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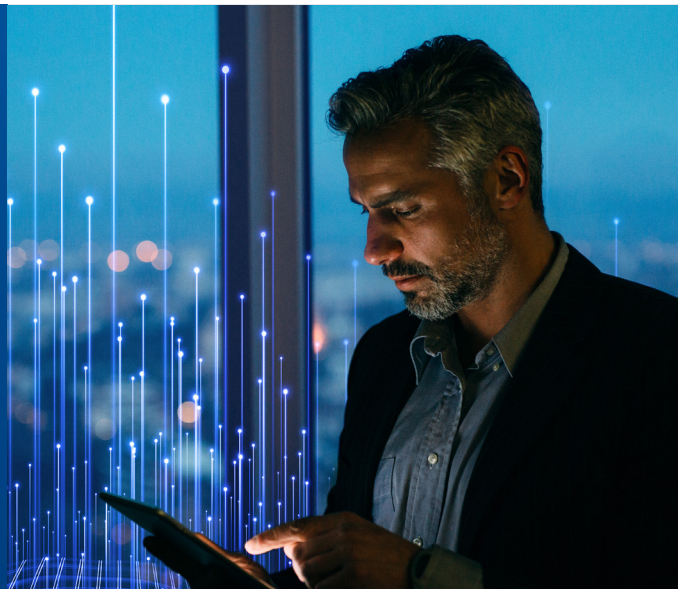
Why companies need a single strategy for sustainability and digitalization



by Alvin Ng, Vice President, Digital Solutions – Asia Pacific Region.

The boardroom looks ripe for a battle. Sustainability and digitalization have both crept up the corporate agenda in recent years, and both issues are now staking a claim to be the top item. But company directors shouldn't jostle for pride of place at their annual general meetings; they are better off joining forces. That's because, like Ginger Rogers and Fred Astaire, it's almost impossible to talk about the topics of sustainability and digitalization individually.

Imagine a company that has outlined zero-carbon goals for its entire network of offices, factories and warehouses. If the company's directors don't mention some form of digital technology in the same breath, then it's not a serious proposal. It would also be strange if a director recommended artificial intelligence (AI) to squeeze energy efficiencies out of a giant office block, and then overlooked one of the main benefits of the software: a smaller carbon footprint.

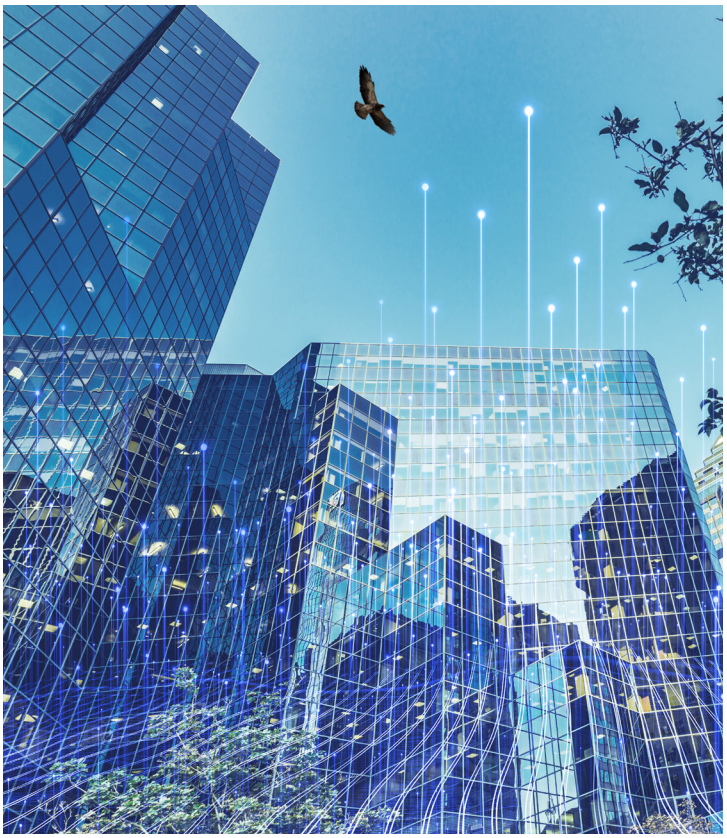
Whether the overlap between sustainability and digitalization is a product of design or accident is a subject of debate, but it's clear that both strategies strive for similar goals and leverage comparable technologies. Despite this, several companies are failing to see how the two corporate missions interrelate, and are still pushing sustainability and digitalization strategies that live in isolation from each other. Take a look at the organizational structure of the average company: There's a good chance they list both chief digital officers and chief sustainability officers in their executive ranks. These two corporate functions tend to work distantly from each other, despite the potential synergies of joining forces.

But boardrooms have a huge opportunity to address this disconnect and align their sustainability and digitalization strategies. Their property portfolios might be a logical place to start. The world's buildings consume around 40% of global energy and are responsible for approximately one-third of greenhouse gas emissions. But companies can unite their sustainability and digitalization efforts via "single pane of glass" software platforms, which allow them to monitor and control every aspect of their building and its operations from a single dashboard. This won't just simplify and streamline corporate governance, but significantly enhance it. Companies that decide to marry sustainability and digitalization in this way can expect to accelerate decarbonization, boost health and safety, and maximize efficiency and productivity.

Sustainability is non-negotiable

Sustainability is no longer an opt-in for the world's companies; it needs to be part of their DNA. And right now, the major theme of sustainability is decarbonization. The 2010s has just entered history as the warmest decade yet recorded, with 2016, the year in which the Paris Agreement was signed, ranking as the hottest 12-month period ever. As U.S. President Joe Biden said on Earth

Day this year, while committing the country to stricter emissions reduction targets for 2030 and a net zero emissions economy by 2050, humanity is entering a "decisive decade" on climate change.



There will be no let-up in countries making commitments and drawing up stricter regulations relating to the reporting of energy use and greenhouse gas emissions. At the same time, environmental, social, and governance (ESG) issues are coming to the fore on Wall Street, meaning that companies that ignore the impact of their activities on the environment and society should prepare to underperform. The world's largest funds are advancing strategies with increased exposure to positive ESG characteristics, and avoiding companies and sectors associated with risks. Blackrock Chief Executive Larry Fink put it succinctly in his annual letter to CEOs: Climate risk is now investment risk.

As sustainability gathers momentum, the pace of technological progress is equally ferocious. We are now living through a fourth Industrial Revolution, also known as Industry 4.0. This refers to the integration of physical assets with advanced digital technologies, such as the internet of things (IoT), AI, robots, drones, autonomous vehicles, 3D printing, cloud computing, nanotechnology, and more. These digital technologies specialize in communicating, analyzing and acting on data, offering organizations, consumers and society better, deeper insights. Those insights can be used to make more intelligent, transparent and efficient decisions.

The overlap

Sustainability initiatives primarily target decarbonization, a circular economy and increased health and safety, while most digitalization programs have productivity boosts, lower costs and enhanced operational predictability as their main goals. Render these strategies as a Venn diagram, and you'll quickly see the area where they intersect: efficiency. The first step for a large company aiming to decarbonize its operations with no negative impact on its productivity will be more efficient electricity use. Even if the company's goals were primarily economic, rather than environmental, minimizing power consumption would also be the main target of any digitalization strategy. (This is not a fanciful scenario, but reality: In recent years, the aim of most digitalization programs has been lower costs, not smaller carbon footprints.)

This illustrates the logic of aligning strategies. The intended "ends" of sustainability and digitalization might differ, but the means and actual outcomes are often the same. Both strategies will rely on cutting-edge software to generate efficiency insights from real-time data about power consumption.

Companies are not just using digitalization to reduce their Scope 1, 2 and 3 carbon emissions. Software can gather and analyze data about energy, water, materials and emissions involved in every phase of a building's lifecycle: its design, construction, operation, renovation and end-of-life. This will help companies to evaluate the total environmental impact of their property portfolio, as well as estimate the impact of any retrofit. Digitalization can also help companies get ahead of the game on sustainability. For example, advanced analytics can help to identify further energy savings and emissions reductions opportunities across buildings, while AI-enhanced technology can help avoid unplanned repairs and maximize uptime of large HVAC systems, which account for up to 70% of a building's energy consumption. These systems can be enhanced by digital twins, which are the virtual digital counterparts of real physical objects and processes.

Aligning strategies

The job of aligning sustainability with digitalization might seem daunting, despite its obvious benefits. Companies will need to rewrite their digital strategies with sustainability goals as their intended outcomes, or identify where digital technology can lighten the sustainability load. In fact, several companies are sensibly implementing sustainability maturity models that break their strategies into three phases: reporting, tracking and management of emissions.

This is an extra complication: The sheer diversity of systems and volume of data in today's buildings. The average building owner runs a multitude of systems from various vendors across buildings, spaces and assets. All of those systems are capturing reams of data and churning out insights every second of the day. Add in the legion of ESG and EHS-related key performance indicators (KPIs) that organizations track at any one time across their digital and sustainability functions, and the job of grafting two strategies appears even more formidable.

But companies should start by defining where they are in their journeys, and then defining their destination. For example, they can establish where they sit on the sustainability spectrum via a scoring model, which evaluates their processes, systems and data points. That makes it easier to set realistic goals, whether they are a multinational company aiming for net zero Scope 1 emissions, a manufacturer targeting a higher ESG rating, or a factory attempting to measure its EHS leading indicators. Whatever their sustainability objectives, there will be a bespoke digitalization recipe provided by the single pane of glass.

These panes of glass are underpinned by "black box"-style digital platforms that use sophisticated Application Programming Interfaces (APIs) to gather data from an army of disparate apps and systems, whether it's AI-enhanced HVAC, the remote diagnostics of a building's lighting, or predictive maintenance insights from a digital twin. Once data is gathered in the cloud,

the platform gets to work, connecting and analyzing the various data streams and insights. It then displays the results on one dashboard, or pane of glass, allowing companies to monitor and control their KPIs.

There is a strong incentive for companies to act quickly, and it's not just to reduce the number of boardroom seats by one as they combine their CDO and CSO functions. Integrating sustainability with digitalization will allow companies to reach both set of targets faster. Firms will also be able to track their progress more efficiently and set themselves more ambitious goals on their paths to a low-carbon future. The earliest movers can also expect a "sustainability premium" from their enhanced ESG credentials, because they will make themselves more attractive to investors. But the real winner is the planet: If the world takes meaningful action on sustainability today, it can stave off climate catastrophe tomorrow.

Linking sustainability and digitalization might seem like a complicated strategy, but it's much more natural than addressing them separately. To learn more about this combined approach and how it changes the game, here.