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## ROLE OF BIG DATA IN ACCOUNTING TRANSFORMATION IN FUTURE

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### **Abstract**

The way of traditional accounting is now replaced to computerized and digital accounting, Today there are various accounting and tax software's like Tally Prime, GST, SAP etc. are available in the market to get easiness in accounting system. Nowadays, there is a great digital invention in technology like Machine Learning, Artificial Intelligence (AI), Big Data, Chatbot, Robot etc. Most of the companies are updating their operational transactions on the basis new techniques of technology. It is eagerness to know the application of such techniques in the accounting process and how they are affecting the growth and performance of company. This study is mainly based on secondary data and the study is in descriptive in nature. The study reveals that the role played by big data in accounting transformation in future.

**Keywords:** Traditional accounting, Big data, transformation, process, performance

### **Introduction:**

Today's world is digital world having various inventions in all the sectors of economy. Due to inventions, there is tremendous change in the work culture of individual and business organisations. Most of the companies are getting help of technology not only in operational activities but in office automation. Every business has to record enormous transactions in a day. Book keeping and Accounting is the basis for various business concern as the language of business. Generally, it is said that 'Where book keeping ends, Accountancy starts. All business concerns have to maintain their books of accounts as per their size and nature of business. In case of multinational companies, there is need to handle enormous accounting data and information. It is the challenge to handle such structured or unstructured data. The company has to use the data which

requires to reflect the financial position and to understand the liquidity, solvency, profitability position on a particular date. The way of traditional accounting is not replaced wholly to computerized accounting, but it is benefited to save time, money, efforts, efficiency etc. of the organization by using accounting software's. The person should have knowledge and skill of accounting basic principles before using such software's. Today there are various accounting and tax software's like Tally Prime, GST, SAP etc. are available in the market to get easiness in accounting system. Nowadays, there is a great invention in technology like Machine Learning, Artificial Intelligence (AI), Big Data, Chatbot, Robot etc. Most of the companies are updating their operational transactions on the basis new techniques of technology. The speedy work with results is the key for every business.

### **Evolution of Accounting:**

Accounting is the language of business particularly it is financial language of all. In the period of pre-2000 B.C the most of transactions were held in barter system. Even those days, people were tried to maintain the record in individual diary (ledger) of transactions done and produce the same as proof when a dispute arose. Bookkeepers were maintained their accounts with single effect till the period 1400s, well known as single Entry system. In 1494, An Italian person, Luca Pacioli published a text book which indicates the benefits of double entry system for book keeping. The said Bookkeeping reached to America with the European colonization called as accounting. Most of the businesses were used for basic calculations. Hence, they didn't need accountants to create complex financial statements and publish their operations and financial transactions in the form of a balance sheet, income statement and cash flow statement. The importance was given to uniformity in accounting.

In England accounting was well recognized as the profession of accounting in 1896 with a title of Certified Public Accountant (CPA). In 1913, there was a beginning of modern accounting system, which included corporate taxes. In 1917, the Federal Reserve published Uniform Accounting, a document that was related to set industry standards for organizing tax reporting and for financial statements. In 1929 due the crash of stock market, there was a great depression

cased fraudulent accounting by NYSE listed companies. In 1933 the precautionary measures were taken by audit by public accountants. After that the Securities Act and the Securities Exchange Act passed to get succession. At last Financial Accounting Standards Board (FASB) came into existence in 1973.

Today there is transformation of accounting system from traditional accounting to modern accounting, computerized accounting and now the application of digital technology which change the face of accounting into digital accounting.

**Objectives of the study:**

The main objective of the study is to concept of Big data and to study the role of big data in accounting transformation in future.

**Research Methodology:**

This study is in descriptive in nature and mainly based on secondary data. The data and information are collected from various journals, government and professional websites etc.

**Big data and application:**

Big data is a digital technology. The terminology Big data has been familiar to the world and introduced by John Mashey . The term Big data consists of data sets with sizes beyond the ability of commonly used software tools to capture, curate, manage, and process data within an intended time. Though it is related to unstructured, semi-structured and structured data, the main focus is on unstructured data.. The size of data may be Terabytes and Zettabytes. It should have the sight of diverse, complex and massive scale. Big data is used in Healthcare, Academia, Manufacturing, Banking, IT, Retail industries. Today it is used by wallmart, American Express, Generic Electric, Uber, Netflix etc for various economic, financial, operational activities.

**According to Gartner, Big Data –**

“Big data” is high-volume, velocity, and variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making.” According to The Association of Chartered Certified Accountants (ACCA), ‘Big data refers as a huge amount of data that is continuously collected and aggregated through various tools and technologies such as the Internet, debit cards, electronic tags, and social media.’ The Institute

of Management Accountants (IMA) and ACCA states that big data has offered the accountant and other finance professionals a chance to reinvent themselves and possibly take strategic and dynamic roles in organizations. ACCA and IMA has reported in its reports , “Big data: its power and perils”, that Accountants and finance professionals can provide new and critical service if they are trained to collect, analyze, and utilize data in forecasting and modeling. Big data has primary features of volume, velocity, and variety though it has many ‘V’s. The big data technologies evolved with the prime intention to capture, store, and process the semi-structured and unstructured (variety) data generated with high speed (velocity), and huge in size (volume).`

### **Variety**

Big data refers to variety of structured, unstructured, and semi structured data collected from different sources like spreadsheets and databases, data from emails, PDFs, photos, videos, audios, messages etc of the past and current.

### **Velocity**

Velocity is the important feature of big data which refers to the speed at which data is being created in real-time. In a broader sense, it contains the rate of change, linking of incoming datasets at varying speeds, and activity bursts.

### **Volume**

Volume is one of the characteristics of big data, indicates huge ‘volumes’ of data that is being generated on a daily basis from various sources like social media platforms, business processes, machines, networks, human interactions, etc. The size of big data is usually larger than terabytes, petabytes and or it may be in zettabytes. Apart from this Velocity, value, variability, exhaustive, Relational, extensional and scalability are also important characteristics of big data.

### **Role of Big Data in Accounting Transformation:**

Due to the exploration of industries and business with technology, there is transformation in also accounting sector. Traditional methods are transformed in digital forms. Most of the multinational companies in financial sectors also have enormous data and information related to the various activities. As a result, most of the accounting firms have already started adopting technologies such as Big Data, Robotics, and Artificial Intelligence (AI) into their business

models. But it is found that big data is playing a vital role today in various aspects of accounting industry. There are many operations carried out in NBFCs, Banks, Insurance companies, Retail businesses, MNCs, as a result there is handling of data and information, documents is lengthy task. Therefore, big data technology is useful to get speedy work. Big data helps in producing better data-driven audits, creating a better experience for clients and auditors.

### **Tax Accounting:**

In case of tax accounting, big data is playing a vital role in evaluating tax codes, reduce fraud, and monitor budget and tax expenses. As a result there is saving in time, money, and stress in case of tax return filers. Big data is complementary in preparation of better reports for improving business performance. Accountants are needed such technology in business process.

### **Real-Time Access**

There is time consuming task to prepare financial statements, prepare reports and other required documents, It cannot produce in given time due to traditional methods of accounting.

But it is possible to get real time access in accounting data as per the business calendar. Further it helps in correct reports in time so that the management can take any decision about business effectively.

### **Data Analytics**

The companies with Big data needs to apply data analytics to get the outcome or results from the large unstructured data. It develops futuristic eyesights to make management decisions.

An accountant should have technical and analytical skills and knowledge to get financial results.

### **Risk-free financial services:**

Big data provides risk-free financial services to customers in respect of their data and information. Big data helps accountants to identify issues with real-time access to the data proactively. Accounting data can be maintained at risk free.

**Data Visualization:** Tableau is one of the data visualization software. The accountant can maintain and see a large amount of data on this software and

handle very easily. He can also see patterns, flows, irregularities, and exceptions more easily.

**Audit Analytics:** Internal and external auditors have been at the forefront of big data in the accounting industry. The auditor has to see and rectify errors, find out frauds and misappropriations from the provided data and information in bulk. Due to the audit analytics it is possible to classify data into financial and non financial data to avoid risk.

**Conclusion:** Digital technology produces digital accounting system. There is transformation in also accounting sector along with industry, trade and commerce. Traditional methods are transforming very fast in digital forms nowadays. Most of the multinational companies in financial sectors also have enormous data and information related to the various activities. As a result, most of the accounting firms have already started adopting technologies such as Big Data, Robotics, and Artificial Intelligence (AI) into their business models. Big data is one, which transforming accounting system.

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