risk of total automation is substantial. Also, the AI Deception Cycle speaks how AI may generate a puzzle which it itself cannot solve. This shows the research and implementation is required in the days to come.

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