

EMBED SUSTAINABILITY IN BUSINESS PROCESSES TO MOVE TOWARD ESG GOALS

Environmental, social, and governance (ESG) commitments are table stakes now. But only a few firms effectively meet ESG targets. Firms should embed ESG deep within their business processes to transform from being resource gluttons to regenerative businesses.



In the past 12 months, ESG has evolved more than it did in the past decade. Consequently, ESG is shaping the agenda for businesses and governments faster than ever before. According to UN Climate Change, the number of commitments to reach net zero emissions from local governments and businesses has nearly doubled in less than a year.¹

ESG initiatives are good for business. Goldman Sachs has established a new policy, stipulating that every company that goes public must have at least two members of its board of directors — either a woman or a person of color. Results?

Since 2016, the median rate of return for companies with all-male boards has been 2%; companies with at least one woman on their boards had a median rate of return of 19%.²

But it's the E in the ESG agenda that has the most impact for businesses the world over. The product behemoth Unilever came up with a dishwashing liquid brand 'Sunlight' that uses much less water than other brands. Sunlight and other water-saving products of Unilever recorded more than 20% growth in their categories. Also, Finland's Neste, founded as a petroleum-refining company 70 years back, now generates more than two-thirds of its profits from renewable fuels and sustainability-related products.³

Today's customers are conscious about the environment. Companies that do not build products for all their stakeholders have much to lose in the long run. Some forward-thinking enterprises such as Unilever, Microsoft, Coca Cola, and Levi Strauss publish articles about being 'net positive', 'regenerative', and 'purposeful', and 'giving back more than we take' to illustrate their environmental accountability. However, many other firms aim for easier goals such as building diverse teams and buying carbon credits. These objectives are the 'low-hanging' fruit understood by all levels of management. In reality, very few can actually dissect the inner workings of an organization to make ESG profitable. Yet, it is possible through a well-crafted ESG strategy that considers aspects such as operations, supply chains, and customer and employee experience.

According to NAVEX global data, only 50% of companies believe they perform effectively against environmental metrics, with the figure at 39% for governance, and just 37% for social issues.⁴

An approach that embeds ESG deep within business processes can help organizations perform better on environment, social, and governance metrics. "When you prioritize sustainability into your existing processes, you're already on your way to making significant change," says Janina Nakladal, Director of Sustainability at Celonis, a process mining company.⁵

Sustainability in business processes

Organizations must embed sustainability in their operational, customer-facing, and supply chain processes. The argument here is that unless they change these frontline processes, and unless they understand how ESG impacts and is acted upon by down-the-line procurement, production, inventory, warehouse, and even developer productivity, they will not achieve [practical sustainability](#).

Organizations must embed sustainability in their operational, customer-facing, and supply chain processes.

Firms should now prioritize diverse suppliers with every purchase order, achieve better energy and water consumption in every production plan, examine more carbon-friendly practices with every shipment, and deploy fair labor practices in every policy, to embrace ESG effectively.

Traditionally, business operations and business process transformations focused on delivering outcomes to amplify customer experiences and create cost efficiencies. Environment-related ambitions, however, were an afterthought.

Our work with clients has found that environment integrates extremely well with experience and efficiency gains. The aim should be to operationalize sustainability within the end-to-end delivery experience and use it to generate real return on investment. In this paradigm, sustainability outcomes are viewed as a leading indicator of business excellence (see Figure 1).

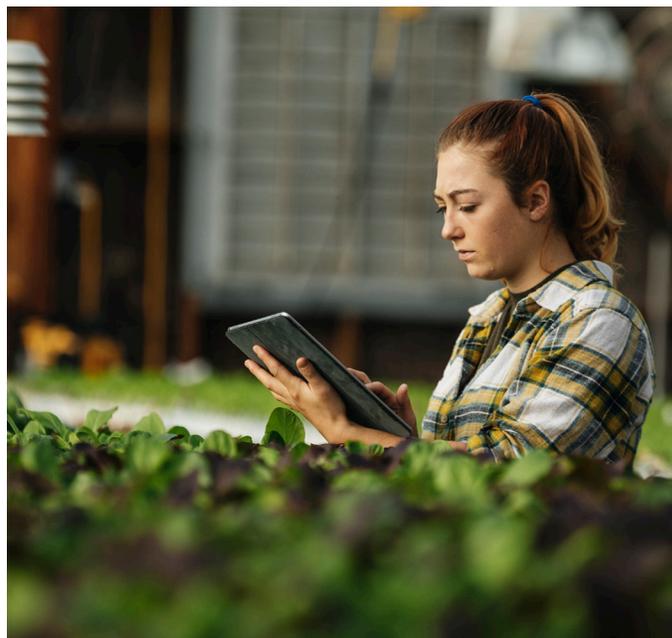
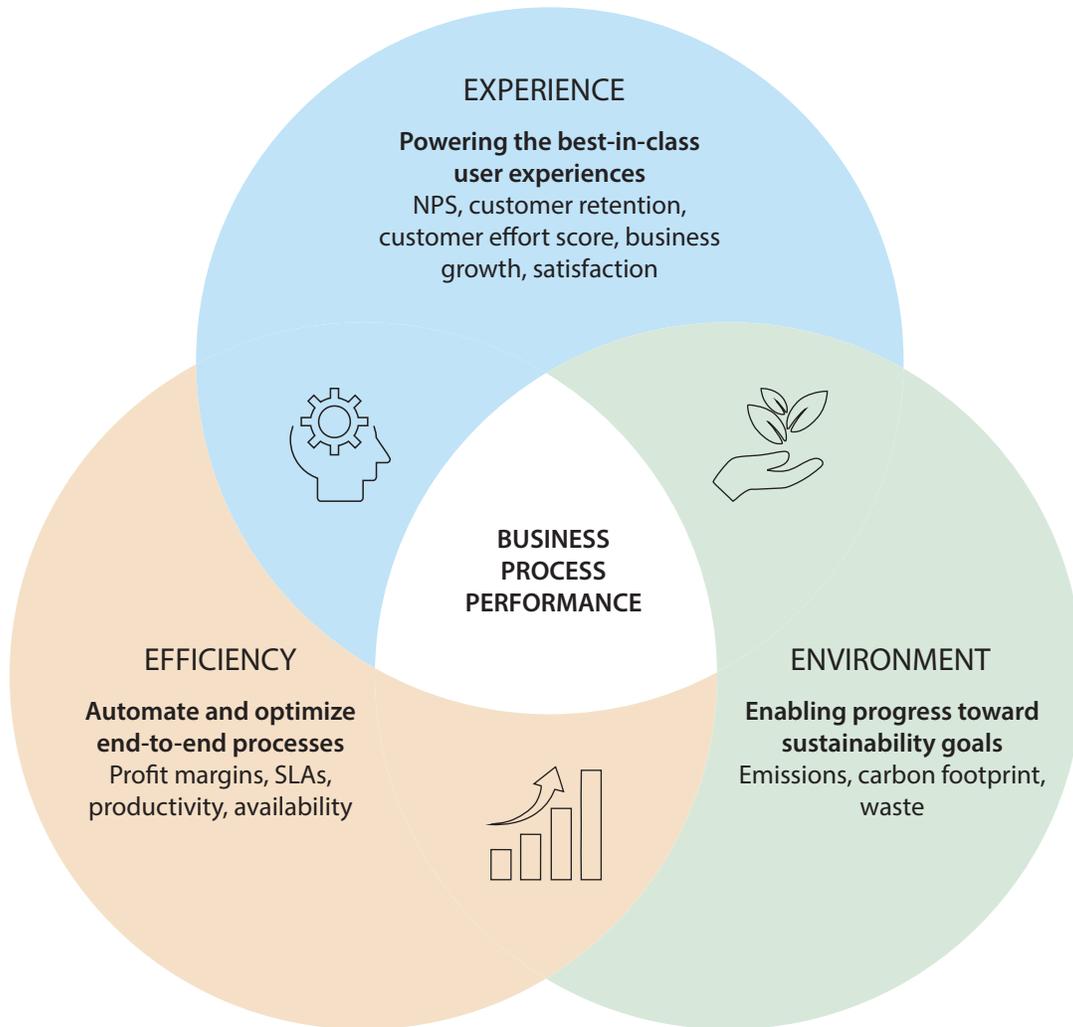


Figure 1. Experience, efficiency, and environment — the three E(s) for better business outcomes



Source: Infosys

The challenges with ESG initiatives

Sustainability efforts are often siloed and set apart from business processes, with ESG reporting often relegated to a CFO in a corner office.

Therefore, good data is needed to understand the company's global value chain across different dimensions. This data and the insights generated must be available across the organization to anticipate and manage the impact of operational processes on ESG goals. Finding quality data continues to be a top challenge, where an absence of universal definitions and a lack of credible sources of truth compound the problem.

Data must be integrated from disparate sources such as SAP, Oracle, Salesforce, and enterprise resource planning systems (ERPs). It must then be enriched with data from carbon accounting platforms, supplier rating data and a bevy of

other external data sources. Then the reporting can be done to meet various industry standards, such as the CDP, SAS, GRI and Science Based Targets initiative (SBTi), all to achieve compliance and adherence to regulatory standards.

To craft an ESG procurement strategy that limits suppliers to the best benchmarks, cross-functional and collaborative teams need to coach and empathize with the firms who lose out in what for many is a box-checking exercise.

And the problems don't end there. Now most firms rely on automated systems that transmit batches or asynchronous data from machines in the wild. Another challenge is to find a strategy that optimizes business processes while exploring the opportunities for moving towards ESG success, including, for instance, extending the life of the business asset to reduce waste, or reducing carbon footprint by automating customer services through virtual bots.



The data backbone, process analysis, and execution

To solve these problems, organizations need three layers of technology capabilities — data backbone, process analysis, and execution (see Figure 2).

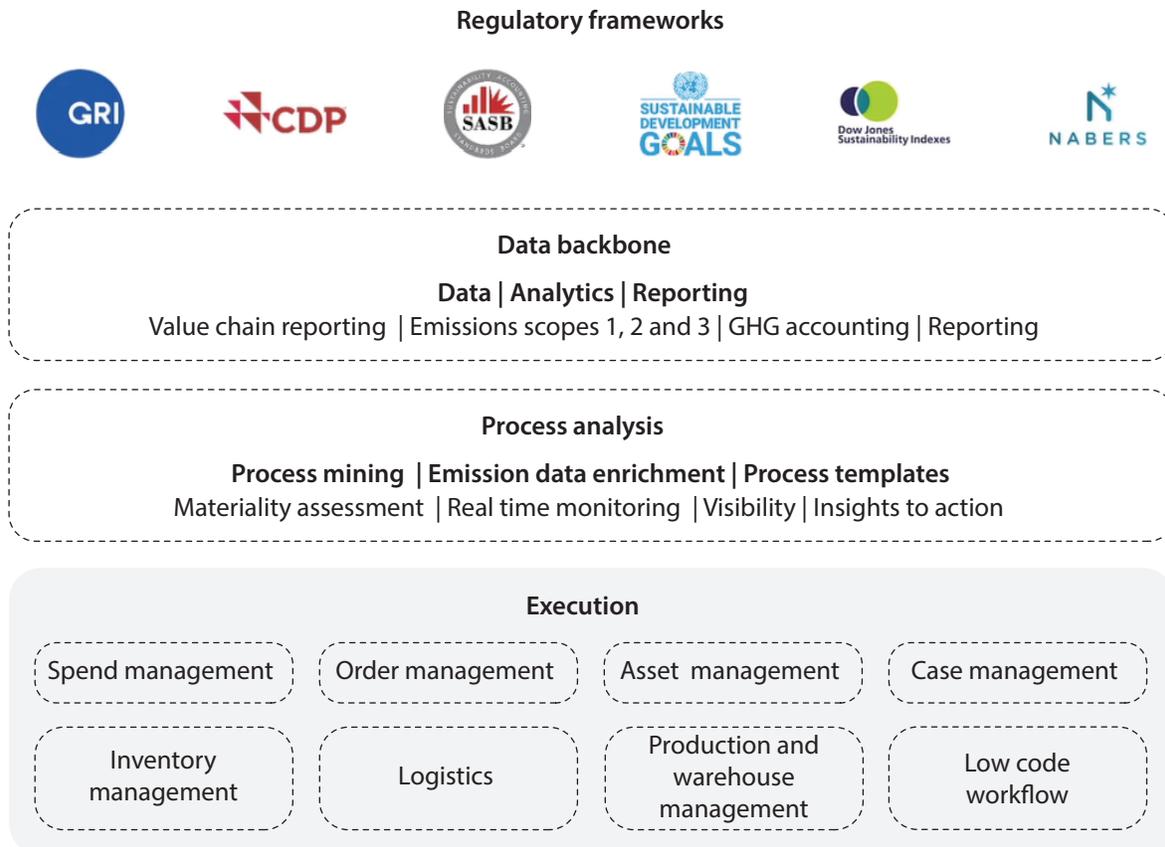
First, the firm must have a robust data backbone to integrate data related to process performance, along with cost and operations, and all from different sources. A concept we described in our adjacent paper, “[Digital Backbone for Enhanced Customer Experience](#).” Consolidating and managing all data in a unified backbone enables teams to report on scope 1, 2, and 3 emissions, and perform greenhouse gas (GHG) accounting. This kind of value chain reporting includes assistance from tools like Envizi (data and analytics) and Ekasoft, so that firms can collate disparate data and visualize it easily on a dashboard.

Then, process analysis involves areas like process mining, process modeling, and optimization. Process mining is about applying data science to discover business processes. This industry is estimated to reach a market cap of \$1.4 billion by 2023.⁶ Process mining will allow teams to understand

process performance in terms of key ESG metrics and highlight process steps that contribute the most to emissions and other ESG-related activity. When process data is enriched with operational information from ERPs and carbon footprint calculations from services like Planety (carbon footprint for transport modes), firms can then start to build action plans that get products from point a to b, with fewer carbon emissions. Firms can then measure the logistics carbon footprint for all relevant transport modes, including sea, air, rail, and road. These calculations must conform to global energy consumption standards like DIN EN 16258 and GLEC.

If process mining answers the “what”, process analysis answers the “why”, giving firms deep insight into what processes need to improve. For example, the tools might tell you that you will only meet emissions targets for the quarter if you start consolidating orders, with the problem most pronounced on shipping routes from China to Germany. Process analysis also includes the ability to conduct materiality quotas. Firms need to prioritize the process based on impact, draw up an ESG strategy, and track the initiatives. Platforms like Software AG ARIS provide ESG-ready process templates for conducting this analysis.

Figure 2. The Fluidity digital backbone for sustainability



Source: Infosys

Finally, the system needs to act on these insights. As the frontline processes in the supply chain, procurement and spend management play an important role in managing the ESG footprint. Sustainable procurement is about identifying, sourcing, and procuring materials with environmental and social considerations in mind. Tools like Coupa help manage procurement by finding, selecting, and diverting spends to diverse suppliers, increasing ESG scores considerably for firms such as Zalando, an online fashion platform that uses the technology.⁷

Every company has several assets, each with a finite lifecycle of maintenance and refurbishment. Using efficient asset management, extending the life of assets by say 20%, can directly impact the business's carbon footprint. Solutions like IBM Maximo help turn insights into action for asset management (increasing the shelf life of systems by 20% can reduce emissions by 40%, with far less process waste), and BlueYonder (warehouse and inventory) to improve demand

forecasting, remove excess and obsolete inventory and fast track failed quality checks.

A Live Enterprise for ESG

Of course, all of this information is in situ, and changes on a dime. Climate change, the war in Ukraine, and financial instability, all carry risk. The system must then be able to respond in near real-time, acting like a living organism that updates itself based on new information. For these three layers to work effectively, they must go beyond just the normal business intelligence (BI), which is often linear and static. In the BI paradigm, firms drill down to ever more tangible business outcomes along with existing KPIs, and then stop there. A better solution is a continuous cycle (see Figure 3) inspired by Infosys' Live Enterprise, a subject we cover in this [book](#). Here, the system at once senses, analyzes, responds, and evolves.



It is crucial to become observant, evolve, and react and adapt to change for a strong ESG proposition. The Fluidity backbone and the live enterprise mindset bring in the virtuous cycle of sense-analyze-respond-evolve, accelerating the progress toward sustainability.

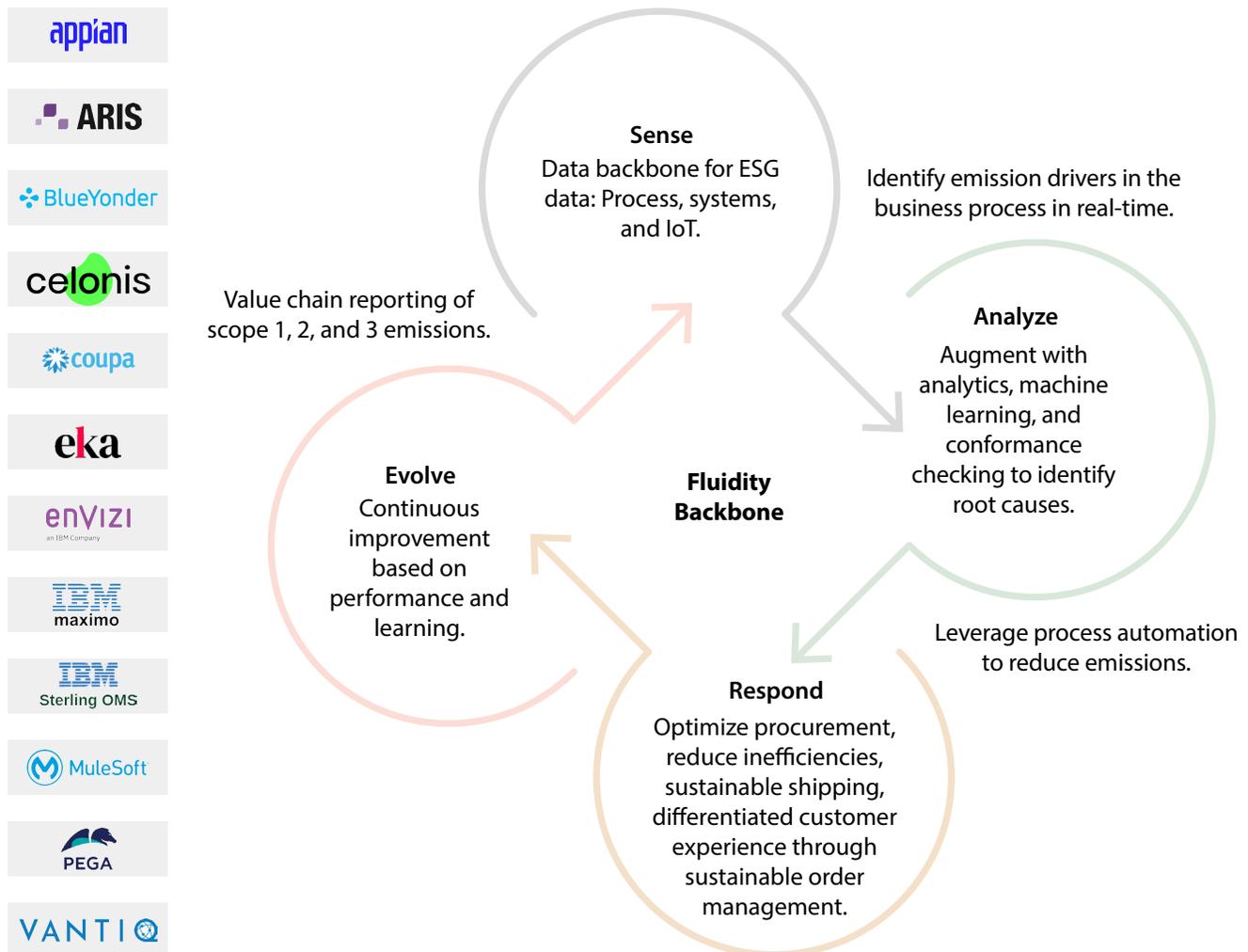
Sense – The Fluidity backbone integrates system data, business operations data, and ecosystem events to measure key ESG metrics associated with business processes. This is vital to create a streamlined reporting foundation for regulatory and compliance purposes.

Analyze – This information is used to analyze the impact of the business on the key sustainability metrics, identify process inefficiencies that contribute to the carbon footprint, and understand why they're happening while quantifying their impact. The result is an evolving backlog of evidence-based opportunities.

Respond – After identifying process area gaps, the right capabilities are explored to act and respond. The decisions and activities vary across functions - from choosing the right supplier, planning production for the right resource efficiency, and aligning the right logistics. Low-code simplifies the automation of processes to drive faster time-to-market. Even customer-facing processes need to be adjusted for the new on-the-ground reality. For example, many customers want the ability to make sustainability-based purchase decisions. This not only includes buying products with minimal carbon footprints but also having the ability to choose conscious shipping methods.

Evolve – Continuous improvement based on performance and learning are key to embed sustainability. By accelerating the progress toward ESG outcomes, the organization finds novel avenues for innovation, amplifying customer experience and newer ways of doing business.

Figure 3. The Fluidity digital backbone in action



Source: Infosys

AI for ESG success

The following are three illustrative use cases from the Fluidity framework that leverage artificial intelligence (AI).

1. **The digital “process” twin:** A process twin is a virtual replica of the actual process, created by data from existing underlying systems and uses the power of process mining. Exciting prospects are making their way to the vanguard, including using AI to simulate changes and waiting to see what happens to the process if certain changes are made.
2. **ESG-aware decision making:** AI helps automate decisions such as procurement, order management and transportation, and considers the ESG impact of those decisions. AI also adds a new dimension to supplier verification by using techniques from natural language processing (programmatically extracting information from text) to graph analytics (learning how different entities influence each other’s ESG).
3. **Automation for good:** AI and automation can be used to automate large-volume human processes (which typically tend to have a larger emission footprint), while enhancing customer experience. For example, a firm that employs a contact service center with 500 people and its associated facilities have a high carbon footprint. By using automation through virtual agents to deliver smart interactions, the firm becomes more productive and upskills its workers on creative projects.

A sustainable path to 2050

It is no secret that ESG increases operational efficiency and impacts the bottom line. For example, a major water utility saved \$180 million per year using lean initiatives to refine spare-part inventory management, improve preventive maintenance, and tackle energy consumption and recovery from sludge.⁸

What is less understood is that in the run up to 2050, the game is now about “not whether a company has good intentions but whether it has the strategic vision and capabilities to achieve and maintain strong ESG performance in the long run,” as Harvard Business Review succinctly puts it.⁹

The Fluidity backbone is a step toward this strategic imperative.

However, building the business case for more ESG-friendly processes will be tough initially. So, start with a few pilot projects that get senior management on board. This incremental progress can fetch higher results, as our Harvard Business Review paper “[Break Down Change Management into Small Steps](#)” outlines.

With a good roadmap and the strategies we discussed, firms will achieve even the hardest ESG goals. This means using stretch KPIs that can cascade down with impact from the board to the frontline. **OKRs** are good for this.

It also means moving away from just disclosing policies and start communicating outcome metrics such as the number of customer accounts hacked (data privacy), liters of water consumed per unit of product produced (water management), carbon emissions saved (climate change mitigation), and percentage of women and people of color promoted internally to management positions (diversity).

ESG then becomes a compass toward better business outcomes. As ex-CEO of Unilever, Paul Polman says, ESG is “rapidly moving from risk management to opportunity management.”¹⁰

Winners in this new normal will be those businesses that are restorative, reparative, and regenerative.

Those who will build businesses that are restorative, reparative, and regenerative will emerge as winners in this new normal. They will lead with empathy, humanity, and humility. And as Polman says again, “[the best leaders] understand the importance of doing [ESG] everywhere in all parts of their business models, in all brands, in all operations, and they need to be consistent.”¹¹

As collective research from George Serafeim, the Charles M. Williams Professor of Business Administration at Harvard Business School, concludes: “A new management paradigm for corporate leaders [is needed] —one in which ESG considerations are embedded in both strategy and operations.”¹²

The digital backbone for sustainability makes sustainability practical. It anchors ESG initiatives to the crux of business operations. The Infosys solution integrates data and decision making related to ESG in all operational processes, including supply chains, internal processes, back offices, and customer and employee journeys.

This is the vision of the digital backbone for sustainability, and a cause for optimism, as we move boldly toward a more sustainable path to 2050.

References

1. [Why processes are the engine to sustainable transformation](#), Julia Kramer, April 21, 2021, Celonis.
2. [Conviction and digital purpose: towards a healthier business](#), Mohit Joshi, February 9, 2022, Jocurnal Du Net.
3. [Five ways that ESG creates value](#), Witold Henisz, Tim Koller, and Robin Nuttall, November 2019, McKinsey Quarterly.
4. [Global survey finds businesses increasing ESG commitments, spending](#), February 23, 2021, Navex.
5. See Ref 1.
6. [Process mining, low-code, and the future of innovation, part 2](#), Roland Alston, October 14, 2021, Appian.
7. See Ref 1.
8. See Ref 3.
9. [Social-impact efforts that create real value](#), George Serafeim, September 2020, Harvard Business Review.
10. [Former Unilever CEO Paul Polman says aiming for sustainability isn't good enough – the goal is much higher](#), November 19, 2021, Harvard Business Review.
11. See Ref 10.
12. See Ref 9.

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