DIGITAL TRANSFORMATION FOR CORPORATE REPORTING ON ENVIRONMENT, SOCIETY AND GOVERNANCE

CMA (Dr.) Paritosh Basu
Senior Professor
NMIMS School of Business Management
Mumbai
paritosh.basu@sbm.nmims.edu

Introduction

Post the World War - II industrial entities remained focussed on scaling up manufacturing operations and expansion of business. Their sole objective was to meet ever growing market demands simultaneously with diversifications by adding varieties to product basket. Another set of entities remained engaged in development of new technologies and products through R&D and innovations. Miners continued to excavate mother earth to take out as much natural resources as possible. Trading entities remained busy in bridging gaps between producers and ultimate consumers. Industrial developments also revolutionised agriculture. Availability of resources also from different sources simultaneously improved, including from government and multilateral agencies.

Around 1970 human civilisation witnessed advent of information technology aided by computer science, which was followed by internet. The entire focus of industry, trade and commerce got shifted to automation and improvements in systems and processes by reducing human intervention. This third industrial revolution brought in many benefits by way by improving speed, quality, and wastage reduction. However, all told, the theme of entire game in the business ecosystem was for volume, market share, maximisation of profit, and profitability. Industrialists and government machinery hardly had any time to ponder over the fact that the entire mad rush for reaching products and services to the ultimate consumers is in turn are hugely risk-prone and causing many irreparable damages to environmental ecosystem, humanity, and society at large.

Research findings of scholars and voices civil society organisations were not heard, neither the regulators could take out needful time to focus on such issues. Humanity kept on suffering from many maladies to the benefits through soaring top lines and bottom lines of business entities and investors. Devastating impacts of frequent climate crises and evil effects due to unscrupulous use of social media, in the absence of appropriate principles of governance and

self-driven sense of responsibilities, are now very apparent for people even at the lower rung of society across the globe. However, measures for controlling all these started being perceptible from early this century through revelations in corporate reporting mainly due to mandates from regulators.

Objective

This article aims at first demystifying the myths clouded around ESG reporting by briefly narrating the evolution of corporate reporting from the period prior to World War – I till now. It will try to establish why ESG reporting metrics serve as a set of important drivers and which are applied by forward looking investors while assessing the value of a corporate entity. This will be done by highlighting the importance of intangible assets, some of which are not even measured in monetary terms for reporting through balance sheet. It will bring about the trend of using such assets for building corporate and product brand images which can be and are being created/fortified through ESG reporting. In the later half the author would make efforts to delineate how Digital Transformation can make ESG reporting easy and user friendly without any additional investments, efforts, and human interventions,

Evolution of Corporate Reporting

Corporate reporting with its restricted connotation of stakeholders kept on improving qualitatively at slow pace since World War - II. Frequency also increased from only annual reports to summary of quarterly financial results with brief narratives for major variances. However, the emphasis remained on sharing only financial and statutorily mandated information. It was the kind of a regime for restricted confidentiality. In other words, many information, that are warranted for transparency and responsibilities to all stakeholders other than the said four, were not shared under the mainly garb of business secrecies. Shareholders' activism as a movement was not visible. There was hardly any disclosure from the perspective of responsibilities of business to society, mother earth, and humanity. The definition of governance remined shackled due to the mandates by corporate laws and regulations and could not transcend to board room driven responsibilities for pervasive governance. Umpteen number research papers have been written on these by academicians and protests raised by civil society leaders without any result.

The findings from various studies conducted by researchers and the author's personal experience over last about four decades reveal the following evolution of corporate reporting. The evolution occurred in terms contents published for information of all stakeholders and larger addressable audience like stockbrokers, etc. The definition of stakeholders started getting widened by addition of indirect stakeholders also to only shareholders and lenders till about 1960s:

Developments Prior to ESG

- Pre-World War to 1960: Only financial information and limited narratives, which were mandated by the then laws, used to be disclosed only once through annual reports. Contents in explanatory form used to include only those which the promoters wanted to disclose at their sweet will.
- From 1960s to 1980: The additions to financial statements were narratives for Management Commentary, presently known as 'Management Discussion and Analysis', 'Governance and Remuneration' and 'Environmental Management.' However, self-driven disclosures continued to be scanty.
- From 1980 to 2010: 'Environmental Management' was replaced by 'Sustainability Management. This phase saw the emergence of a new phrase '3P Bottom Line'. Ps signify Planet, Profit and People, the order importance being determined by the nature of industry. Soon after the fourth P, i. e., Product got added and sustainability management started being reported from the perspective of 4Ps. In India such reporting continued to remain optional barring a disclosure of a few mandatory information like electricity consumption etc.
- Emergence of Integrated Reporting in 2010: The International Integrated Reporting Council (IIRC) was incorporated in 2010. Its final draft paper for consultation was published in 2013. IIRC's CEO Paul Drukman said, *"Don't let others define you. Communicate what you are trying to do"*. One of the major recommendations in the consultation paper was for corporate houses to include in annual reports reliable information on respective companies' a. Business Strategies, b. Performance, c. Prospects in foreseeable future d. Governance and e. Propositions for creating and preserving values in short, medium, and long term. Finally IIRC merged with Sustainability Reporting Standard Board in 2020 at global level.

Emergence of Reporting on ESG

The overarching principle of 'Who Cares Wins' is fundamental to the concepts related to responsible investments. What all a corporate entity should care for while crafting win-win strategies are Environment, Society and Governance, popularly summed up as ESG, the new frontier of corporate governance. This principle has been included in the report of Freshfield's document titled 'A Legal Framework for Sustainability Impact in Investor Decision Making'[1]. ESG was first referred in the UNO's 'Principles for Responsible Investment (PRI), published in 2010. From thereafter ESG criteria and evaluation of actions executed by entities at the ground level started becoming a set of information for incorporating in the financial evaluations of companies.

The first clarion call for investments with responsibilities of ESG was from former UN Secretary General Kofi Annan when he wrote to over 50 CEOs of major financial institutions inviting them to partake in a joint initiative to integrate ESG into capital markets, within the framework of the UN Global Compact. According to Deloitte[2], *"…. the percentage of retail and institutional investors that apply*

ESG principles to at least a quarter of their portfolios jumped from 48% in 2017 to 75% in 2019. Furthermore, a 2018 U.S Trust Wealth and Worth Survey concluded new investments in ESG funds could total $20 trillion in the next two decades."

The conceptual framework of 'Reporting on Environment Society and Governance' by a corporate entity is enshrined in the "The Ten Principles of the United Nations Global Compact[3] derived from: the 1. Universal Declaration of Human Rights, 2. the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, 3. the Rio Declaration on Environment and Development, and 4. the United Nations Convention Against Corruption." While the Societal aspects are taken care of by principles related to human rights, labour rights and anticorruption, principles of governance circumscribe all these principles. The following graphic aptly describes ESG by incorporating some the essential elements for ESG reporting

Source:

https://earlymetrics.com/esg-ratings-how-can-a-business-environmental-and-social-impact-be-measured/

According to PwC[4], *"ESG is more than ticking boxes. It's about making a difference - for your business and our world. Creating sustained outcomes that drive value and fuel growth, whilst strengthening our environment and societies. ESG is more than good intentions. .... success is not about climate change, diversity, and disclosures alone. It's about embedding these principles- and more across your business- from investment to sustainable innovation.".*

The giant PE Fund BlackRock[5] conducted a survey in 2020 on sustainable investing for which 425 responses were received from 25 countries with asset under management of about USD 25 Billion. The following were their two major findings:

- 54% of respondents are of the view that sustainable investing is essential to the process of generating outcomes. Respondents of EMEA region adopted this more than others. While respondents from APAC and Americas were found to be in the early stages of their sustainable investing journey.
- The proposed scheme of almost all respondents was to double sustainable AUM in the next five years from 18% average to 37% on by 2025. Covid-19 Pandemic delayed the implementation plan of about 3% of respondents.

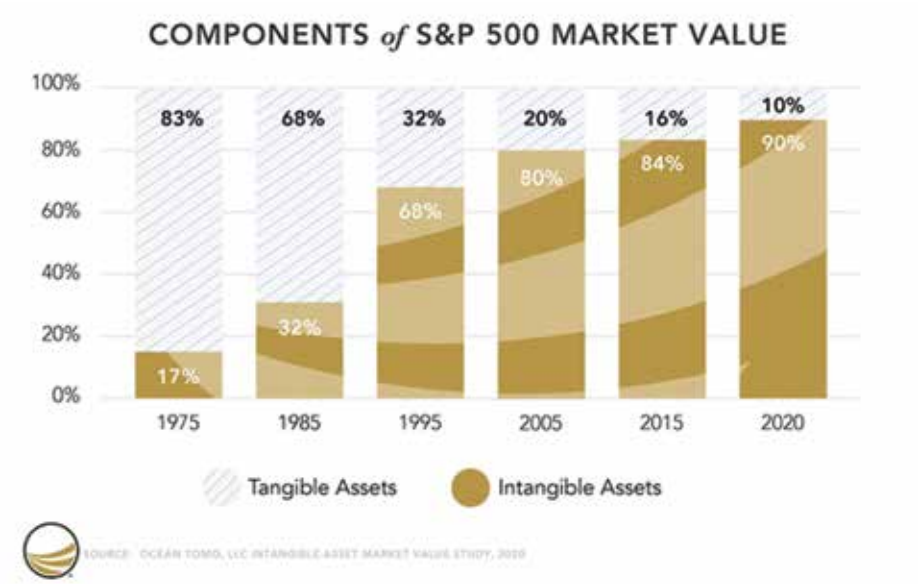
By virtue of a circular from the Security Exchange Board of India (SEBI) ESG reporting is mandatory for top 1,000 listed companies from FY 2021-22. The framework for contents has also been prescribed. The Economic Times reported on March 25, 2021[6], the following: *"The new reporting requirements are expected to bring in greater transparency through disclosure of material ESG-related information to enable market participants to identify and assess sustainability-related risks and opportunities."*

ESG and Corporate Image Branding

In this short period of about a decade post announcement of the aforesaid 'Principles of Responsible Investment by the UNO in 2010 large conglomerates around the world have started using ESG reporting as a tool for improving images and building brands for their corporate group and products. This exercise by corporates is seen to be a great going the way to go albeit the speed is slow. World-wide scholars have conducted research on this phenomenon called 'The Intangible Asset Market Value" (IAMV) and concluded that the importance and impact of intangible assets and disclosures about their successful utilisations have acquired more vigour in driving share prices in stock exchanges than mere property plant and equipment and financial

information.

It is not necessary that all such intangible assets are measured in monetary terms and reported through the Balance Sheet of any entity. It has also been established that corporate image and brand building through ESG reporting has also brought respects and attracted investors to certain corporate houses. Case in point is proliferation and popularity of Green Bonds widely accepted by investors. Ocean Tomo, a reputed management consulting firm has published their following updated version of IAMV Study[7].



Source: *https://www.oceantomo.com/intangible-asset-market-value-study/*

Readers will be able observe that with evolution in corporate reporting, as delineated above, the importance of intangible assets have increase from 17% in 1975 to 68% 1995 and from there to about 90% in 2020. Findings of Ocean Tomo's research also suggest that Covid 19 Pandemic has accelerated the process of intangible assets build through more and more ESG efficiency are gaining momentum. Importance of tangible assets is relegated to only 10%. This is because investors take it for granted that business managers, having invested money in property, plant and equipment, must effectively and efficiently use those for value generation. The differentiating factors for attracting investors should be ESG efficiency and sustainability.

Therefore, investors' sentiments are clear in the context of evaluating any company's performance. They take it for granted that any responsible set of corporate managers are bound to utilise their tangible assets for creating values and reaching goods and services to consumers. The differentiating factors for them are the intangible assets in the form of patented unique products by 'innovention', digital technology driven unique processes and solutions. They want smarter digital solutions, more effective and efficient solutions in terms of creating competitive advantages remaining fully compliant with legal and regulatory mandates. They are also keen to see a company to be responsible for environment and society as well as reliably manifest that responsible behaviour through their perceptibly pervasive actions for good governance. A unique case in point to prove this is, 62% of ExxonMobile shareholders went against management's recommendations in May 2017 by voting to force this major hydrocarbon and gas company to report on the impacts of climate change to its business. Such an action was more prompted by the Paris Climate agreement.

Digital Transformation for ESG Compliance and Reporting

It will be useful to understand at this juncture the need for using a standardised set of metrics that would help ESG transformation and reporting. Unless such a code of standard metrics is established, ESG reporting will be driven through too many directions without any orchestration. This would baffle investors and they would not be able to make any meaning out of those information. Case in point is the use of IFRS or US GAAP for financial reporting. The metrics would usher in a new era of 'Stakeholder Capitalism' with a forward-looking approach. Such metrics are increasingly being used for a range of ESG integration approaches, such as benchmarking and scenario analyses.

ESG Reporting Metrics

Once a common set of metrics are established, and it is understood what all information would be required to reliably constructing and regularly reporting those, embedding the capability to generate those data through digital solutions will be that much easy. There are as of now 22 ESG specific metrics as recommended by the World Economic Forum in collaboration with International Business Council and Big4 accounting firms. These are used to evaluate the extent of exposures of a company to a range of risks emanating from factors related to environment, society, and governance. Days are not very far when various functional ministries of federal and state governments of will have to also report their ESG efficiency and measures taken for risks mitigation.

Applications of such ESG metrics while conducting investment analyses are almost similar to traditional financial analyses. Like an analyst compares the growth in revenue, profit, and profitability of a company, she/he would now compare the key differences in numbers reported through ESG metrics using non-financial data. Line items of report could include the level of greenhouse gas emissions, energy efficiency, product life cycle, recycling of scraps and wastages, treatment of air and water pollution, incidence of safety breaches and accidents, employee attritions and unrest, etc. The author would urge upon readers to read the publication of Harvard Law School Forum titled 'The Rise of Standardized ESG Disclosure Frameworks in the United States'[9] and 'What are ESG Matrics'[10] written by Majid Khan for first-hand understanding of these metrics.

Meeting Challenges for Designing Digital Solution for ESG Reporting

Readers would recall that in all his previous twenty-seven articles under this column, the conscious effort of the author was to emphasise on the axiom that technologies do not have ethics, morality emotional intelligence, and value generation skills. But every technologist and solution designer have. They are expected to apply those while designing solutions using digital technologies and devices for serving the causes of every stakeholder. Their ultimate objective should be to ensure shared benefits for inclusive growth, inclusive happiness, and inclusive smile for all people across societal strata anywhere under the sun. These objectives when achieved, in most likelihood the designed solutions would be ESG compliant by:

- Proactively assessing all varieties of risks that may emanate from ESG,
- Performing measurement of those risks both in financial and non-financial terms,
- Enabling management to craft strategies for risk-enabled performance management, and
- Feeding all information required for ESG reporting.

However, such a process for designing ESG compliant digital transformation would not be smooth and free from challenges and hurdles. The author in one of his earlier articles has voiced the following 'Ten Commandments for Digital Transformation' which would be appropriate to include in this article even at the cost of repetition and perhaps would serve as a reminder for readers:

- Humanity first
- Redistribute power
- Reduce complexities
- Reimagine consumption
- Go for creative destruction
- Manage climate emergency
- Be accountable without discrimination
- Fix imbalance of humanity and technology
- Enhance technology with universal altruism
- Let imagination safety and ethics lead transformation

Compliance of these commandments in letter and spirit would be possible only when the author's initiated 7Ts and 7Ps are also put together in their thought process while designing digital solutions:

7 Ts for Success in Technology	*7 Ps for Shared Development*
Technology	People
Talent	Patience
Truth	Passion
Trust	Perseverance
Transparency	Piety
Tenacity	Purity
Timeline	Penance

Meeting challenges for ESG complaint solution designing and generating quantitative and qualitative information for corporate reporting would call for embedding those requirements in the software scripted solution itself. Therefore, applications of digital technologies, inter alia serving the primary operational objectives, must also ensure the following:

- Simplification of the way ESG related data are to be collected, collated, analysed, and stored for meaningful periodical reporting of ESG related information,
- Sensitisation of cross-functional enterprise team members and encouraging them to ensure this with a sense of priority and importance,
- Appropriately integrating the ERP systems and databases of the company with digital technology-based solutions, and
- Provision of workflow, document flow and information flow in all process management for standard and customised ESG disclosure frameworks.

Application of Digital Technologies for ESG Reporting

This task of assessing risks related to ESG, effectiveness of mitigation measures initiated, and periodical reporting of the same using the said twenty-two metrics must be embedded with every entity's strategy for digital transformation right from the beginning. Almost all transaction/function oriented applications of digital technologies can take care of requirements for assessment and reporting of ESG efficiency. This can briefly be narrated through the following points:

- Blockchain: In the context of day-to-day business management what is trusted may not be true and what is true may not be trusted because any matter of truth can be of only one version. This digital technology would help establishing the single version truth for all transaction in a transparent manner. By now hundreds of use cases have been tested and implemented by business organisations. Designing and scripting of software using smart contracts for all Blockchain platform can also embed data requirements to be met for assessing ESG efficiency and reporting thereof under applicable metrics.
- Artificial Intelligence and Machine Learning: Data is considered as the most valuable and strategic asset in the present Industry 4.0 era. All solutions designed under any ERP system as well as operating systems created with applications of

digital technologies like a blockchain platform can be integrated with systems for applications of AI, ML, and big data analytics. Business entities need these to make meaning out of data, draw inferences before formulation of strategies. Such applications would also be needed for reporting numbers through ESG metrics post analysis of huge data.

- Internet of Things (IoT): It has predictively been assessed by researchers of digital technologies that by around 2030 a common human being would be under direct and indirect influence of 5 and 25 IoTs respectively. The author has in his articles on digital transformation of manufacturing operations[11] has narrated various applications of Industrial Internet of Things (IIoTs) and Internet of Robotic Things (IoRTs) simultaneously with applications of sensors and actuators for multivarious purposes. Such IoTs, are integrated with the main ERP and digital technology-based platforms for collecting and using of operational data. While designing applications/solutions, an entity can also embed in script the requirements for generating data specifically required for assessing and reporting ESG efficiency.
- Robots and Robotic Process Automation: Digital technologies and hardware for these two applications, coupled with AI and ML, are increasingly being adopted by companies across all sectors, particularly manufacturing, healthcare and BFSI. Study of various publications and research reports reveal that industries adopting technologies for Robots and RPAs are to a considerable extent showed responsibilities for transparently sharing information related to associated risks and adverse impacts, if there be any, for substitution of human efforts due to such adoption. However, proliferation of these technologies in India are yet to assume reckonable proportion except in industries that require assembly functions.
- Drones: Number of instances for using these unmanned aerial vehicles by industrial and other commercial entities are slowly increasing. Governmental administrative authorities have also started using these for multivarious applications. Information collected through applications of drones would be useful for collecting data for assessment and reporting of ESG efficiency, duly mapped with geographical coordinates by integrating GPS technology. Readers may refer the article of the author published under this column in October 2021[12]

Rest of the other deep digital technologies, e. g., AR, VR, 3D Printing, etc. are also being used by industry, however, more study is required to appreciate their impacts on ESG related risk issues and mitigation. It is pertinent to mention here that audit professionals and eminent accounting and consulting firms have initiated actions for designing systems, processes and crafting online software for auditing transactions generated from out of applications of digital technologies. The author is of the view that for making any digital technology application ESG compliant, adopting entities should involve and collaborate with auditors right from the beginning of selecting, designing, and customizing solutions. Readers may refer a relevant article of the author in the context of Audit 4.0[13] in Industry 4.0 era.

Conclusion

In the limited space of this article dealing with such a critical subject like ESG may not give satisfaction to any stakeholder. So is the case of this author. This subject is assuming critical importance and evolving simultaneously with evolution of legal and regulatory mandates. This subject needs more attention, research, and deliberations as different regions of the world, irrespective being in any stage of economic development, are experiencing serious metamorphosis with plenty of adverse impact to humanity. The author would look forward to opportunities for conducting more collaborative research on the subject and contributing for the great cause of ESG efficiency. MA

Bibliography and Webliography

All these websites have been accessed during October and November and December 2021.

1. *https://www.freshfields.com/4a199a/globalassets/our-thinking/campaigns/legal-framework-for-impact/a-legal-framework-for-impact.pdf*
2. *https://earlymetrics.com/esg-ratings-how-can-a-business-environmental-and-social-impact-be-measured/*
3. *https://www.unglobalcompact.org/what-is-gc/mission/principles*
4. *https://www.pwc.com/gx/en/issues/esg.html?WT.mc_id=CT3-PL300-DM1-TR2-LS4-ND30-TTA9-CN_the-new-equation-esg&gclid=Cj0KCQiAy4eNBhCaARIsAFDVtI1RDb9O0z3NiiKx1cbyi3iWWR-gStE8FmrHZiiZLXR3C7Cc8XwgQkIaAoytEALw_wcB&gclsrc=aw.ds*
5. *https://www.blackrock.com/corporate/about-us/blackrock-sustainability-survey*
6. *https://economictimes.indiatimes.com/markets/stocks/news/esg-embedded-in-india-inc-as-sebi-expands-reporting-norms/articleshow/81690104.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst*
7. *https://www.oceantomo.com/intangible-asset-market-value-study/*
8. *https://corpgov.law.harvard.edu/2020/06/22/the-rise-of-standardized-esg-disclosure-frameworks-in-the-united-states/*
9. *https://corpgov.law.harvard.edu/2020/06/22/the-rise-of-standardized-esg-disclosure-frameworks-in-the-united-states/*
10. *https://www.fe.training/free-resources/valuation/esg-metrics/*
11. *https://docs.google.com/viewerng/viewer?url=http://www.innoventionians.com/wp-content/uploads/2020/10/14th-Monthly-Column-Digital-Transformation-October-2020.pdf*
12. *https://www.linkedin.com/posts/dr-paritosh-basu-87a67a15_digital-transformation-with-drones-activity-6856077167961411584-csPK*
13. *https://docs.google.com/viewerng/viewer?url=http://www.innoventionians.com/wp-content/uploads/2021/04/20th-Monthly-Article-on-Digital-Transformation-Audit-April-2021.pdf*