

Original Article

A Conceptual Study on an Analysis of Green Initiative in Accounting and Reporting of Business and Financial Information

¹Dr. M L Ashoka, ²Abhishek N, ³Divyashree M S
¹DoS in Commerce, MGM University of Mysore, Mysore,
²UGC-SRF DoS in Commerce, University of Mysore, Mysore,
³GFGC Bilikere.

Abstract - Making provision for the peaceful life of future generations is one of the most important duties of every business organization because it is the corporate citizen of the society running by utilizing the resources available in its surrounding v, so it has to contribute in return to the environment for the sustainable development. Green initiatives undertaken by business houses do not only help in the sustainable development of the economy but also helps for the sustainable growth of business operations. Making provision for the peaceful life of future generations is one of the most important duties of every business organization because it is the corporate citizen of the society running by utilizing the resources available in its surrounding so it has to contribute in return to the environment for the sustainable development. Green initiatives undertaken by business houses do not only help in the sustainable development of the economy but also helps for the sustainable growth of business operations. So the present study is intended to analyze the green initiatives in accounting and reporting of business and financial information.

Keywords - Green initiatives, Accounting, Reporting, Sustainable development.

I. BACKGROUND

Making provision for the peaceful life of future generations is one of the most important duties of every business organization because it is the corporate citizen of the society running by utilizing the resources available in its surrounding so it has to contribute in return to the environment for the sustainable development. Green initiatives undertaken by business houses do not only help in the sustainable development of the economy but also helps for the sustainable growth of business operations. This green initiative also helps in adopting clean mechanisms at the workplace, which enables the firm to provide a healthy environment for employees, minimizes wastage, and helps the business to identify itself in society as the organization working for social change. The green initiative was actually started in the 2000s, but now it

is becoming a trend for business houses. Introducing green business initiatives not only helps in minimizing the cost but also favors establishing its greater market base through the popularization of its brand.

II. GREEN BUSINESS INITIATIVES

Green business initiatives can be undertaken by inducing the process, methods of operations of the business, which establishes a healthy workplace, minimize wastages and maximizes environmental, economical and social benefits to business and its surrounding. The term 'Green initiative' emphasizes renewable, sustainable and environmentally friendly method or process can be used in the business operations.

III. IMPORTANCE OF GREEN BUSINESS INITIATIVES

Green business initiatives are multidimensional, which emphasizes various aspects, the importance of which is discussed as follows:

- The industrial sector is mainly dependent upon oil for energy which is most essentially needed for its operations. The use of oil is negatively impacted by polluting a huge portion of water, air, and food pollution in the surrounding of the business. If the industries are induced alternative source of energy which has zero negative impact on the environment can avoid various pollution which is already discussed. Alternative energy is popularly known as the 'green energy initiative'. Green energy sources include bio-fuel, solar energy, wind energy, etc.,
- Green business initiatives try to eliminate the major environmental issues faced today due to industrial pollution, which affects biodiversity.
- Green business initiatives show the way for business houses to use alternative energy sources and helps to minimize the over usage of depleting resources, and also helps in preserving the same for the future generation.



- Going green can improve the overall efficiency of a business by reducing unnecessary wastage, and thereby it minimizes operating costs.
- Green initiative in the workplace improves hygiene and health of the workers by providing green products with fewer chemicals. In some of the organizations that have given top priority to the green initiative are even converting food waste into methane to supply energy for the building.

IV. LIST OF GREEN BUSINESS INITIATIVES

Following are the activities that can be considered as green initiatives for their business.

1. Use natural gas for boiler fuel.
2. Recycle biodegradable waste.
3. Minimum use of plastic material;
4. Use recyclable packaging materials.
5. Use biomass and solar radiation as sources of renewable energy.
6. Reporting of business and financial information through digital formats.
7. Generate electricity from hydroelectric plants.
8. Reduce toxic emissions, etc.

Among these green initiatives, the present study is focusing on analyzing reporting of business and financial information through digital formats as a green accounting and reporting initiative.

V. LITERATURE REVIEW

Yoon et al. (2011) concluded that XBRL adoption reduces the information asymmetry in the Korean Stock market. There is a need for future research examining the additional benefits of XBRL adoption for various stakeholders.

Makhail. N. K and Joseph Sherer(2017). In their study, they have analyzed that the effect of political-economic reform on the quality of financial reports in Egypt. Also contributed theoretical aspect for shaping the accounting practices in socio-economic environment and investigated the influence of socio-economic factors on accounting and reporting processes in developing countries. To analyze the data, authors have adopted an interpretive approach, and they found that political-economic reforms in Egypt have negatively affected the quality of financial reporting.

James Gunn (2007) discusses the potential of XBRL in making the recognition and disclosure distinction more transparent by reducing errors or omissions in user's information search by making their search more targeted. It also reduces the cost of data processing, re-entering, manual cut and paste exercises. Finally, in the paper, it is evidenced that XBRL reporting ensures the transparency of data and assures the quality of data.

Ernest and Harmon (2012) have analyzed and predicted the role of auditors, which could be expanded with the introduction of XBRL financial reporting by their conceptual study. They have found that the steps involved in creating XBRL financial statements create additional risks in financial statement disclosure. For this reason, they are of the opinion that auditors will be required to adjust their process and also master XBRL terminology, taxonomies, and tools. Also suggests auditors gain early and in-depth knowledge of audit implications of XBRL, which will give a strategic competitive advantage in the marketplace.

Swain et al. (2017) examine the consistency of Indian corporate in disclosing environmental factors as per GRI guidelines and also analyze the extent of environmental disclosure under GRI guidelines by sample companies (50 from BSE). By analyzing collected data through Statistical tools like the coefficient of variation, proportion test, and chi-square test, they have applied and concludes that there is no consistency in disclosing environmental factors by the Indian Companies as per GRI guidelines.

Sahoo et al. (2018) examine the level of environmental disclosures among the Indian companies group such as Textile, Cement, FMCG, Pharmaceutical and Petroleum sectors. By the content analysis of the annual reports, they analyzed the data and found that there is a considerable difference in disclosure of environmental disclosure among this group of industries due to the lack of unified standards for governing environmental reporting.

Tailor and Modi (2017) conducted a study to analyze the corporate social reporting practices of cement companies of India with the help of both primary and secondary sources of information, and to analyze the collected information, they employed Rank Analysis, Averages, Percentages, Chi-square test, and F-test and concluded that among selected companies except JK Lakshmi Cement all other are good at CSR practices and spending majorly on Rural Education, Infrastructure, Employees medical care, Security purpose and also found out that companies are in require of constructive suggestions for the improvement of CSR Activities and are trying to remove the existing problems in CSR activities with the help of HR Department.

VI. RESEARCH GAP

From the analysis of earlier literature in relation to the present topic, it is found that only a few studies focused on green business initiatives, but no studies specifically focused on green accounting and reporting initiatives by the business organizations. So present study is intended to the analysis of Green Business and financial reporting initiatives for sustainable development

VII. OBJECTIVES OF THE STUDY

Based on the literature review following objectives were framed for the present study:

1. To analyze the importance of the green initiative in accounting and reporting of business and financial information.
2. To analyze the importance of Robotic accounting and XBRL in promoting green business initiatives.

VIII. METHODOLOGY

The study is conceptual in nature based on the secondary sources of data collected through journals, newspapers, reports, etc.

A. Green accounting and reporting initiative

Making provision for the peaceful life of future generations is one of the most important duties of every business organization because it is the corporate citizen of the society running by utilizing the resources available in its surrounding so it has to contribute in return to the environment for the sustainable development. Green initiatives undertaken by business houses do not only help in the sustainable development of the economy but also helps for the sustainable growth of business operations. Further recording and communication of business and financial information through digital mode is known as green accounting and reporting. The benefits of green accounting and reporting are:

- It removes the cost of printing, saves the energy to be used for printing and publishing the business and financial information.
- It eliminates unnecessary wastage and ensures paperless accounting and reporting.

B. Green accounting and reporting

Green accounting is carried through artificial intelligence that is popularly known as **Robotic Accounting**. In the same manner, green reporting is carried through Extensible Business Reporting Language. This paper clearly analyses the working mechanism of these emerging aspects of accounting and reporting.

C. Robotic accounting as a green accounting initiative

Robotic accounting is the process of application of an automatic process that is robotics in recording and maintenance of books of accounts. Further, any system of accounting that applies artificial intelligence for the accounting process. This will eliminate the cumbersome procedures, encourage paperless accounting, and induces the green move of accounting.

D. Robotic accounting can involve in

- Operational accounting (billing and collections, accounts receivable)
- General accounting (journal, ledger, reconciliations, intercompany transactions)
- External financial reporting
- Planning, budgeting, and forecasting
- Treasury processes

In 2016, Deloitte, one of the world's four largest accounting firms, introduced artificial intelligence into accounting, taxation, and auditing. Many countries have been competing to carry out research and application of robotics or artificial intelligence. It is observed that the application of artificial intelligence in the financial and accounting field is the general trend of financial intelligence in the future transformation and upgrading of accounting process from traditional accounting mechanisms such as repeated procedure of recording, maintenance of books of accounts, and preparation of annual reports. The application of artificial intelligence can solve the problem of inefficiency, and low added value in the accounting field enables accountants to involve in more creative work and bring greater value to the company. The application of artificial intelligence to the accounting industry will promote the development and innovation in accounting and reporting of business and financial information in a green way and which is gaining greater significance in the modern days.

E. Problems involving adopting robotic in accounting

The future of the accounting profession will be based on artificial intelligence, but for the implementation of the same, the business people will face certain challenges that are discussed as follows.

- Lack of experience by the accountants in the initial stage will create the challenge of awareness.
- For introducing artificial intelligence, there is a necessity of huge investment with slower investment, but in the long term, it will ensure efficiency with sustainable growth.
- Importantly it is vital to improving the quality of professionals, which makes them in operating in a smoother manner.
- It is also important to include a training program for the accounting graduates during their study period.

F. XBRL as a green initiative in reporting and communication of business and financial information

Extensible business reporting language is one of the technological e-initiative made as a part of Green Business Initiatives. XBRL is the internet-based language for communicating business and financial information and promotes paperless reporting and

communicating business and financial information for various stakeholders. This will help the business and stakeholders in various manners. Particularly for the business people, it encourages avoiding unnecessary wastage of non-renewable sources to be used for printing and publishing annual reports. So we can authoritatively call XBRL a Green initiative in Business and financial reporting.

G. Importance of XBRL in Indian scenario

India had experienced the benefits and problems of the human-readable format of financial reports for so many years, i.e., Word, Excel, PDF, and HTML, etc., are not give many benefits than the reports which can be readable by both humans and

machines. The format of the financial report, which is both human and machine-readable format benefits in a number of ways for both preparers and users like it reduces many mechanical tasks. And also minimizes preparation and consumption of financial and business information costs and also maintains the high quality of data, so the implementation of XBRL reporting for Business and financial information in India is important in various aspects that are: XBRL format of financial reports built based on country-specific standards. In India, XBRL taxonomy is based on Ind-As And Accounting rules, and it is impossible to violate the business and accounting rules, so this format enables to create the accurate reports.

Table 1. Comparison of Traditional Reporting and XBRL-Reporting Process

Steps	Traditional Reporting Process	XBRL-Reporting Process
1.	Enter debit transactions, i.e., the facts related to ASSETS.	Enter business and accounting rules. i.e., Debit=credit in other words Assets=liability + owners equity.
2.	Enter credit transactions, i.e., The facts related to liability and owner equity	Enter debit transactions, i.e., the facts related to ASSETS.
3.	Generate the business and financial report.	Enter credit transactions, i.e., The facts related to liability and owner equity
4.	-	Generate the business and financial report.

Source: secondary source

From the comparison of traditional and XBRL reporting processes, it is evident that the XBRL-Reporting process is more scientific and comprehensive than the traditional format of reports because XBRL-reports are built based on the business rules such as mandated legal compliance rules like Companies Act 2013 provisions, tax provisions and accounting rules such as Ind-As provisions, Costing provisions and others as required by the regulatory authorities. These business rules included in taxonomies serve as suggestive guidance and enable the Indian corporate for easy verification of compliance of various rules followed during the reporting of information. This saves time and cost by eliminating the manual verification process. Along with this, XBRL benefits all stakeholders by providing the platform to analyze Metadata without additional efforts. Further metadata provides the information on information. For instance, if a reader reading fixed assets details and wants additional detail on fixed assets, then it is easy by clicking on fixed assets he can get additional information as he wants. In the future, it is possible to add auditing and assurance rules and standards to the XBRL taxonomies and which enable an easy auditing process. The new format of XBRL financial reports completely changes the Indian accounting and reporting environment. Due to this, Indian companies are being capable of catering to the information needs of various stakeholders and enables them to take

timely decisions and also, they will become competitive firms that can produce the information based on the international accounting and reporting framework, i.e., IFRS and XBRL to attract the global communities and to take the interest of their investment.

H. Challenges involved in the implementation of XBRL in India

Adaptation of new technology, method, technique, etc., for any aspect, will create its own challenge for its successful implementation; likewise, XBRL implementation for digital financial reporting in India is also facing various challenges to build a strong base for new method reporting and communication of financial and non-financial information by the Indian companies. The main challenges involved in the implementation of XBRL in India are:

- There is a lack of awareness among the people involved in reporting and communication of business and financial information, such as auditors, so the creation of awareness among these people is a big challenge facing the regulatory authorities who are involved in mandating XBRL reporting in India (MCA, SEBI, IRDAI, RBI, etc.).
- Implementation of XBRL in the banking and insurance sector is the need of the hour, but

banking and insurance companies are running under their own reporting software, and it is difficult to immediately modernize their financial reporting technology in relation to compliance accounting and audit aspects.

- In India, at present, there are only limited vendors from whom the business organizations directly can import the taxonomies which are suitable to their nature of business, i.e., manufacturing, services, banking, insurance, etc.
- India is the fastest-growing country having a dynamic and complex environment which leads to regulatory authorities to timely revise the reporting requirements. This directly creates the challenge for developing the taxonomies as per the timely revised requirements by the regulatory authorities.
- To implement XBRL in the Indian banking and insurance sector, there must be separate taxonomy applicable to the business and financial aspects of this sector, so the development of separate taxonomy for this sector is one of the greater challenges to RBI and IRDAI who regulates these sectors in India.
- Today it is not only important to report financial information as per the requirements of IFRS, but it is also important to report non-financial information (sustainability information) as per the requirement of GRI requirements, so it is also a big challenge to the regulatory authorities to provide an XBRL taxonomy which accommodates both the financial and non-financial information under a single annual report.
- It is very important to implement XBRL format, which is compatible at the international environment that is in-line XBRL, but in India still, it is not possible, so implementation of Indian in-line XBRL with greater research and development of the present matter is one of the critical challenge being faced by the regulatory authorities of the country.
- Working with this new system for financial system professionals who are involved in the preparation and publication of reports are required to possess new skills to work within this new digital paradigm and to understand new tasks to be performed based on computer engineering. So it is one of the major challenges to both regulatory authorities to businesses to give a platform for increasing the skills and knowledge required by them.
- In India, still, so many professional accountants are not aware of XBRL and who are working for small and medium-sized business organizations; if the MCA implements a separate taxonomy of XBRL for this sector, then how will professional accountants work? For XBRL is the big question.
- The majority of small and medium-sized business organizations working in India are not much upgraded for accounting and reporting purposes; still, they are following manual tasks. If the government implements XBRL in this sector

definitely, it will create a problem for both filers and the government.

- It is very important to have reliable taxonomy after the perfect design by establishing interrelationships among various elements in the taxonomy. To make this a better way, it is necessary to have coordination among the government regulatory authorities, super agencies, companies, stock exchanges, accountants and auditors, technical team, XBRL software vendors, and well-trained staff who are involved in preparation. And it has become one of the critical challenges in the successful implementation of XBRL in India.

IX. CONCLUSION

There are several green initiatives to be undertaken by business houses. Among them, accounting and reporting of business and financial information is emerging. This initiative encourages business people to promote paperless accounting and reporting and saves the non-renewable energy such as the raw materials used for the production of papers, energy used to print and publish reports and makes the provision for the future generation. This indicates robotic accounting and XBRL will also promote sustainable development. So the study concludes that future accounting is purely based on artificial intelligence.

Limitations of the study

The study also suffers from limitations such as it is conceptual in nature, the area of research concentrated is still in the infancy stage, so analysis of data is a very difficult task. Every methodology applied for the research suffers from its own limitations, and that can impact the results.

Scope for future research

The study analyzed only conceptual aspects. Future studies can be done by taking into consideration the case of the companies that have already implemented Robotics in accounting and XBRL as green business initiatives.

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