

Whitepaper

Achieving
ESG Sustainability Goals
with Process Mining-Based
Transformation Program



Abstract

In today's world, achieving a sustainable business model is no longer a social obligation, it has become a mandatory compliance to seek financial loans and maintain business reputation in the market. Sustainability initiatives contribute to an organization's overall success by having better access to markets, growth opportunities, and higher customer satisfaction. When it comes to incorporating sustainability goals, an organization faces a major challenge in developing a robust, error-free data collection process. Hence, having a sustainability program and its reporting is becoming the boardroom's priority and a challenging job.

Key Takeaways

- What are the key challenges that an organization faces while incorporating sustainability factors into organizational goals?
- How can an organization develop real-time sustainability reporting via process mining?
- What is the importance, and what benefits an organization will get by adopting process mining?





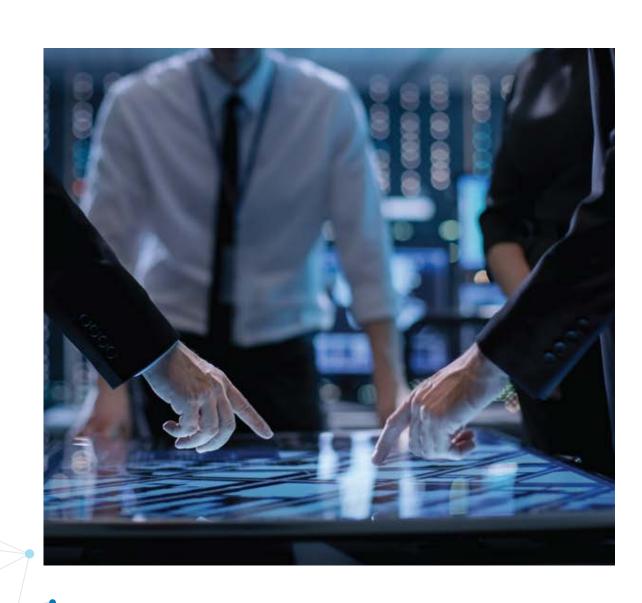


Introduction

Being sustainable means an organization's goals, strategies, business activities and practices should be aimed to create, maintain, and preserve such conditions under which humans and nature can co-exist. An organization's sustainability can be assessed structurally based on the integration of environmental, social, and governance (ESG) factors into the decision-making process, where sustainability performance is tracked with measurable KPIs to articulate stakeholders i.e., how well an organization is performing against those ESG factors and its parameters. Such KPIs indicate how the sustainability strategy can create long-term value for the organization and for its clients. Hence the practice of sustainability reporting is becoming the industry norm.

Despite having global standard ESG in place, enterprises, businesses, and organizations still struggle to define and report KPIs as per their environment, as they do not have a complete view of all types of information and insights that are relevant and generated in the system, results in, they overlook the essential data, projects, practices, and processes needed for ESG reports.

Process mining can help an organization to get data insights which are collected from different sources and centralize it to render it in real-time. This allows total transparency, and creates a visualization of bottlenecks, improvement, and growth opportunities in any process at each level.





ESG Aspects

Environment

Focuses on the company's impact on the planet, such as climate-change initiatives.

Social

Focuses on the way the company treats its people and the societies in which it operates.

Governance

Focuses on organizational practices, controls, and procedures used to ensure the company is actually doing what it claims to do.

- Diversity and inclusion
- Corporate social responsibility
- Data protection and privacy
- · Labor standards
- Animal welfare
- · Product safety
- · Responsible sourcing
- Sustainable supply chain
- Protected Ethics
 Advice and Reporting
 Mechanisms Board
 composition
- Management diversity
- Shareholder rights
- · Lobbying activities
- Executive compensation
- Accounting transparency
- Reporting and disclosures
- Conflict of interest
- Shareholder actions
- · Investor relation

- Greenhouse gas emissions
- Air and water pollution
- Biodiversity
- · Business circularity
- Deforestation
- Recycling and waste management
- Water security
- Energy efficiency
- Product carbon footprint

Figure 1: ESG Aspects and Performance Indicators

Standard Reporting Framework Accounting for a SASB Accounting for a Sortal accidence CIPI COSB Climate Disclosure Standards Board TCFD TAGGROUSE IN ACCOUNTS ACC

Regulations

ISSB
International
sustainability
standards board

SFDR
Sustainable
finance
disclosure
regulation

CSRD
Corporate
Sustainability
reporting
directive

SUSTAINABLE DEVELOPMENT GOALS

IPRIPRIDE PRINCIPLE STORY
Responsible Investment

GREENHOUSE GAS PROTOCOL

Global Goals

and Principals

Raters and Rankers



MSCI 🏶

ecovadis

ISS ESG⊳

Moody's

Figure 2: ESG Reporting Framework Landscape at a Glance

Note: Above mentioned framework and standard are not exhaustive as there are various standards being followed in the world, which differ from country to country and region to region



Challenges to Align Organization's Goals with Sustainability Factors

To execute the enterprise sustainability program, ESG factors, parameters (KPIs) and related activities can be holistically reported, tracked, and governed in real-time covering enterprise dimensions like people, process, technology, and data to drive organizational changes, and

culture-building practices. Adopting sustainability without precise reporting is not going to help the underlying transparency which is the key in the eyes of the stakeholders. Below are the challenges that most organizations face while aligning sustainability goals and the availability of measurable KPIs.

Data

An organization may or may not have complete data to measure KPIs as it requires significant data from multiple sources that go into the calculation. For instance, to calculate the gender pay ratio, data is readily available as information related to the salaries of each employee is sufficient, however on the other hand, to calculate carbon footprint (measurement of a company's greenhouse gas (GHG) emissions in units of tons), an organization need to have a list of all electronic assets (laptop, desktop, printer, switches), asset life,

power consumption and emission of greenhouse gases through direct and indirect activities. Therefore, most of the time due to a lack of complete or inconsistent information, data needs to be restructured, re-recorded or to be sourced from suppliers.

Key challenges faced:

- · Incomplete or unavailability of data
- · Inconsistent data
- Inflow of data from multiple sources in various forms



Identifying ownership is an important aspect in considering any goal-setting and deciding strategy. When it comes to ESG, it requires a concerted effort across departments upstream and downstream in the value chain, hence ownership is unclear. There is a lack of education in terms of knowledge and awareness on the concept of ESG

across the organization including among employees and leadership.

Key challenges faced:

- Identifying stakeholders and owners
- Communication and driving cultural change
- ESG literacy, training, data- reporting and analytics

Process and KPIs

Understanding and identifying KPIs are the most difficult tasks for organizations for ESG integration and reporting. Quantitative KPIs can be tracked and analyzed easily, however, it is difficult to track and calculate qualitative KPIs. For example, diversity and inclusion (one of the critical ESG metrics) talks about social and ethical considerations that go beyond financial metrics.

Deciding how and what to measure is difficult for organizations while implementing diversity and Inclusion as one of the parameters.

Key challenges faced:

- Understanding and identification/ selecting of KPI
- · How KPIs will be calculated



Systems

ESG data is collected in different forms from multiple sources which makes it difficult for an organization to process the data and provide the ESG output accurately. Calculation of KPIs is relatively new compared to financial reporting which is based on tools like Access and Excel. This leads to inconsistent handling of data and open areas to make errors.

Key challenges faced:

- Where the data will be stored and handled
- How should the data architecture, data integration and data governance

Additionally, other major challenges in the integration of ESG Factors in enterprise programs are:

- Lack of standardized process and approach for achieving ESG/sustainable goals
- Forming a sustainability partnership

Achieving ESG Sustainability Goals with Process Mining

Process mining is a technique that uses data from business systems to gain insights into organizational processes and identify areas for improvement. Process mining plays a crucial role in promoting environmental, social, and governance (ESG) principles in the transformation journey for any organization.

approach, where all subjective parameters can be converted in specifics for a given organization into tangible, and measurable reports (outcomes) as captured from their source systems, and workshops. Below are the few aspects of ESG checklist items, and actionable insights to be tracked via process mining.





| ESG Factors | ESG Aspect | Key Areas to Focus on | Process Mining (Baseline stage) |
|----------------------------------|---|---|--|
| People | Organization and governance model (roles and ownership responsibilities) Communication and change management Data literacy, training, data, reporting, and analytics ownership and stewardship | Develop an ESG strategy that is guided by an overarching vision and mission of the company and incorporate ESG into strategic planning Strengthening the board's responsibility and setting up responsibilities Establishing effective communication channels with key stakeholders Implementing awareness training plans and identification of resources with the required skillset | Review of mission, vision, and other policies Stakeholder relationships, social and environmental impact Existing training plans and skillset of resources |
| Processes | Sustainability reporting workflow (manuals, protocols, and controls) processes Central KPIs navigation (setting priorities, definitions, units, and scopes) processes KPI, reports and data lifecycle management, data governance and data quality processes | How ESG Factor can be implemented in the current process How ESG KPIs will be incorporated and aligned to revised policies How Incorporated ESG KPIs will be calculated and integrated into the current reporting process | List of related processes org. deals with. Map the current KPIs and its definition and how they are calculated Develop reporting catalogue as is in place, and how reports are generated |
| Data | Sourcing raw data from different functions, subsidiaries and third parties Ensuring secure and compliant data handling Data identification and data quality measures | What data needs to be collected, both for internal KPI tracking and reporting Where it exists now (system, spreadsheet) Who's responsible for it (department, individual) Any quality or accessibility issues. Relevant industry benchmarks | Analyzing existing data Analyzing the source of data Quality of data Data integration and mapping |
| Source Systems and Tooling | Technical system architecture, configuration and (core) system functionality Information architecture, reporting and analytics tooling Data architecture, data integration, and data governance and quality tooling | Is the required data available and readily at the correct place? Can the data be sourced? Can the data have linked to current KPIs? Develop a robust and reliable system to consolidate and keep all ESG data | Integrate existing systems and apps Integrate with existing data storage strategy and tracking system |

Through process mining an organization can conquer the driving and reporting challenges by monitoring the right KPIs under the below structured approach to maintain sustainability compliance efficiently and effectively.

Focusing on Execution - Single platform to Visualize the Process using real time Data ingestion, Identifying the Process gaps and closing the Process gaps by leveraging low code Automation, Advanced Analytics and Machine Learning to unlock the Execution Potential of the Business Processes

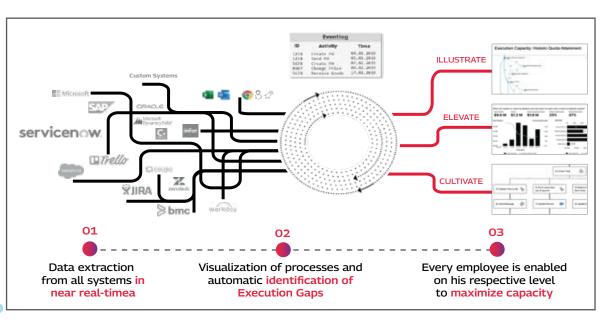


Figure 3: Process Mining Reference Framework

Conclusion

The demand for ESG compliance is growing day by day. Governments, investors, consumers, and business partners are requesting performance of organizational ESG metrics which is now a continuous and mandatory process.

Process mining based transformational approach adds enterprise wide transparency and business agility that proves to be a strategic competitive advantage. However, a few organizations still see this as an expensive process as it requires regular disclosure on how the process is being conducted at each step to prove transparency of the information used for reporting.

Here process mining provides the following benefits efficiently and effectively:

• Deriving Insights into the current process such as what are the current challenges in the "as is process" that stops an organization from achieving its ESG targets.

- Identifying areas where an organization can attempt to improve time, effort, and cost efficiency by reducing time through automation.
- Improve customer experience and user satisfaction by providing benefits in terms of automation, reduced cost and churning out more volume at the same time.
- Since process mining is more data-driven, it helps an organization to take decisions on real data as it provides a comprehensive view of all process steps and dimensions.

Process mining with consulting approach, while choosing the right framework that aligns organizational business strategy to KPIs as per ESG standards, facilitates to create a robust structure and comprehensive sustainability reporting process.

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