Speaker 1: Welcome to the MIT CISR Research Briefing series. The Center for Information Systems Research is based at the Sloan School of Management at MIT. We study digital transformation.

Ina Sebastian : Hi, I’m Ina Sebastian, a research scientist at MIT CISR. Today I’m pleased to share with you the January 2025 research briefing that I co-authored with Stephanie Woerner, Peter Weill, and Daniel Woerner—

Business Value from Digital Sustainability

Earlier MIT CISR research showed that companies build three types of digital sustainability capabilities to scale carbon emission reduction: green IT, green products, and green digital offerings. Based on a recent survey, companies that do this make significant progress on sustainability. The survey found that from 2022 to 2023 companies, in the top quartile on digital sustainability were 15 percent better at improving their sustainability than companies in the bottom quartile, and the top quartile companies were 19 percent more effective at incorporating circularity principles. Sustainability is becoming a performance metric and an important issue for both senior executives and boards; for example, in 2024, 24 percent of publicly traded companies had a board committee with ESG as part of its mandate.

But in the recent survey, we also found that being a high performer on digital sustainability did not directly differentiate company performance. This lack of bottom-line impact makes it hard for companies to view sustainability as an opportunity for value creation rather than solely a cost of doing business—perhaps explaining some of the corporate pushback on sustainability investments.

The survey research did find, however, that companies that pursued strategic sustainability goals saw bottom-line impacts. This briefing explores how and when companies create business value from digital sustainability, and the relationship between strategic sustainability goals and digital sustainability capabilities.

Strategic Goals Matter

The key to jointly improving sustainability outcomes and business performance is not just building digital sustainability capabilities but also leveraging the capabilities strategically to achieve specific goals. Our survey analysis suggested that there are four distinct strategic sustainability goals—compliance and efficiency, customer and investor reputation, new revenue, and company purpose—and the company performance profile for each goal is unique. Companies can pursue more than one goal if they are able to manage more complexity.

The first strategic sustainability goal is compliance and efficiency. These companies’ primary drivers for sustainability efforts are regulations, cost reduction and operational efficiency, and risk minimization. Companies in the top versus bottom quartile on this goal showed no significant differences on any metric we measured regarding sustainability improvements or business value.

The second goal is customer and investor reputation. These companies orient sustainability initiatives to customer demand, investor requirements, and attractiveness to talent. Companies in the top versus bottom quartile on this goal made significantly more progress over a year on improving sustainability (16 percent higher); they performed better at implementing circularity principles (16 percent higher); and they achieved greater EBIT (17 percent more in Switzerland and 42 percent more abroad).

The third goal is new revenue. These companies describe sustainability as a source of innovative capacity and competitiveness. Companies in the top versus bottom quartile on this goal made significantly more progress over a year on improving sustainability (9 percent higher) and innovative capacity (12 percent higher), and they had more revenues from innovation (53 percent more).

And the fourth goal is company purpose. These companies consider social responsibility and green corporate image as very important goals. Companies in the top versus bottom quartile on this goal made significantly more progress over a year on improving sustainability (22 percent higher) and improving customer experience (13 percent higher), and they performed better at implementing circularity principles (22 percent higher).

The results in this research study suggest that when considering sustainability initiatives, adopting clear strategic goals and moving beyond compliance and efficiency pays off with both greater sustainability improvement and greater business value. Jean-Pascal Tricoire, chairman of the global energy management company Schneider Electric, argued in a recent conversation with Peter Weill that, besides efficiencies, there are enormous strategic opportunities to sustainability. Tricoire said, “We start with efficiency, and efficiency pays for the investment. But then it brings collateral advantages— like safety of operators, like uptime of installations because you can detect outages before they happen.”

Strategic Goals Guide Digital Sustainability

In the earlier MIT CISR research, we identified three types of digital sustainability capabilities that companies can develop for use in carbon emission reduction:

The first type of digital sustainability capability is green IT. This capability focuses on replacing carbon-intensive technologies, and captures tracking and optimizing of technology emissions.

The second type of capability is green products. This capability focuses on decarbonizing products and production, and captures tracking and optimizing product emissions.

And the third type of capability is green digital offerings. This capability focuses on providing digital offerings that have lower carbon footprints or that help suppliers, partners, and customers track and manage their emissions.

To provide guidance to leaders about where to focus their efforts on building capabilities, we analyzed the relationships between these capabilities and strategic sustainability goals. Replacing carbon-intensive technology with green IT is a baseline. Companies in the top quartiles on each of the goals were significantly better than those in the bottom quartiles on green IT. Green IT is becoming increasingly important as companies incorporate carbon-intensive generative AI into enterprise processes and work.

Companies that focus on the customer and investor reputation, new revenue, and company purpose goals must build, in addition to green IT, digital sustainability capabilities in green products, green digital offerings, or both. Companies in the top quartile on the customer and investor reputation goal built significantly stronger capabilities in green digital offerings. Companies in the top quartile on the new revenue goal built significantly stronger capabilities in green products. And companies in the top quartile on the company purpose goal built significantly stronger capabilities in both green products and green digital offerings.

Bupa, the international healthcare company, is an example of a purpose-driven company developing all three digital sustainability capabilities.

Bupa Is on a Mission to Be Sustainable

Bupa’s purpose-driven goal, named Mission 2040, is to build a healthier future for people and planet through decarbonization, sustainable healthcare, and digitization of products and services. As the company undergoes a digital business transformation to achieve this purpose, it is progressing on all three types of digital sustainability capabilities.

Green IT: In 2022, leaders in the company’s Technology division began to build a green IT capability. They focused on increasing Bupa’s systems hosted in the cloud and increasing the company’s IT spend with suppliers that align with Bupa’s net zero ambitions. By 2024, Bupa had 88 percent of systems hosted in the cloud (from 41 percent in 2022) and 71 percent of IT spend with aligned suppliers (from 31 percent in 2022).

Green products: Bupa is reducing the environmental impact of care, for example, by reducing emissions associated with anesthetic gases across its global businesses. In addition, Bupa has expanded its sustainable procurement program—which includes ESG assessment in supplier onboarding and partnering—to the whole supply chain.

Green digital offerings: Bupa is also reducing carbon emissions by developing digital health offerings that enable greater access to healthcare with a lower carbon footprint. By mid-2024, the number of customers using the company’s digital health app, Blua, grew 24 percent from the previous year. And in Spain, the app’s CO2 calculator shows customers the carbon emissions they avoided generating by using a virtual appointment instead of travelling.

Bupa’s Technology and Sustainability teams collaborate to connect the digital business transformation with sustainability, focusing on using digital technology to improve both sustainability outcomes and customer health outcomes. This includes greater access to healthcare and preventive care (which are green digital offerings) and smart hospitals (which are green products).

Embed Sustainability in Your Strategy

Sustainability is a cost of doing business for many companies today—but it is also an opportunity for creating value. Your company can only achieve value, however, by embedding sustainability goals into company strategy. Improving sustainability capabilities to satisfy customer or investor demands, to build innovation and competitiveness, or to become a socially responsible enterprise is linked to real business value like increases in EBIT, innovation, and customer experience. Your company may want to do it all, but building enterprise capabilities is an increasing commitment. Be clear about your goals and then develop sustainability capabilities to advance these goals.

Speaker 1: Thanks for listening to this reading of MIT CISR research, and thanks to the sponsors and patrons who support our work. Get free access to more research on our website at cisr.mit.edu.