Food Manufacturers Increase Sustainability

The United Nations estimates that if population growth and resource consumption continue at the current pace, almost three planets could be required to provide the natural resources needed to sustain current lifestyles by 2050 (3). 60% more food production will be needed to feed the expected 9.8 billion people [7]. Food and beverage companies are facing increasing pressure from consumers, legislation, employees, and personal integrity to increase sustainability.

Luckily, green F&B manufacturers have already begun implementing sustainability goals and strategies into their business. 93% of the world's 250 largest companies are now reporting on sustainability [3]. According to NYU Stern Center for Sustainable Business, between 2015 and 2019, sustainable products accounted for more than half (54.7%) of the growth within consumer packaged goods (5). This trend is especially prevalent with sustainable food and beverage processors, who have pledged $5.2 billion towards sustainability between now and 2050 [7].

The Environmental Protection Agency (EPA) defines sustainable manufacturing as the creation of manufactured products through economically-sound processes that minimize negative environmental impacts while conserving energy and natural resources. Sustainable manufacturing also enhances employee, community, and product safety [1]. For food and beverage companies specifically, The Grocery Manufacturers Association's criteria are based on environmental sustainability in three different areas: air, waste, and water [8].

"For starters, with real-time inventory tracking, SAP Business One has helped us manage our inventory better, which has dramatically improved our cash flow. All the information we need is at our fingertips and there are no more huge piles of paper to sift through. Our reporting is accurate, input errors have been greatly reduced and we rarely incur penalties for late shipments, improper labeling, etc. from our larger customers, which used to be an issue for us. Our customer service performance has also gotten much better with our ability to keep customers informed every step of the way about the status of their orders and shipments."

- Shawn M. Herzinger, Vice President, Products and Operations, P3 International

The Impact of COVID-19 on Sustainability Goals

While COVID-19 rocked global food supply chains and resulted in shifting priorities for businesses everywhere, sustainability remained high priority. Over 90% of sustainable indices have outperformed their parent benchmarks during the COVID-19 pandemic (4). Implementing sustainable business practices even serves to increase resilience against disruption. Companies with a greater commitment to environmental, social and governance (ESG) benchmarking and reporting regimes continue to prove their ability to weather periods of uncertainty in the market better than their peers (4).

Increase Accountability by Measuring Your Impact

To see tangible improvements in sustainability, companies need to set clear, formal goals that address the issue in a coordinated, integrated manner. Modern day businesses consider the "triple bottom line" which includes monetary worth, social responsibility, and environmental impact. The importance of green F&B manufacturing also extends to the workforce, particularly with millennials.

Empower Customers to Make Sustainable Choices with Supply Chain Visibility

Consumer pressure and brand improvement are the leading reasons why businesses adopt sustainable food and beverage production. Four out of five consumers (79%) are changing their purchase preferences based on sustainability (6). Over two thirds (69%) of executives pointed to an increase in brand value and 77% say their sustainability approaches have resulted in increased customer loyalty (6). Sustainability even beats price point for many consumers, with 59% willing to pay a price premium for products they view as sustainable (6).

Transparent supply chains empower customers to make more environmentally responsible choices, as well as increasing brand trust and preference. While over two-thirds (68%) of consumers are willing to purchase more sustainable products, close to half of consumers (49%) say they do not have any information to verify the sustainability claims of products (6). Supply chain technology that allows for total traceability, from farm to fork, means customers can see the environmental impacts of the products they purchase. This empowers them to make sustainable choices, and ultimately increases sales, consumer trust, and brand loyalty.

Decrease Power Usage with Cloud Technology

The federal government estimates that manufacturing operations use about one third of the total amount of energy consumed annually (2). Research by Google and Lawrence Berkeley National Laboratory says that transitioning commonly used software applications to the cloud can cut an organization's energy use by 87% (6). ERP technology allows sustainable food and beverage processors to monitor production in real-time, and even make live updates, ensuring that equipment and energy is being used as efficiently as possible.

Sustainable energy is being adopted exponentially due to decreasing costs. Based on the levelized cost of energy, the cost of solar panels per watt produced in 1977 was $77; in 2020 it is $0.14 (4). While some SMBs may view sustainable energy options like solar, wind, and geothermal as costly, long-term savings are quite significant. Tax credits can amount up to 30% for renewable energy usage (5), and these types of sustainable energies tend to be less expensive to maintain.

Optimize Logistics to Reduce Carbon Footprint

Over 70% of the products in the United States are transported by truck, which generates CO_2 and greenhouse gases (7). The food sector accounts for around 30% of the world's total energy consumption and 22% of total Greenhouse Gas emissions (3). One method that has been heavily adopted to reduce carbon footprints and increase resilience is shifting to locally sourced suppliers. *As of June 2020, 69% of manufacturers indicate they are "likely to extremely likely" to reshore in the future and 72% of industrial/B2B buyers "always or generally" prefer to source locally* (5). The localization trend is also being adopted by consumers. 68% of consumers plan to purchase more locally made products rather than imported or non-local products in the next 12 months (6). Technology that allows you to create partnerships with local suppliers and create digital contracts can contribute to sustainability goals.

Systems that allow green F&B manufacturers to view all sales and inventory information in one place also allows you to optimize delivery routes and shipping container usage for the most energy and time efficient transportation. Maximizing shipping container usage and delivery schedules with the use of artificial intelligence (AI) and cloud computing can result in massive environmental and fiscal savings in the food and beverage industry, since cold packing, ground transport, and food preservation methods are costly and require large amounts of energy.

Increase the Use of Sustainable Materials and Packaging with Upcycling

In a recent survey entitled Packaging Matters, 98% of the surveyed consumers indicated sustainable practices are extremely or very important to their view of a CPG brand [8]. To keep up with consumer demand for sustainable, transparent supply chains, sustainable food and beverage processors must seek suppliers who provide supply chain transparency. Passing this information to customers increases credibility and sales. Green F&B manufacturers can also upcycle waste products or byproducts created during production processes and use them to create new products or packaging materials. Supply chain technology traces which byproducts are produced by which processes and identifies ways to reduce or potentially repurpose byproducts. Sustainable food and beverage processors can identify opportunities for symbiotic relationships where partnered companies may utilize otherwise wasted byproducts, resulting in less waste and additional revenue streams. For example, an orange juice company can sell its unneeded orange peels to a candy manufacturer, who can then candy the peels or coat them in chocolate and sell them as a new product. This results in additional revenue streams and decreased waste management costs for the orange juice company. The candy manufacturer also saves since they do not have to use resources to harvest orange peels (and waste the rest of the orange) and they can make sustainability claims that attract consumers. An integrated system gives the orange juice manufacturer visibility into how may peels are produced and available to sell to the candy company. Situations like this benefit the supplier, the buyer, the environment, and the consumer.

75% of executives believe they have a strategy, infrastructure, and resources in place to drive sustainability and circular economy efforts [6]. Sustainable food and beverage processors use technology and innovation to take a deep look into their operations and perform strategic analyses and scenario planning. This allows for informed, actionable decisions and clear-cut, measurable benchmarks to increase sustainability. Enterprise Resource Planning (ERP) systems allow for collaboration and visibility across the entire business, enhancing accountability across business functions.

Increase Operational Efficiency and Reduce Waste

63% of business leaders have even seen a direct revenue uptick due to sustainable manufacturing practices [6]. Technology that traces the entire production cycle and bill of materials from beginning to end identifies the exact impacts of these materials and processes. Identifying production methods that use resources and labor more efficiently improves efficiency from multiple standpoints including energy usage, resource consumption, and labor. This efficiency gain is especially important for green F&B manufacturers who rely almost entirely on valuable natural resources, which are quickly dwindling due to a growing population.

It is estimated that 75% of the world's food waste occurs at the production level [9]. Demand planning systems and technology that analyzes sales data in real time allows sustainable food and beverage processors to adapt to changing demand and produce optimum inventory levels, resulting in less waste.

Conclusion

Sustainable food and beverage processors are expanding their reach across the globe, but there is still much work to be done. Green F&B manufacturers can benefit from adopting more sustainable business practices with cost savings and brand recognition. Integrated business technology can help achieve sustainability benchmarks that benefit the environment and the bottom line.

Sources

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