Agile Reporting: ESG

Overview

ESG (Environmental, Social, and Governance) has become a critical issue for organizations across various industries. Companies are expected to operate sustainably, take care of their employees, and have strong corporate governance. Failure to meet these standards can lead to negative impacts on their brand reputation, loss of investors, and legal repercussions.

What is ESG?

ESG is a set of specific criteria used as a tool to evaluate companies on their environmental, social and governance impact. It was developed by investors but is now used by many as a key tool in measuring sustainability initiatives. Companies use ESG metrics and data to analyze performance, determine progress and gaps, and create internal and external reporting.

Environment. The "E" in ESG accounts for how a company makes use of natural resources and how those policies and practices impact the environment, both from their direct operations as well as their supply chains. When companies neglect to consider the effects on the environment, they expose their business to higher levels of financial risk. Some examples of issues that fall under this category include greenhouse gas emissions, electricity and water usage, waste and pollution, deforestation, land use, and biodiversity.

Social. The "S" in ESG is the social pillar that measures how organizations manage their relationships with their workforce, as well as their impact on customers, suppliers, and the community in which they operate. Social factors can affect overall financial performance: when neglected, this can result in labor strikes or consumer protests, and when handled properly, it becomes a way for investors to reflect their values in investing, while leading to higher and more reliable returns over the long term.

Governance. The "G" stands for governance in decision-making, which ranges from policymaking to allocation of rights and obligations among various organizational stakeholders, including board of directors, management, and shareholders. Governance factors pertain to the regulations and rules that corporations abide by, which enable investors to gauge the quality of a company's governance practices, similar to how they would for their environmental and social practices.

Achieving ESG reporting compliance requires effective data management, which allows organizations to accurately measure and report on internal and 3rd party supply chain operations and performance. However, this data is often stored in disparate systems and formats, creating silos and lack of transparency which inhibits teams from leveraging it as business insights. Using data insights for ESG initiatives increases the likelihood to achieve long-term success and resilience in the face of changing market conditions and stakeholder expectations.

Challenges with Unlocking Data for ESG Reporting

ESG data often comes from various sources, making it difficult to manage, analyze and report. In addition, reporting requirements are often changing and there aren't clearly defined guidelines on what needs to be reported, which adds even more complexity to this process. ESG data can also be

subjective and difficult to quantify, making it challenging to develop standardized metrics for comparison across different companies and industries.

Organizations face increasing disclosure requirements in the US and Europe with the addition of more stringent mandates for public companies, which includes reporting on:

- direct usage and indirect emissions purchases of electricity and energy sources (Scope 1 & Scope 2)
- emissions from a company's 3rd party suppliers, customers and partner activities (Scope 3)

This means going forward, even smaller non-public companies will be impacted by this change as they will be under pressure from their larger partners or customers to report, meet, and maintain certain sustainability standards.

Data quality and accuracy are also critical factors to consider as companies must ensure that their data is reliable and auditable. Many organizations lack the necessary expertise or resources to collect, analyze, and report on ESG data accurately, which further complicates the process. Despite these challenges, they must prioritize effective data management and reporting to meet ESG standards and maintain stakeholder trust. Some additional challenges to consider:

- **Data Aggregation:** ESG data comes from diverse sources such as internal or external data sources, applications, IoT devices and more The data can be structured, unstructured or in files of different formats all of which may be delivered through batch or streaming services. Collecting data from external sources for sustainability performance in supply chain, as well as data for ESG framework (i.e. GRI, CPD, SASB, WEF, and other regulatory requirements) is often challenging. This is one of the key reasons ESG data can be difficult to integrate and analyze.

- **Standards and Data Standardization:** Industry ESG reporting standards are constantly in a state of change. In addition, standardizing data and datasets is always a challenge with any reporting. All of this contributes to the challenge of comparing data reports across different companies and industries.

- **Integrating Data Sources:** Since ESG data and standards are evolving at a rapid pace, the sources where necessary data comes from also changes frequently. Onboarding new data sources or changing them often requires a significant amount of time, which inhibits organizations from providing necessary information in a timely manner.

- **Data Reporting:** Reporting on ESG data requires adherence to various regulatory requirements, frameworks, and guidelines, which can be complex and time-consuming to navigate. This data also often requires sophisticated data analysis tools, such as machine learning, data visualization, and predictive analytics, which may require specialized expertise. Furthermore, there is a need for audit-ready data backed by trusted and transparent information.

Modern Data Integration for ESG Compliance

An effective approach in managing data integration plays a critical role in enabling organizations to achieve ESG compliance. In addition to solving the challenges mentioned above, it can help establish a strategy even when there aren't clearly defined guidelines for what needs to be measured or reported on.

Here are a few ways ESG compliance can be streamlined with StreamSets:

- **Data Aggregation:** With StreamSets, you can easily connect and integrate data from any type of data source or file - whether it's structured or unstructured, using batch, streaming or CDC pipelines.

- **Data Standardization:** StreamSets enables you to create standard reusable pipelines so that you can make a change once and apply it across all data infrastructure, when things inevitably change.

- **Operational Efficiencies:** StreamSets helps teams work more efficiently by providing a way to connect all data sources, schedule data pipelines, and monitor and manage them. The platform provides a complete view of a company's data supply chain and proactively adapts to changes by monitoring, alerting, and taking action to ensure uninterrupted data flow.

- **Enabling Collaboration:** Collaboration between different departments and stakeholders allows for better coordination and alignment around ESG initiatives. With a modern data integration platform like StreamSets, data engineers have the ability to scale access to insights to line of business owners for more informed decision-making.

Creating transparency/visibility:

- Create single source of sustainability performance data across company from internal and external sources by integrating data from multiple sources.
- Develop a customized dashboard by key stakeholder in the company.
- Measure, monitor, and report on ESG corporate goals as well as guidelines along multiple standards.
- Prepare internal and external reporting for specific disclosures and communications against corporate goals and multiple standards - GRI, SASB, IBC, WEF, etc.

Impact

Data integration is key to creating business efficiencies because it provides a way to connect and integrate all data sources. By doing so, costs and resources required to manage data are reduced, freeing up valuable time and effort that can be used on critical business tasks.

Effective data management not only helps to streamline business processes but also increases reliability and trust for ESG initiatives. By ensuring that data is accurate and consistent, organizations can make informed decisions that align with their ESG goals. With efficient data integration and management in place, teams are able to focus more on critical business efforts rather than spending time compiling and reporting on data. This allows them to work towards achieving their business objectives and delivering value to their stakeholders. As a result, this helps improve reputation, attract and retain investors, and promotes a more sustainable future.

Learn how StreamSets can help you

About StreamSets

At StreamSets, a Software AG company, our mission is to ensure data engineering teams thrive in today's world of constant change. We do this by embedding the DataOps philosophy of "continuous data for the connected enterprise" into the StreamSets DataOps Platform. StreamSets empowers data engineers to build, run, monitor, and manage smart data pipelines for the modern data ecosystem.

StreamSets is the only data integration platform that provides a single design experience for all design patterns for 10x greater developer productivity; smart data pipelines that are resilient to change for 80% less breakages; and a single pane of glass for observing and monitoring all pipelines to eliminate blind spots and control gaps. With StreamSets, you can deliver continuous data for the modern data ecosystem and hybrid integration in a world of constant change. **For more information, visit streamsets.com**

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