

Accounting Technologies: A Review

Preeti

Email: Preeti@gmail

Abstract

Accounting has rightly been termed as the language of the business. The basic function of a language is to serve as a means of communication Accounting also serves this function. It communicates the results of business operations to various parties who have some stake in the business viz., the proprietor, creditors, investors, Government and other agencies. Though accounting is generally associated with business but it is not only business which makes use of accounting. Persons like housewives, Government and other individuals also make use of a accounting. For example, a housewife has to keep a record of the money received and spent by her during a particular period. She can record her receipts of money on one page of her "household diary" while payments for different items such as milk, food, clothing, house, education etc.

Key words: Accounting, Government, communicates payments etc.

Introduction

Accounting is as old as money itself. However, the act of accounting was not as developed as it is today because in the early stages of civilisation, the number of transactions to be recorded were so small that each businessman was able to record and check for himself all his transactions. Accounting was practised in India twenty three centuries ago as is clear from the book named "Arthashastra" written by Kautilya, King Chandragupta's minister. This book not only relates to politics and economics, but also explain the art of proper keeping of accounts. However, the modern system of accounting based on the principles of double entry system owes its origin to Luca Pacioli who first published the principles of Double Entry System in 1494 at Venice in Italy. Thus, the art of accounting has been practised for centuries but it is only in the late thirties that the study of the subject 'accounting' has been taken up seriously. The main purpose of accounting is to ascertain profit or loss during a specified period, to show financial condition of the business on a particular date and to have control over the firm's property. Such accounting records are required to be maintained to measure the income of the business and communicate the information so that it may be used by managers, owners and other interested parties. Accounting is a discipline which

records, classifies, summarises and interprets financial information about the activities of a concern so that intelligent decisions can be made about the concern. The American Institute of Certified Public Accountants has defined the Financial Accounting as "the art of recording, classifying and summarising in as significant manner and in terms of money transactions and events which in part, at least of a financial character, and interpreting the results thereof". American Accounting Association defines accounting as "the process of identifying, measuring, and communicating economic information to permit informed judgements and decisions by users of the information.

Review of literature

(Almujamed, Tahat, Omran, & Dunne, 2017) studied "*Development of Accounting Regulations and Practices*" The international accounting literature has recognised that the prevalence of a specific legal system in a country influences the accounting system followed; countries are categorised in accordance with their legal systems as either common law or code law Corporate governance is a system through which companies are directed, regulated and governed through board-regulating mechanisms c It has been argued that, together with a well-developed accounting profession, a strict rules-based structure can lead to improvement.

(Unegbu, 2014) studied "*Theories of Accounting: Evolution & Developments, Income Determination and Diversities in Use*" It found that the theory of accounting is a material field of accounting. Accounting, traditionally, predates monetary economics. In the age of the barter system, this was precisely the case where transactions were not only pre-determined by calculation, but also by exchange rates. Both pre and postante accounting was the precept under which commodities were traded at arm-length by concentrated efforts to obtain, assess and calculate prices. The exchange by barter era was characterised by measurement inequality, cumbersome in terms of output variety and all-inherent in the barter economy, coupled with the issue of coincidence of desires. However, unlike the monetary economy, the progression of accounting theory was to eliminate the inherent problems faced in the barter economy. In order to recognise the work of accounting theory, it is appropriate to consider the purpose, scope and implementation of a theory in the humanities and management sciences.

(Shrivastava, n.d.) studied "*financial accounting*" Company is a commercial practise carried out for the purpose of generating income and maximising the owners' capital. It

is difficult for company to operate in isolation. To a large degree, commercial operation is carried out by individuals coming together with a view to supporting a common cause. This team is also referred to as an entity in various ways, such as sole proprietorship, association, corporate body, etc. Business laws are based on the basic concepts of commerce, social standards and the legal system governing national or international borders. While these variables can be different for different organisations, different countries, etc., in order to fulfil consumer demand, the basic purpose is to add value to a product or service.

(Garg, 2015) studied "*FINANCIAL ACCOUNTING*" It noticed that accounting was rightly referred to as the language of the firm. The fundamental role of a language is to act as a medium of communication. This function is often fulfilled by accounting. It communicates the results of business operations to various parties, the owner, creditors, investors, government and other agencies, who have some stake in the company. While accounting is commonly associated with company, accounting is not only used by businesses. Accounting is also used by individuals such as housewives, government, and other citizens.

(Doucet, Doucet, & Essex, 2000) studied "*Development of accounting discipline*" Typically, accounting is known as the Language of Industry. A company, however, may have a lot of aspects that may not be financial in nature. As such, naming it The Vocabulary of Financial Decisions might be a simpler way to explain accounting. The more the language is understood, the better the financial aspects of living are handled. Accounting, personal financial planning, savings, income tax, loans, etc. are focused on certain facets of our lives. We have numerous roles to play in life: the role of a student, a family leader, a boss, an investor, etc.

(Yoon, 2020) studied "*A Study on the Transformation of Accounting Based on New Technologies*" The technical development of Artificial Intelligence (AI), Big Data, and the Cloud has been the centre of the Industry 4.0 era worldwide in recent years. The need for jobs in particular areas has been diminished by this current development, and the risk of evolving industrial systems has been greatly addressed. For example, AI has Robotic Process Automation (RPA) and Deep Learning (DL) features, which would greatly boost computer processing capabilities. A procedure that in the past took a

significant amount of time can be achieved immediately now. These emerging innovations have been deployed in different fields already.

Backgrounds of Accounting Technologies

Many research papers and reports discussed accounting technologies, defining them in various ways. The Association of Chartered Certified Accountants (ACCA) and the Institute of Management Accounts (IMA) reported on the future of accounting titled “Digital Darwinism”. On the one hand, the Institute of Chartered Accountants in England and Wales (ICAEW) identified AI, Big Data, Blockchain, and Cybersecurity as technologies transforming the accounting industry. harnessing the power of the Cloud, accelerating automation, breakthroughs via Blockchain were the future accounting trends. Accounting technology can be identified in various ways, and these technologies are not limited to accounting. In fact, they are used actively in other areas, such as autonomous vehicles, financial engineering, and so on, simplification of accounting documents and migration of certain accounting operations to cloud-based electronic platforms have significantly changed accounting information system. the cost saving generated by the utilization of a cloud computing-based application and stated that this is an important and relevant criterion when selecting the internet-based accounting solution. digital technologies including Cloud potentially increase the quality of the business-related decision process. clients and accountants could always be communicated with through the Cloud. The security of data can be ensured by the cloud provider and the risk of unsynchronized data can be eliminated. The Financial Stability Board reported AI technology would enable accountants to focus on more valuable tasks such as decision-making, problem solving, advising, strategy development, and leadership. RPA accelerates greater automation of process and AI improves productivity in public sectors. Accuracy and efficiency can be increased and operating costs and time can be reduced in performing accounting tasks and process by AI technology. AI can provide higher quality information by machine or deep learning, and contribute to generate more transparent accounting information. Big Data present many important implications for accounting. video and image data, audio data, and textual data are different types of Big Data as a supplement to existing accounting records, and this information made available through Big Data can provide improved accounting practices. In an increasingly complex and high-volume data environment, the use of technology and Big Data analytics offers greater opportunities in all

accounting areas. For example, auditors can obtain a more effective and robust understanding of the entity and its environment, and enhance the quality of the auditor's risk assessment and response. Blockchain is a technology with a direct impact on the accounting profession. Blockchain is a data decentralization-based technique. Various data are saved on a list of records called blocks and these blocks are linked like chains using cryptography. It is an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way. the data in any given block cannot be altered retroactively without alteration of all subsequent blocks, which requires consensus of the network majority. Therefore, modification, alternation, and manipulation of data become improbable. Blockchain is considered as the next generation of business-processing software where transactions are shared among customers, competitors, and suppliers. Particularly, Blockchain with functions that enable data integrity, rapid processing and sharing, and programmatic and automatic control processing will significantly contribute to developing new accounting systems.

Conclusion

Accounting or accountancy is the measurement, processing, and communication of financial and non financial information about economic entities such as businesses and corporations. Accounting, which has been called the "language of business", measures the results of an organization's economic activities and conveys this information to a variety of users, including investors, creditors, management, and regulators Practitioners of accounting are known as accountants. The terms "accounting" and "financial reporting" are often used as synonyms. Creditors are important for the economy as a means of providing credit for a business. They are responsible for screening out applicants whose financial standing is weak. If creditors fail in their work, the consequences might be huge as it might turn in lower profitability of banks and increased vulnerability which in turn can lead to macroeconomic risks. In order for creditors' to be able to work more effectively, they need relevant information. Accounting information has an important role in banking activities as they are aiming for successful strategies.

Reference

- [1] Frey, C.; Osborne,M. The future of employment: How susceptible are jobs to computerization? Technol. Forecast Soc. Chang. 2017, 114, 254–280.

- [2] PwC. Global Industry 4.0 Survey. 2016. Available online: <http://www.pwc.com/gx/en/industries/industry-4.0.html> (accessed on 24 September 2020).
- [3] Piccarozzi, M.; Aquilani, B.; Gatti, C. Industry 4.0 in management studies: A systematic literature review. *Sustainability* 2018, 10, 3821.
- [4] Milian, E.Z.; Spinola, M.D.M.; De Carvalho, M.M. Fintechs: A literature review and research agenda. *Electron. Commer. Res. Appl.* 2019, 34, 100833.
- [5] Arundel, A.; Bloch, C.; Ferguson, B. Advancing innovation in the public sector: Aligning innovation measurement with policy goals. *Res. Policy* 2019, 48, 789–798.
- [6] Rikhardsson, P.; Yigitbasioglu, O. Business intelligence & analytics in management accounting research: Status and future focus. *Int. J. Account. Inf. Syst.* 2018, 29, 37–58.
- [7] ACCA/IMA. Digital Darwinism: Thriving in the Face of Technology Change. Available online: <https://www.accaglobal.com/in/en/technical-activities/technical-resources-search/2013/october/digital-darwinism.html> (accessed on 28 July 2020).
- [8] IFAC. Technology and the Profession—A Guide to ICAEW’s Work. 2019. Available online: <https://www.ifac.org/knowledge-gateway/preparing-future-ready-professionals/discussion/technologyand-profession-guide> (accessed on 20 May 2020).
- [9] Chandi, N. Accounting trends of tomorrow: What you need to know. *Forbes* 2018, 13A.
- [10] Ionescu, B.; Ionescu, I.; Bendovschi, A.; Tudoran, L. Traditional accounting vs. cloud accounting. In Proceedings of the 8th International Conference Accounting and Management Informational Systems, Bucharest, Romania, 12–13 June 2013; pp. 106–125