THE IMPORTANCE OF SUSTAINABILITY IN INNOVATION: THE IMPACT OF QUANTITATIVE TOOL TO MEASURE SUSTAINABILITY PROGRESS AND CAPABILITIES

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The 20th century has been a period of unprecedented industrial growth and societal advancement, which has led to exponential growth in energy use, natural resource depletion and a rise of varied problems relating to sustainability. In recent years, such negative environmental impact has led to greater awareness about the importance of sustainability and growth of a modern sustainability movement among companies to reduce their ecological footprints. While companies are considered as the main reason behind social and environmental problems and the source of lack of sustainability in society, they can potentially become agents of change by championing sustainability too. With this shift in company mindset and consumer preferences, the demand for sustainable goods and services has increased. 72% of Gen Z consumers are willing to spend more on a sustainably-produced service; and 59% of consumers across all ages believed that it was important that the foods they bought were consumed sustainably, an increase from 50% in 2017.

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1Harvard Business School, 2017
2Rubicon, Dec 2018
4 Besides improving brand reputation, companies are also leveraging sustainability to improve operational efficiency and lower costs. 5 In this regard, companies used to focus on reducing energy usage and manufacturing waste generated. However, it is crucial to shift this focus and integrate sustainability into the end-to-end value chain so that new product launches will have better sustainability performance compared to existing products, which can be a key competitive advantage. Overall, the strategic usage of a company’s resources, technology reach and motivation across all nodes of the value chain to execute such launches is important in driving organic business growth and improving the state of various business functions.

While innovation has always been considered as an important measure of company success due to positive resultant changes in a firm’s real product, process or service that exceeds the impact of previous achievements, it is interesting to note that it is positively correlated with sustainability. 6,7

For innovation to effectuate sustainability, a close connection between ‘individual purpose and corporate purpose’ is required. A clear direction is needed for employees to recognize how sustainability fits into the company’s goals. 8 For example, Paul Polman, Unilever CEO, has prioritized sustainable growth as a key business priority and championed roadmap creation to chart Unilever’s long-term plan to increase positive social impact while strengthening competitiveness. This motivated employees to innovate in a sustainable manner, as it was perceived as an encouragement to own and pursue unique innovation with sustainability in mind.

Another requirement is resource availability for sustainability-focused innovations. Sufficient budget, expertise, and corporate backing is required to raise visibility and support for such innovations. For example, J&J has created a Social Intrapreneurship Program to build employee capability of developing sustainability-focused initiatives. The employees are trained by expert consultants on how to pool resources, identify synergistic stakeholders, and work collaboratively to achieve a common goal.

On the other hand, sustainability also strongly influences innovation, both in real products and in employee mindset and company culture. Studies have shown that companies with a focused sustainability agenda are more likely to be successful at innovation, 9 due to three reasons:

First, sustainability is responsible in driving technological and organizational innovations to yield bottom and top-line returns. Due to added constraints to ensure environmentally-friendly processes, companies focus on maximizing their inputs, leading to cost savings which in turn enable exploration of other ideas such as creating new businesses or better products to capture market share. 10

Second, sustainability encourages companies to adopt a different thinking and ideation lens — it enables employees to approach a business issue differently, either by brainstorming different subjects or thinking ‘out-of-the-box’ about existing subjects. A greater breadth of highly innovative ideas is unlocked as employees re-examine the business from a fresh point of view. 11

Most importantly, sustainability enables employees to see the entire value chain and improve cross-functional understanding. When looking for environmental efficiencies, thinking beyond their function’s domain becomes the employees’ second nature, which nurtures a working environment where ideation becomes valuable and comprehensive.

4https://www.greenmatch.co.uk/blog/2018/09/gen-zs-sustainable-shopping-habits
5Mckinsey and Company, Oct 2011
6MIT, Nov 2018
7SciELO research paper, 2018
8Ideascale, Feb 2017
9Harvard Business Review, Sep 2009
10Deloitte, 2013
11Network for Business Sustainability (NBS), 2012
Hence, tapping into the synergy between innovation and sustainability will lead to novel products and services for consumers, increased profitability, and improved trust-based relationships with consumers and the natural environment. Should companies get this right, they can ‘learn, adapt and lead change’.

Given the growing awareness about how innovation and sustainability lead to each other, a growth process was kickstarted in one leading Pharmaceutical company to raise employee awareness on the usefulness of sustainability in innovation. Initially, a qualitative approach incorporating traffic light indicators was used to gauge sustainability progress in new product projects. The strategic direction to embed sustainability into innovations was proposed and sponsored by senior leadership who realized that innovations usually focused on low-cost quick wins without considering long-term wins via incorporation of sustainability. Under their close support and guidance, employees were educated, engaged and exposed to this approach where they understood the impact of sustainability in innovation and how they can improve sustainability status in innovation.

However, it was difficult for employees to quantitatively understand where the impact of sustainability support could improve upon. Hence, this gradually evolved into an objective tool – a checklist based on collaborative feedback from employees and senior leadership.

The checklist enables employees to consider innovation with sustainability in mind while ensuring that they receive adequate resources to execute proposed improvements derived from it. It also helps employees continuously improve sustainability footprints of innovation as they pass through the new product innovation project timeline, by assessing innovation project status and tracking sustainability footprint progress through project milestones. Serving as a mini life-cycle assessment, the checklist’s outputs support employees in implementing and justifying sustainability strategies to senior leadership to perceptively leverage company resources to deliver business growth in an environmentally-friendly method.

In collaboration with National University of Singapore for benchmarking and execution support, innovation projects were trialed. Before each project passed through the three main milestones, the checklist was filled up, and inputs from previous milestones were reviewed to track sustainability progress and ensure that the previous initiatives were effective in improving sustainability footprints. This process helped to keep project teams focused on embedding sustainability end-to-end from conceptualization to launch phase.

The checklist is optimized for quick completion, making it easy for employees to get a broad overview of sustainability status and improvement opportunities at each milestone. The outputs are presented at a monthly board meeting to get senior leadership buy-in on proposed sustainability initiatives. As a result, 60% of projects generated significant environmental improvement. More importantly, the outputs are also re-visited during post-launch phase – hence, the tool has brought about positive company culture as employees, as one team, reflect and celebrate on their achievements in innovation sustainability.

To further illustrate the tool’s benefits, specific innovation projects will be discussed as follows. The first project involved the launch of an all-natural new product. Upon checklist completion, employees proposed to change the color of the existing bottle mold. Through this, substantial cost savings was achieved. The tool has hence increased attentiveness by employees to the current manufacturing processes, which enabled them to ideate broadly to improve the sustainability footprint, both for the company and external partners, while having desired cost savings.

The second project involved the launch of various products under a new brand. When the packaging supplier was assessed, employees proposed to change the artwork printing to single-pass CMYK printing. This led to process improvement savings – besides ink savings, only 1/40th of the original printing time is needed. Hence,

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12Network for Business Sustainability (NBS), 2012
the focus on sustainability in innovation empowered the employees to challenge the norm (the usual artwork printing process) to optimize the process as much as possible.

In conclusion, using quantitative tools, the company has leveraged on the synergies between sustainability and innovation to encourage employees to integrate sustainability into the innovation space, while achieving time and cost savings to improve business competitiveness and environmental footprints. This is a win-win situation for both employees and senior leadership. Given that the need to drive sustainability in innovation is crucial for companies to stay agile and competitive in today’s ever-changing world, companies should reflect consistent commitment as the process of embedding sustainability into innovation must be tailored with conscientious thought, coupled with mentorship from senior leadership, and done from scratch to match business priorities. Therefore, companies must lay the groundwork in engaging everyone bottoms-up and top-down to raise awareness and gain company-wide sponsorship on the importance of embedding sustainability into innovation. Eventually, building this strong foundation will inspire employees to own and live out sustainability in their work and innovate for better products and services to benefit society.