ROLE OF ARTIFICIAL INTELLIGENCE IN ACCOUNTING PROFESSION

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ABSTRACT

An attempt has been made to examine the role of artificial intelligence in accounting profession. Researcher has studied origination of AI technology, Importance of AI technology, threats posed by AI technology to the accounting profession and Application of AI technology in accounting profession. Researcher has also explained way out for accounting profession.

KEYWORDS: Artificial Intelligence, Accounting Profession, Digital Technology.

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Introduction

Accounting plays a very important role in the business. Accounting is the language of the business. Accounting is also called a system which comprises input like entering economics transactions, processing these transactions with help of accounting standards and output is financial statements like income statements, balance sheets and cash flow statements. Accountant role has also been changed in the present context. Globalization has changed the nature of business and most of business has become IT driven. Accountants use accounting software like tally, QuickBooks, Turbocahs, and Mehta Fresh etc. His job is to enter transactions into software and financial reports are automatically generated. Now time is changed and there is much advancement in technology. With the advent of artificial intelligence everything seems to have changed. In 1956 the first word Artificial intelligence had come on the market. IBM had introduced a programme based chess game which was known as deep blue of IBM which had defeated the great chess champion Garry Kasparavo in 1997. In 2008 another landmark development happened and that was that Google had found a Google assistant to search the contents in Google search engine without the use of a keypad. Another important event happened with the introduction of driverless cars by Toyota Company in 2011. The car had 10 trips and each trip was 100 miles. Beside Google, Apple had also found a search assistant known as 'siri'. Facebook also started using Artificial intelligence to remove unwanted contents. In 2016 Uber also started self driving car with the help of artificial intelligence technology. Thus artificial intelligence means "Artificial intelligence is a method of making a computer, a computer controlled robot or software think intelligently in a manner similar to the human mind" Neil Harrison was the first person in the word who fixed an antenna in his skull. He was colour blind and in order to identify the colour, he used an antenna which gets vibrated after sensing the colour. Neil was from Saudi Arabia. Now with the use of artificial intelligence he could recognize different colours. Another important invention of Artificial intelligence was the creation of Sophia humanoid robots. She was the first robot who could talk like a human. The unique feature of Sophia was that she could have sixty types of facial expressions. This robot was first introduced in the market in the year of 2016 in the united state of America. It was created by David Hanson in Hong Kong. The name of the company was Hanson Robotics. The first ever human creation was given citizenship in Saudi Arabia. She can also drive a car. IT experts have also developed robotic politicians named 'SAM' in New Zealand. Nowadays

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artificial intelligence is being used very extensively in the field of medical, education, banking and transportation. The advent of artificial intelligence has changed many things in human lives. Thus artificial intelligence also largely impacted on the accounting profession. The role of accountant is to enter economic transactions in the books of journal, ledger, trial balance and income statement and balance sheet. After the arrival of AI the role of account has been changed. Now difficult tasks like preparing bank reconciliation statements, quarterly or monthly statements, keeping records of accounts receivable and payable, evaluating creditworthiness of suppliers, resolving queries of customers etc. are being done using AI technology.

Threats of AI technology to the Accountant

The accountant professionals are fearful from the AI technology because some of the task will become very easy and no need the person. For example booking keeping and compilation will be done by robot. So those who are performing such task will face challenges. The CEO of Google said that the last decade was of computer and next decade would be of artificial intelligence. He rightly said that data and information are very important in the present context. It is said that those who have data is known to be richest person. The data are exponentially increasing because of internet and Internet of things. The Internet of things has eased the work of human being. A person can control many things through internet. It is believed that households like refrigerators, washing machine and other gadgets are also controlled by the internet. Another threat is to the job of financial analyst. The role of financial analyst is to facilitate investors in capital market. The financial analysts study financial statements carefully and give important tips to the investors who can easily invest money in capital market. There are analytical techniques of financial statement which can be well understood by the financial analyst. With the help of artificial intelligence technology, experts have developed software. The software can easily analysis and interpret the financial statements. Moreover software gives more precise result which is more useful to the investors. It is believed that software can also predict the future trend. Even software can study any number of data within fraction of second. Job of stockiest is also in danger because of AI. The main job of the stock keeper is to count the items placed at different places in supermarkets, price the items and also record items which are out of stock etc. but robot named tally will do all types of jobs as the storekeeper used to do. If any items are out of stock, it is immediately identified by tally. It is very difficult to value the stock but tally can easily value the stock without any errors. Thus it is said that the task of inventory management becomes very easy. Banks employees also felt threatened because of the technology like for financial transactions different apps are being used.

Beside, credit card, debit card and ATMs. Earlier we had to stand in a long queue to have banks facilities, but now we need not to go to banks and funds can be transferred through different apps like Google pay, paytm, YONO app introduced by SIBI, Amazon pay etc. many documents are required for taking loan from the banks. We used to go to banks to get our documents assessed for loan purposes but now we can upload required documents online and can take any amount just sitting at home or office. Here technology plays a role of assessors. Earlier in order to withdraw money, we used to go to banks and ask the bank personnel to perform the transaction but now with use of ATMs we can withdraw an amount. Thus different software and APPs have reduced the burden of bank employees and also facilitated the client to a greater extent. Another important area where artificial intelligence posed the threat is tax consultancy service. Filing returns is a very difficult task for taxpayers. We have many tax experts who calculate the tax and file the tax returns. But now this job is under the threat because software can calculate tax automatically and also file the returns. Every firm wishes to reduce tax liabilities by legitimate means. For this, there is a need for tax planning and tax management. Now this job cannot be performed by a robot alone. Thus it is said that the job of tax planners and tax consultant remained safe. There are four big firms like Price water house and cooper, Ernst and young, KPMG and Deloitte. These firms are well known firms across the world. They offer the services of management consultant, auditing, insurance and legal advice. These big firms would grab the small firm because small firms can't afford to adopt technological changes quickly. Globalization and technological advancement made the business model very complex, so the job of accountant has also become very tough. Accounting standards are very important for an accountant to have guidance for recording business transactions. But there are many changes in accounting standards which pose great threat to accountants particularly in India. It is believed that the job of accountant has become more complex with the development of international financial reporting standards. Now many firms in India are preparing annual reports by considering IFRS. Many firms who prepare annual reports as per Indian accounting standards are later on convert its annual reports into foreign currency by considering IFRS.

Significance of AI technology in Business

Each coin has two sides. Artificial intelligence also has two sides, good effect and bad effect. Now let us see the positive impact of artificial intelligence on firms. Accenture consulting firm has estimated that there is 80% reduction in production cost which has increased productivity. Now every firm is trying to control the cost. There are techniques like standard costing, cost audit, management audit, kaizen costing and inventory management etc against these cost accounting techniques, AI has done marvelous tasks. Another important aspect to increase labour productivity is task performance time. Task performance time is always going up when the labour force is used. Now robotic technology has replaced labour force and also reduced 95% of task performance time which is amazing. Customers are always quality conscious. So to sustain them with the firm, we need to produce items with good quality; generally chances of human errors are very high when a task is performed by labourers. But there are no errors if the task is performed by robotic technology. The best example is of Japanese car manufacturing industry. When a human being performs any task, they are tired and fatigue is seen on the face. So they need holidays. But no holidays are required for robotic technology. They can work tirelessly. Even robots can never be sick, so no sick leave is required. Different employees have different types of psychology; Many times there are behavior issues among employees. So to control the employees, disciplinary actions are taken. When production is being done with robotic technology, no disciplinary issues are required to be addressed. Even redundancy cost is also avoided. The most important feature of robotic technology is consistency in output.

Recently sage has revealed the data that small size firms spend 120 days on administrative tasks which could be shaved if artificial intelligence is used and the time can be spent productively on creative activities. In the present situation companies have started using artificial intelligence extensively. As per statistics, earlier only 38% firms were using AI technology, now more 61% firms started using technology with AI. Price water house cooper held a survey in 2019 which shows that the result was that those firms which have used AI technology have been able to increase profit by 50%. Toyota motor corporation ltd is a well known firm in Japan. The company is going to spend 1 million dollar on artificial intelligence technology. The main use of the AI is to reduce the accident.

Application of Artificial Intelligence in Accounting

Now let us see the application of artificial intelligence in accounting. It is very difficult to record total transactions being taken place in a firm. When volumes of transactions increase, it increases the burden of an accountant. But with artificial intelligent technology massive or big data can be processed easily. Thus there is accuracy in data processing tasks. Another important application to artificial intelligence is in decision making. Management account collects data from financial accounting and cost accounting and analyzes and interprets for management. So that Management can make decisions easily. Now AI technology helps management to make decisions with accuracy. Each firm has to comply with the rules and regulations of the company act. In this regard AI technology helps in a greater way. Moreover, firms can have benefits with any legal matter going on. AI technology has the capacity to store thousands of similar verdicts. So whenever firms need reference, ready reference is available though AI technology. AI technology can easily understand the complexities of GST. AI technology helps to detect frauds in accounting. Though scrutinizing minute details, the Accountant commits errors which can be avoided by AI technology. There are some notable cases of frauds in India like Kingfisher Rs. 9000 crores, Coalgate scam of Rs. 1.86 lakh crores, Nirav Modi fraud in Punjab national Bank of Rs. 11400 crores and Satyam Scam of Rs. 14000 crores. AI technology prevents such types of scams. The banking industry needs AI technology to prevent fraud. Recently data of SBI of 422 million customers have been hacked. Hackers have developed malicious apps to steal the personal data on Facebook, beside, Server of Canara bank was also hacked and most prestigious 50 clients lost Rs. 20 lakh. Big B's twitter account was also hacked. So in order to keep tight cyber security, use of AI technology is inevitable. Even Level of non-performing assets can be reduced to a large extent.

Conclusion

Use of technology is good but at the same time we must have control over technology. Technology should not have control on us. Looking at the importance of AI technology and threat to accountants, researchers have suggested some ways to avoid the challenges. Now the accountant has to acquire report writing skill. Now an accountant is not merely a data processor but his role is changed into a problem solver. He has to identify the problem within the organization and tries to give optimum solutions. Apart from this, an Accountant has to be considered a strategist who can develop strategies for business. Accountant has to acquire technical skill, digital skill, creative skill and skill to control the emotions.

References

❀ Miklos A. Vasarhelyi and Alex Kogan, Artificial Intelligence In Accounting and Auditing, Markus Wiener Publisher, Princeton, NJ 08540 USA, Volume 4, pages; 5 to 6.

❀ Neetu Dongre, Alka Pandey And O. P. Gupta(20),Journal of Xi'an University of Architecture & Technology, Volume XII, Issue V, Page No: 1858-1864

❀ Om Prakash Gusai (2019), robot human interaction: role of artificial intelligence in accounting and Auditing, Indian Journal of Accounting (IJA) 59 (Online) Vol. 51 (1), June, 2019, pp. 59-62

❀ Syed Moudud-Ul-Huq (2014), the Role of Artificial Intelligence in the Development of Accounting Systems: A Review, the IUP Journal of Accounting Research and Auditing Practices, VL - 13

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