



Sustainability

THE VALUE CHAIN
LEADING TO SUCCESS
& SURVIVABILITY

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Sustainability has emerged as a critical focus for organizations across industries. It is no longer enough for businesses to simply thrive financially; they must consider their environmental and social impacts. Sustainability is not a mere buzzword or a passing trend; it is a fundamental principle that ensures long-term success and survivability of both business and the planet. It encompasses the idea of preserving and protecting the environment while ensuring economic and social growth. The value chain that leads to sustainability has become a foundation of resilience and innovation for businesses, industries and society. To truly create a sustainable value chain, organizations must consider the interconnectedness of social, environmental and economic factors. Organizations that fail to adopt a holistic approach undermine their own sustainability efforts and the collective effort to maintain a livable climate on Earth.

A key concept that fortifies sustainability is the value chain — an end-to-end process for any product or service, encompassing all activities involved in designing, producing, marketing and delivering that product or service. From sourcing raw materials to distributing the final product, each step in the value chain has the potential to impact the environment, society and the bottom line. As stewards of the physical and natural environment, we must be the champions for sustainability. All decisions made by facility management professionals must consider not only the impact on people, but also on the planet to safeguard all life.

The tech factor

The first step in creating a sustainable value chain is to assess and mitigate environmental impacts. Businesses must evaluate their resource consumption patterns, energy usage, waste generation and carbon emissions. By implementing measures to reduce their carbon footprint, industries can reduce harm to the planet. This can involve adopting renewable energy sources, optimizing production processes to minimize waste and promoting recycling initiatives. Not only do these actions demonstrate environmental responsibility, but they can also lead to cost savings through reduced resource consumption and increased operational efficiency. Organizations must include sustainability as a practice by first ensuring it is embedded in organizational philosophy, policy, mission and vision. Sustainability should be part of an organization's culture, in which organizational success is measured on factors that demonstrate environmental responsibility.


The role of technology in creating a sustainable value chain cannot be overstated. One of the key aspects of the Industrial 4.0

revolution is the integration of physical and digital systems through technologies such as the Internet of Things (IoT), artificial intelligence (AI), robotics, automation and big data analytics. This will introduce opportunities for organizations to optimize processes, increase efficiency and reduce environmental impacts. These technologies, once leveraged appropriately, can allow companies

to gather vast amounts of data from various points along the sustainable value chain, analyze it in real-time and use it to make more informed decisions. For example, sensors embedded in machines can collect data on their performance and identify potential issues before they become major problems, thus improving efficiency and reducing downtime.

Digital transformation enables organizations to enhance their supply chain management. With the help of advanced technologies, companies can track and manage inventory in real time, monitor the performance of suppliers, optimize logistics and transportation, and improve overall supply chain visibility and agility. This not only leads to cost savings and better resource utilization, but also enables companies to respond quickly to changing customer demands and market trends while keeping sustainability at the core of their process by reducing carbon footprint generation, leading to net zero status.

Another important aspect of the digital transformation is the digitization of products and services. Thanks to advancements in technology, companies can now offer personalized and customized products and services to their customers. For example, through AI and big data analytics, companies can analyze customer data to gain insights into their preferences, behaviors and purchasing patterns. This data can be used to develop and offer tailor-made



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products and services, thereby increasing customer satisfaction and fostering brand loyalty. It also improves collaboration and coordination among different stakeholders. Digital technologies facilitate seamless communication and information sharing between departments, suppliers, partners and customers. This enhanced connectivity enables companies to better coordinate their activities, streamline processes and ensure that everyone is aligned with the overall goal of creating value for the customer through the sustainable value chain.

A digitized sustainable value chain provides companies with new opportunities for revenue generation. By embracing digital technologies, companies can develop new business models and revenue streams. For example, by using IoT, companies can offer value-added services such as predictive maintenance or performance optimization. By leveraging the data collected from connected devices, companies can proactively identify and address issues, thereby improving customer satisfaction, reducing waste and generating additional revenue. It enables the development of innovative products and services that cater to changing consumer demands and the ability to adapt quickly to market disruptions. Embracing technology as an enabler of sustainability can help organizations stay ahead of the curve and future-proof their business models.

The people factor

Collaboration is crucial in achieving a sustainable value chain. Organizations must work closely with suppliers, customers and other stakeholders to identify and mitigate sustainability risks and seize opportunities for improvement. This requires open lines of communication, transparency and a shared vision for sustainability. Without strong collaboration, it becomes difficult to align goals and strategies, resulting in a fragmented value chain that is less effective in achieving sustainable outcomes. By forging strategic partnerships across the value chain of a building's life cycle, companies can share knowledge, pool resources and leverage collective impact to drive systemic change.

Consumers are more conscious about the environmental and social impact of the products they purchase. A sustainable brand image can attract a loyal customer base and contribute to long-term success. Additionally, investors and financial institutions are increasingly considering sustainability factors when assessing the

viability and potential of businesses. Companies with sustainable practices are more likely to attract investment and secure access to capital, which is vital for growth and expansion. Sustainability provides a framework for growth and resilience, enabling companies to stay ahead of regulatory requirements and address the evolving needs of consumers. It fosters adaptability and innovation, making businesses better equipped to navigate challenges and seize opportunities in an increasingly competitive market.

The financial factor

Implementing sustainable practices often requires significant financial investments. For businesses operating under tight budgets, this can be a major hurdle. However, it is important to recognize that sustainability can also create cost savings and improved efficiency. The challenge here lies in finding the financial resources to make the necessary initial investments and convincing decision makers of the long-term benefits. Sustainability is not a standalone objective but an integral part of the value chain, requiring a comprehensive and collaborative approach to securing financial buy-in.

Sustainable value chain management is crucial in the development and maintenance of green buildings, which are designed and constructed with an emphasis on energy efficiency, sustainable materials and reduced environmental impact. This, too, requires a holistic approach that considers all activities and processes from the initial design and construction stages to ongoing operations and maintenance. One of the key reasons why the sustainable value chain is important in green buildings is because it allows for the efficient utilization of resources. Proper planning and coordination of activities along

the sustainable value chain ensure that materials are sourced sustainably, waste is minimized and energy is conserved. This reduces the ecological footprint of the building and leads to long-term cost savings. The value chain enables a systematic approach to resource management, leading to improved performance and increased competitiveness.

The sustainable value chain facilitates collaboration and cooperation among different stakeholders involved in green building projects, including architects, engineers, contractors, suppliers and building owners. Each stakeholder brings expertise and knowledge, enabling the development of innovative solutions and best practices. Effective



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collaboration leads to the integration of green design principles into every stage of the value chain, resulting in high-performance green buildings. The sustainable value chain is critical for ensuring the quality and performance of green buildings. It emphasizes the need for standardized processes and clear communication among stakeholders. This helps in the selection of sustainable materials, monitoring and controlling energy consumption, and implementing effective waste management strategies. By focusing on quality throughout the value chain, green buildings can achieve their intended environmental and energy efficiency goals.

The future factor

Lastly, the sustainability value chain plays a vital role in the ongoing operation and maintenance of green buildings. Regular monitoring and evaluation are necessary to ensure that the building is performing according to its intended design. The value chain enables the collection and analysis of data on energy consumption, indoor air quality and water efficiency, among others. These insights allow for continuous improvement and optimization of green building performance. The sustainable value chain is of utmost importance in green buildings as it enables efficient resource utilization, fosters collaboration among stakeholders, ensures quality and performance, and facilitates ongoing monitoring and improvement. Embracing a holistic approach to the

value chain is crucial for creating sustainable and environmentally responsible buildings that contribute to a greener future.

In addition to environmental and economic benefits, sustainability also drives social development and improves the well-being of communities. Sustainable companies often prioritize ethical and responsible practices, including fair labor standards, diversity and inclusion, and community engagement. By investing in their workforce and the communities in which they operate, businesses can create a positive social impact and ensure the well-being of their employees. By fostering positive relationships with all stakeholders and society at large, companies can enhance their reputation, retain talented employees and ensure long-term success. This, in turn, leads to higher employee satisfaction, increased productivity and reduced churn rates. But it requires a fundamental shift in mindset and a commitment to long-term thinking, as sustainability demands both immediate action and the ability to adapt and thrive in the face of future challenges. Organizations that prioritize sustainability will not only thrive financially but also contribute to a more sustainable and resilient future for all. Sustainability requires a change in the collective organizational mindset as the impact of cost might be immediate, but its value will be proven over time. Organizations that fail to change can become victims of that change. FMJ

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