Corporate Leadership Group on Digital Reporting:
Insights on using digital tools for sustainability reporting processes

Developed by:

GRI

ERM

INTRODUCTION

An effective and systematic reporting process is important to create a high quality sustainability report. At the center of report creation lies the data collection process, along with the management and usability of this data.

Creating a sustainability report of high quality is crucial for companies because the market value of sustainability data is increasing. This can be seen in the increasingly frequent information requests to companies from shareholders and customers. It is also evident from the number of legal or statutory requirements on published and material data in many jurisdictions, which has raised the reporting bar for many companies. However, obtaining and analyzing accurate and timely data remains cumbersome for most organizations. If a company wants to gain value from its reporting process, it is vital that it can effectively identify, collect, validate, aggregate, and analyze information for the needs of all its stakeholders. Luckily, the landscape of digital solutions available for these steps of the reporting process has been growing and evolving. Reporters can tap into these solutions to make their data collection processes more efficient.

How can digital tools be leveraged to enhance the sustainability reporting process?

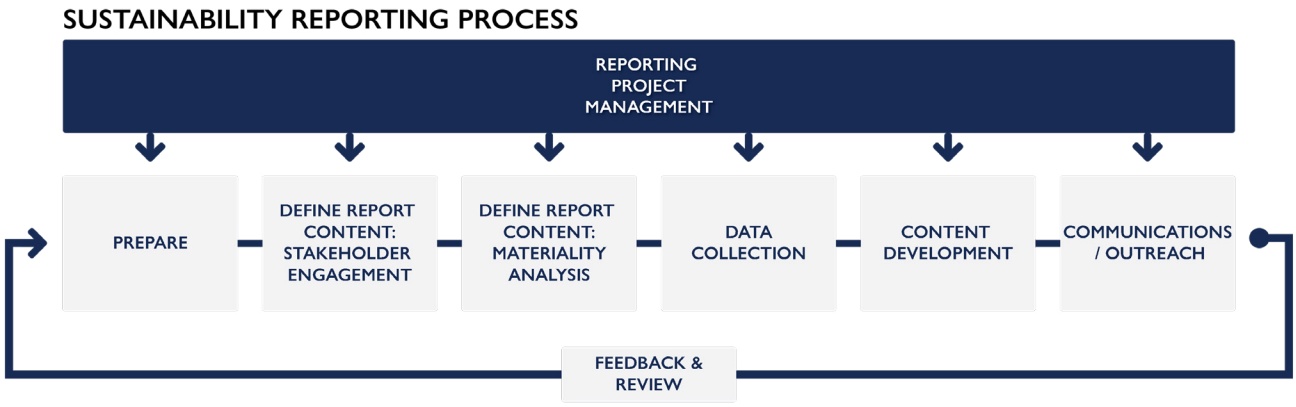
In collaboration with ERM, GRI undertook this question and convened the Corporate Leadership Group on Digital Reporting to explore how common challenges in the reporting process can be tackled through digital solutions. More advanced tools such as data mining, artificial intelligence (AI), or blockchain solutions can be applied to improve the quality of reporting and increase corporate transparency. These digital tools are quickly changing the way sustainability teams work – they enable reporters to have more control over information about their performance, analyze larger volumes of data more efficiently, and can lead to better management of a company's material topics.

IN THIS BRIEFING

This briefing provides an overview of the reporting project management phases and a summary of the opportunities for applying digital solutions to each part of these phases. It is a result of discussions and presentations by CLG Digital Reporting participants and invited experts. We begin by describing the challenges companies currently face in the processes for defining report content – stakeholder engagement and materiality – and the digital solutions that can address these challenges. The briefing then goes on to discuss solutions for some of the challenges faced around data collection, management, and data quality. The last section focuses on data collection from the supply chain. Organizations can use this information to reimagine their digital processes that feed information into their reports and create a more efficient reporting process.

The four areas of opportunity for applying digital tools for the reporting process:

- Materiality Analysis
- Stakeholder Engagement
- Data Collection, Management, and Data Quality
- Supply Chain Data



DISCLAIMER: The process described here refers to the most common activities for reporting purposes, based on reporters' experience. It is not part of the GRI Sustainability Reporting Standards (GRI Standards), therefore it should be considered as a suggestion and not as a requirement to produce a report in line with the GRI Standards.

INTERSECTION BETWEEN A DIGITAL JOURNEY AND THE SUSTAINABILITY REPORTING PROCESS

The sustainability reporting process poses a number of challenges. The process extends from the initial report content definition to the materiality analysis, data collection and analysis, publishing and distribution of the report. Without digital intervention, the process can be time-intensive, relying heavily on manual efforts to collect and aggregate information from within the company and from external stakeholders.

Where are companies spending most of their time?

As shown below, companies spend most of their time and effort on validating, collecting, aggregating, analyzing and consolidating this data. Reporting deadlines, the existence of multiple sites and subsidiaries, and variations in data sources and collection systems intensify these challenges.

Rank	Activities where most time and effort spent in the reporting cycle[1]
1	Sending and getting information from sites/locations in a timely manner
2	Collecting and aggregating data from the sites/locations with respect to sustainability reporting
3	Analysing and consolidating data from sites/locations to form a corporate sustainability report
4	Validating the data to ensure quality and accuracy
5	Generating the sustainability report
6	Receiving approvals
7	Conducting materiality analyses
8	Communicating, publishing and distributing the sustainability report
9	Responding to inquiries once report has been published

1 Survey question: In priority order, please rank the following activities in terms of where you spend the most amount of time and effort in terms of the reporting cycle:

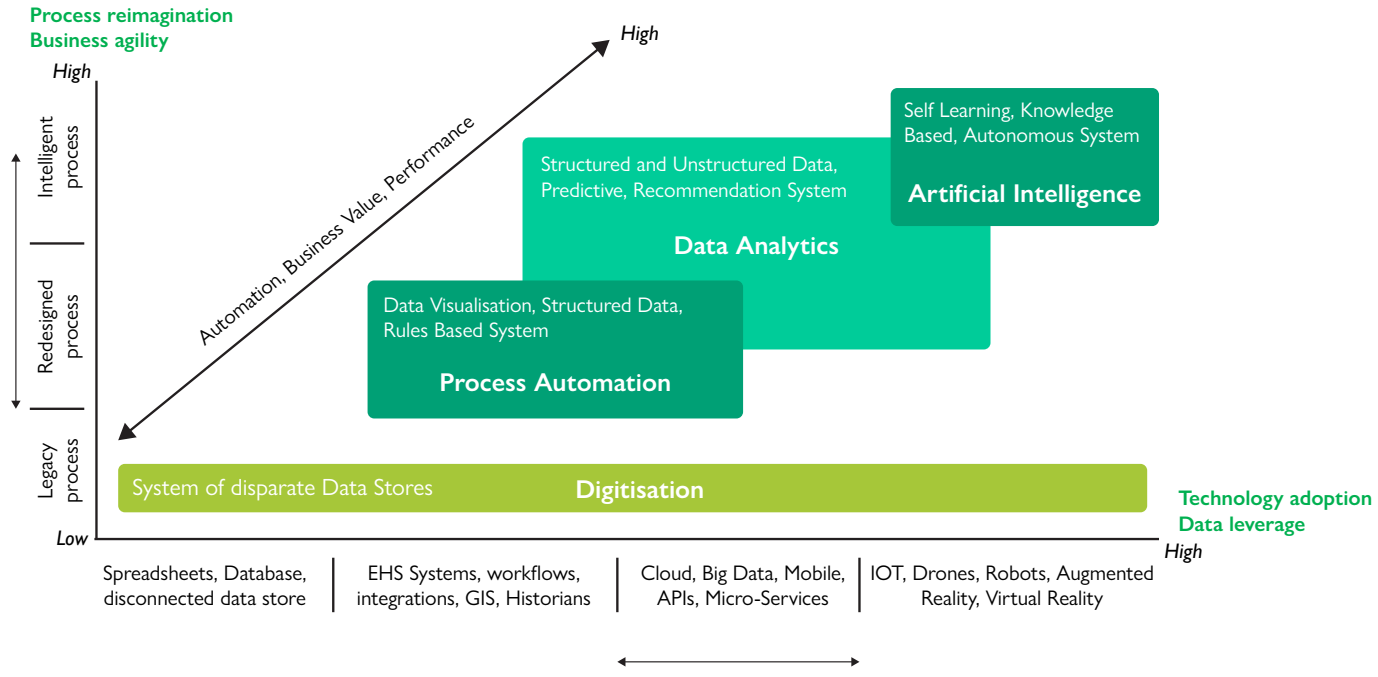
What can digital solutions offer?

Fortunately, digital solutions can assist companies by harnessing technology and data to resolve some of the more difficult aspects of the sustainability reporting process. A company's adoption of new technologies is driven by its current digital maturity, its place in the digital journey, and its ambition levels. Digital tools can also be utilized to bridge the gap between management and reporting on ESG topics, highlighting the potential for addressing different operational purposes and efficiency gains.

The Digital Journey: the table below illustrates that organizations beginning the digital journey focus on using spreadsheets and databases to collect and analyze data and implement dashboards to provide visibility. As companies advance in their digital maturity, their processes evolve from legacy and manually intensive practices to intelligent processes specifically designed for the digital world. Companies further along the digital journey begin to transition from working with legacy systems to deploying advanced technologies with automation at their core. These technologies move beyond data analytics to artificial intelligence or blockchain in response to specific challenges. In the case of sustainability reporting, companies' journeys vary from using legacy systems (e.g. Excel, SharePoint) to the use of specialized software to automate data collection and analysis.

Key takeaways

- Digital solutions can accelerate and automate the reporting process, while helping tackle challenges around transparency and accuracy.
- However, implementing digital solutions requires a cultural change from both the reporters and stakeholders to leverage more digital ways of working and consuming data.



REPORTING PHASE: STAKEHOLDER ENGAGEMENT

Expectations from GRI Standards

Stakeholder engagement is a core activity in the process of defining content for an organization's sustainability report. Stakeholder engagement ensures that the informational needs, expectations, and interests of different actors are accounted for in the content of an organization's sustainability report. Stakeholders are those that are affected by an organization's activities, products, or services or whose actions have influence on the organization's strategy or ability to achieve objectives.[2] *GRI 101: Foundation 2016* lists examples of stakeholders as "employees and other workers, shareholders, suppliers, vulnerable groups, local communities, and NGOs or other civil society organizations."

Disclosures relating to stakeholder engagement (in *GRI 102: General Disclosures 2016*)

- Disclosure 102-40: List of stakeholder groups
- Disclosure 102-41: Collective bargaining agreements
- Disclosure 102-42: Identifying and selecting stakeholders
- Disclosure 102-43: Approach to stakeholder engagement
- Disclosure 102-44: Key topics and concerns raised

Common challenges in conducting stakeholder engagement

Challenges in the process of reaching out to stakeholders can include difficulties in contacting varying sizes of stakeholder groups and being able to represent groups which might be less vocal than others.

Thus, pre-determining channels of communication and planning processes for analyzing the data are vital in order to access large volumes of data and effectively capture information that may otherwise be "locked away."

How can the stakeholder engagement process be improved through technology?

Data mining, artificial intelligence, and other technologies allow data to be analyzed and utilized quicker and with greater precision. A legacy process may rely on surveys to collect data from stakeholders – these may be enabled through an online tool but the response rate is often quite low. Moreover, the stakeholders engaged are limited due to the manual effort needed to send surveys, collate the limited information, and analyze the data into meaningful insights. Annual surveys are also often a static tool, representing a viewpoint in a moment in time. Data mining technologies have significantly advanced. Tools are now commercially available to mine social media in real-time in order to understand the sentiments of customers and stakeholders. These tools allow for the analysis of data that had previously been too labor-intensive to review to now be examined with more rigor.

Recommendations for the stakeholder engagement process

- More engagement is needed throughout the year and in real-time.
- Surveys need to be more engaging to encourage participation. For example: making use of emoticons and 5-star ratings which resonate more with people's daily interactions, to then prompt other questions to follow, tailored depending on the response rating.
- Ensure the appropriate approach is used based on the stakeholder group.

2 From *GRI 101: Foundation 2016*: "Stakeholders are defined as entities or individuals that can reasonably be expected to be significantly affected by the reporting organization's activities, products, or services; or whose actions can reasonably be expected to affect the ability of the organization to implement its strategies or achieve its objectives."

REPORTING PHASE: STAKEHOLDER ENGAGEMENT

The traditional approach to stakeholder engagement involves identifying stakeholders, surveying them, and analyzing the feedback. Organizations can then respond to this feedback either directly or in a subsequent sustainability report. This traditional approach is a linear, slow process that limits a company's capacity to understand the perceptions of stakeholders.

Improvements in technology allow stakeholders to be engaged at a much more personal and targeted level, ensuring that the messaging resonates with the appropriate stakeholder. Today, stakeholder engagement can be improved through emphatic listening, social media, and new tools such as augmented and virtual reality. However, it is worth noting that digital tools in the stakeholder engagement process may only be useful when stakeholders have access to these digitized channels. If not all stakeholders are digital users, existing traditional processes may still be optimal to connect with particular groups.

Emphatic learning

Artificial intelligence tools now mine available data and input – often received in real-time – to understand the sentiments behind feedback. With such tools, organizations can respond back with a tailored response based on emphatic listening. By leveraging sentiment analysis, organizations can understand what a stakeholder is asking for, how they want to use the information, what is driving their feedback or questions, and how they would like to receive the information. With this information, the organization can design meaningful responses to their stakeholders.

Social media

The most prominent way of stakeholder engagement is through social media. Through social media, stakeholders have a direct way of expressing their thoughts and opinions to the world and making their sentiments public. Perceptions of a company's sustainability footprint can be shared globally in a moment and can influence others (positively or negatively) independently of the company's actual sustainability reporting.

The engagement process has had to evolve to adapt to this new form of expression. With millions of feedback and comments available instantaneously, companies are leveraging artificial intelligence (using commercially available tools) to quickly track topics that are trending and assess the mood or sentiment of a statement. This analysis can then be used to cluster stakeholders and provide them with a more targeted response. Companies are also moving towards dedicated channels to engage stakeholders around the companies' efforts around sustainability. Through social media, companies can provide regular updates on their efforts in addition to their annual sustainability report.

Augmented and virtual reality

In addition to using social media to engage stakeholders more directly and frequently, companies are changing the content that they provide to these stakeholders. Traditionally, companies have leveraged polished text and images to illustrate their sustainability efforts. Through augmented reality and virtual reality, companies can bring their efforts to life. Rather than words on a page, information can be augmented through immersive experiences that allow the stakeholders to visualize and feel the improvements. For example, an organization might use animation to showcase changes to a factory floor to improve energy efficiency and reduce waste.

REPORTING PHASE: MATERIALITY ANALYSIS

Expectations from GRI Standards

The materiality analysis is part of defining report content – choosing the relevant topics to be included in the sustainability report based on the GRI Reporting Principle of Materiality. According to the principle, the sustainability report should cover topics that "reflect the reporting organization's significant economic, environmental, and social impacts; or substantively influence the assessments and decisions of stakeholders" (*GRI 101: Foundation 2016*). A topic may warrant inclusion based on only one of these dimensions.

Materiality offers benefits to an organization beyond solely identifying report content – the output of a materiality analysis can lead to a more efficient reporting process, allows for a review of an organization's strategy, and can lead to a more effective allocation of investments and resources to manage relevant topics.

What is material to an organization? To begin, an organization may want to identify the impacts it has on the economy, environment, and society. These can be positive or negative, direct or indirect, actual or potential, and intended or unintended. Designing a materiality analysis involves a number of activities:[3]

- Benchmarking and gap analysis
- Design the materiality analysis
- Value chain analysis
- Identification of the initial list of topics
- Execute the materiality analysis (including topic prioritization and defining threshold)
- Identify material topics' boundaries
- Materiality validation
- Choose the 'in-accordance' option and define the set of disclosures for each material topic

Half of all CLG Digital participants reported using a digital tool for materiality related activities such as an online survey platform for topic prioritization.

Disclosures relating to the materiality analysis (from *GRI 101: Foundation 2016*, *GRI 102: General Disclosures 2016* and *GRI 103: Management Approach 2016*)

- GRI Reporting Principle of Materiality
- Disclosure 102-47: List of material topics
- Disclosure 103-1: Explanation of the material topic and its Boundary

3 The process described here refers to the most common activities for reporting purposes, based on reporters experience. It is not part of the GRI Sustainability Reporting Standards (GRI Standards), therefore it should be considered as a suggestion and not as a requirement to produce a report in line with the GRI Standards.

Common challenges in conducting a materiality analysis

Reporters often find some of the most difficult aspects during a materiality analysis are the topic identification and prioritization stages. The most challenging aspect, however, remains validation of the results of the materiality analysis – how is the output of the materiality analysis approved and by whom?

How can the materiality process be improved through technology?

Technology has always had an impact on materiality analysis. Survey platforms allow companies to collect data around stakeholders' viewpoints on different topics; visualization tools then allow those topics to be visualized graphically to showcase which topics are the most important and relevant.

Companies are now leveraging artificial intelligence (AI) through commercially available technology platforms, such as Datamaran, to undertake the materiality analysis. Without AI, companies may not have the resources to analyze this exponential increase in feedback and input. However, through the use of AI, companies can scan through thousands of sustainability reports, mine perceptions posted on social media, and incorporate trends or rising issues reported in mainstream media. AI tools analyze this mass of unstructured information to identify the key points that are relevant to the company's sustainability goals and present these to the sustainability team to focus and prioritize. There are also some adverse impacts associated with the use of AI which are worth considering - for example, creating and training AI is a very energy intensive process, which has implications for the carbon footprint of such business activities.

REPORTING PHASE: DATA COLLECTION, MANAGEMENT, AND DATA QUALITY

Expectations from GRI Standards

Comprehensive data collection and management processes are necessary for developing a high-quality sustainability report that follows GRI's Reporting Principles (from *GRI 101: Foundation 2016*). The GRI Reporting Principles ask for reports to be accurate, balanced, clear, comparable, reliable, and timely in order to enable stakeholders in making sound and reasonable assessments of an organization. A report that contains accurate information, presents data that is comparable over time, explains the information gathering processes, and reports this information on a regular schedule will serve more purpose to stakeholders who are seeking information about the company's impacts.

How can a reporting organization ensure that its sustainability report quality is in line with the GRI Reporting Principles? Well-developed processes for data collection are the first step. Unfortunately, factors like complex supply chains and incongruent processes for data management among company sites or subsidiaries can lead to challenges in data collection.

Common challenges in data collection and management

When it comes to data collection and management, participants of the Corporate Leadership Group stated that the most time and effort in the reporting process was spent on:

- Validating data
- Collecting and aggregating site data
- Obtaining timely site information
- Analyzing and consolidating site data

One key point for reporters is to differentiate between challenges they face in applying digital solutions and challenges they may face in management of data collection due to internal factors.

Challenges in data collection and management that affect sustainability reporting

- Collecting accurate and consistent data
- Inconsistent definitions used (in some cases), e.g. by site regulatory agency, corporate, within a portfolio, between subsidiaries and external standards / frame-works (e.g. GRI, GAAP)
- Inconsistent consolidation of data – varying taxonomy (e.g. site / business unit / legal entity / asset)
- Lack of resources for reporting (including consolidation tools and interfaces to use)
- Challenges in collecting data from dispersed locations
- Supply chain data – where to get this information, especially with respect to products
- Multiple legacy systems within a portfolio
- Traceability of data and supporting documentation required for assurance
- Timeliness of data/ content (including availability of data in relation to the report development / drafting process)
- Time consuming, manual data validation process (and other processes)
- Adds pressure to reporting timeframe
- Lack of time to use data to improve performance
- Version control (report iterations)
- Changing KPIs / metrics over time (financial KPIs / metrics do not subject to the same degree of variation)
- Determining internal control processes that produce 'decision ready' (investor grade) data which can be assured in line with recognized approaches
- Different stakeholders (including internal and external) are interested in data at different frequencies and different levels of granularity. How to provide flexibility to meet different needs
- Turnover of staff who collect data

It may be that an effective digital solution exists for the data collection challenge a reporter faces, but convincing internal management to adopt this solution is difficult. In this case, the approach the reporting team uses will need to showcase the benefits and potential cost-saving opportunities of the digital solution.

How can the data collection and management process be improved through technology?

Data collection can be improved through a number of tools. The most common tool for data collection and management among Corporate Leadership Group (CLG) participants was Microsoft Excel, followed by online forms through Microsoft SharePoint or another custom web application. At the same time, participants of the CLG noted that they had little certainty over the data quality that they collected. Ensuring data quality and reliability of information to be reported can become difficult due to varying versions of data available and problems with data aggregation and analysis.

Tools that promote collaboration, such as SharePoint or Yammer allow teams of people to share their information in a common and accessible format. Online form builders, low-code development tools, and workflow tools can also help improve data management by providing a rapid way to digitize the process.

Finally, enterprise platforms like SAP, Sphera, Enablon, Intelex, Cority, and others provide structured systems focused on common business processes like sustainability reporting. These advanced solutions can meet more specific needs of an organization and provide pointed capabilities for challenging areas. Implementing an enterprise platform may mean transforming processes, moving from manual aggregation to automation, but can also pose challenges as adoption of the solution may be high in cost and effort.

Recommendations for effective data collection and management

- Focus on improving data quality at its source by integrating data directly from source systems
- Pre-define reporting hierarchy, data templates and report structure to minimize manual handling and processing of data
- Minimize calculations being done by individuals and build them directly into the tool
- Collect information relating to the data context as well as the data itself
- Build validation steps into the data collection process to ensure sign-off and ownership
- Leverage a single repository/platform for data
- Develop dashboards to provide visibility to executive management
- On-site audits
- Ensure processes are digitally captured/ tracked for assurance and retrieval of key inputs if required by investors, regulators or other stakeholders
- Continuous internal training

REPORTING PHASE: COLLECTING DATA FROM THE SUPPLY CHAIN

Expectations from GRI Standards

Depending on the industry, as much as 98% of a sector's environmental impacts can be located in the supply chain. A company's activities in its supply chain can have significant impacts on the economy, environment, and society, thus creating the need to disclose information on these material topics in the sustainability report.

An organization can use a number of GRI Standards and disclosures to report on its supply chain. Disclosure 102-9, for example, asks for an organization to describe its supply chain and *GRI 308: Supplier environmental assessment 2016* and *GRI 414: Supplier social assessment 2016* provide further opportunity for disclosure of specific impacts from suppliers.

Standards and disclosures relating to information from the supply chain

- Disclosure 102-9: Supply chain
- Disclosure 103-1: Boundary of material topics
- GRI 308: Supplier environment assessment 2016
- GRI 414: Supplier social assessment 2016
- Topic-specific Standards that have some indicators that relate specifically to supply chain impacts for that topic (e.g. *GRI 403: Occupational health and safety 2018*, Scope 3 emissions in *GRI 305: Emissions 2016*)

Most importantly, for each material topic, an organization is required to report the Boundary, "the description of where the impacts for a material topic occur, and the organization's involvement with these impacts."[4] If an impact occurs in the upstream part of the supply chain, an organization will need to report that the Boundary lies within the supply chain and will then need to gather and report data from this area. For example, it may happen that a company's material topic relates to *GRI 408: Child Labor 2016* and that the incidents of child labor are occurring in the company's supply chain. In this instance, the Boundary for this material topic would extend to the supply chain and the company would need to gather these cases of child labor and report on them.

Common challenges in gathering data from the supply chain

Understandably, gathering data from supply chains can be made difficult by their complexity – processes like mapping the supply chain can be difficult beyond Tier 1, hindering data collection in this area. Even when information is captured, it may be of variable quality due to language differences or variances in data definitions.

Challenges faced while gathering data from the supply chain

- Difficulties in mapping the supply chain
- Difficulties in collecting data from upstream entities in the supply chain beyond Tier 1
- Quality of data beyond Tier 1 may be variable or be limited by language barriers
- Confidentiality concerns in supply chain may inhibit suppliers to share supply chain data
- Lack of common terms and definitions can inhibit quality data collection
- Difficulties in understanding where an organization has leverage over impacts in the supply chain and how to measure the organization's effectiveness

4 *GRI 103: Management Approach 2016*

How can the process of collecting data from the supply chain be improved through technology?

Technology can help an organization in collecting supply chain data by addressing problem areas like reaching out to large numbers of suppliers, analyzing and verifying the information collected, and generally making the process of data collection more efficient. According to a survey conducted by BSR and Globescan in 2018, 72% of companies surveyed were already applying new technologies to address supply chain sustainability.

Specialist platforms now provide efficient ways to collect data from the supply chain. Companies previously had to use their resources to hunt, collect, and analyze this information. Now, commercial tools are available that can automate this data collection process. Solutions like Ulula allow data to be collected from individuals in the extended labor force quickly through mobile devices and simple forms distributed by SMS. Likewise, platforms like Assent Compliance are regularly collecting data from suppliers and regulatory authorities that can then be incorporated into a company's sustainability report.

Blockchain has also extended a company's data collection capabilities. Through blockchain platforms, companies can trace resources being used as part of the supply chain while at the same time providing better visibility to suppliers about how their products are being used. For example, blockchain solutions can be used to allow customers to trace the origins of juice bought at a grocery store back to the actual farmer providing the fruit.

ACKNOWLEDGEMENTS

The Corporate Leadership Group on Digital Reporting is composed of nine companies that regularly meet online and in-person in "Labs" to discuss the digitalization of the sustainability reporting process. With the facilitation of GRI and ERM, the group explores digital solutions for more efficient external reporting. The nine members explore ways in which technologies can support processes such as stakeholder engagement practices and the diversification of information for different audiences. The outcomes of the discussions will result in recommendations to support GRI's work on digital reporting and help participants find their way forward in adopting technologies that support a more effective sustainability reporting process.

Participating companies include:

- ABB
- Abertis
- Arcadis
- European Investment Bank:
- Enel
- Hoffmann La Roche
- Munich Airport
- Solvay
- Votorantim Cimentos

ABOUT GRI

GRI helps businesses and governments worldwide understand and communicate their impact on critical sustainability issues such as climate change, human rights, governance and social well-being. This enables real action to create social, environmental and economic benefits for everyone.

The GRI Sustainability Reporting Standards (GRI Standards) are the first and most widely adopted global standards for sustainability reporting. The GRI Standards are developed with true multi-stakeholder contributions and are rooted in the public interest. Since GRI's inception in 1997, it has transformed reporting from a niche practice to one now adopted by a growing majority of organizations. In fact, 93% of the world's largest 250 corporations report on their sustainability performance.

GRI works with the largest companies in the world as a force for positive change – companies with revenues larger than the GDPs of entire countries and supply chains that stretch the globe. As a result, the impact of GRI's work on social well-being through better jobs, less environmental damage, access to clean water, less child and forced labor, and gender equality has enormous scale.

ABOUT ERM

ERM is a leading global provider of environmental, health, safety, risk, social consulting services and sustainability related services. ERM works with the world's leading organizations, delivering innovative solutions and helping them to understand and manage their sustainability challenges. To do this, ERM has more than 5,500 people in over 40 countries and territories working out of more than 160 offices.

ERM's Digital Services help organizations achieve these improvements in EHS and sustainability performance through tech-enabled innovation. These business outcomes are delivered through our global network, EHS and sustainability subject matter expertise and extensive digital capabilities.