Restaurants Can Innovate and Recover From the Covid-19 Pandemic

By Eojina Kim, Ph.D., Pamplin College of Business, Virginia Tech, Yoon Jung Jang, Ph.D., School of Hotel, Restaurant, & Culinary Arts, Woosong University, and Vivica Kraak, Ph.D., Department of Human Nutrition, Foods, and Exercise, Virginia Tech

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About the Authors

Eojina Kim, Ph.D., RD, is an assistant professor in the Howard Feiertag Department of Hospitality and Tourism Management, Pamplin College of Business, Virginia Tech. She holds a Ph.D. from Iowa State University in Hospitality Management with a minor in Business Administration. She focuses on understanding how industry practices and policies influence consumer behavior with the goal of advancing new business models, practices, and regulation in the foodservice industry. She has experience at the government, corporate, and operations levels in the food industry. She has generated multiple extramural grants and has been recognized in top-tier publications. [Profile Page](#) [LinkedIn](#)

Yoon Jung Jang, Ph.D., RD, is an assistant professor of Food Service & Culinary Arts Management, School of Hotel, Restaurant, & Culinary Arts, Woosong University, Korea. She holds a Ph.D. from Iowa State University in Hospitality Management. She specializes in restaurant sustainability and has conducted significant research in the field. She has been serving as a reviewer in government-funded projects as well as top-tier journals. She has professional experiences in the foodservice industry for many years and now teaches courses on restaurant management and entrepreneurship. [Profile Page](#)

Vivica I. Kraak, Ph.D., MS, RDN, is Associate Professor of Food and Nutrition Policy in the Department of Human Nutrition, Foods, and Exercise at Virginia Tech in Blacksburg, Virginia. She has more than 30 years of professional experience and has researched strategies to improve government policies, business practices and mobilize civil society support to address undernutrition, obesity, diet-related non-communicable diseases, and climate change. She teaches courses on food and nutrition policies in the United States (U.S.), and active transport for a healthy sustainable planet. [Profile Page](#) [LinkedIn](#)
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Addressing the dimensions of sustainability during the Covid-19 pandemic

Human-induced climate change is one of the greatest current challenges, and policies and actions to address its consequences on the health of people and the planet have gained momentum in recent years (Swinburn et al. 2021). International policy aims to mitigate the adverse effects of climate change and stabilize global warming were endorsed by 196 countries in December 2015 in Paris at the United Nations (UN) Climate Change Conference of Parties (COP 21), which is a legally binding treaty that went into action in November 2016 (UN Framework Convention on Climate Change, 2021).

In 2015, the UN established the Sustainable Development Goals (SDGs) as a “blueprint to achieve a better and more suitable future for all” with a focus on tackling poverty, health, and climate change by 2030. The 17 SDGs are ambitious and describe 169 targets for governments, corporate leaders, and civil society to integrate sustainability into strategies and systems to realize shared values for both business and society. Driving these opportunities can lead to businesses’ competitiveness, supply chain resilience, and brand confidence.
Governments and businesses in countries worldwide have made commitments to reduce greenhouse gas emissions (GHGE) and achieve the SDG 2030 Agenda. Food system activities – including large-scale agricultural beef and dairy farms, food production, transportation, and storage of food waste in landfills – collectively contribute to climate change (Myers et al., 2017). These processes account for 20-40% of greenhouse gas emissions (GHGE), and the carbon footprints of diets that are high in animal-source proteins compared to plant-source proteins contribute to health and environmental challenges relating to climate change (Springmann et al., 2018; UNCN, 2017). Therefore, environmental, social, and economic sustainability are integral parts of the restaurant businesses’ strategy.

The restaurant and food service industry sectors are important food system actors who feed millions of customers daily. These businesses offer inexpensive and convenient meals either consumed by customers on the premises, through takeaway, or delivered at home (Kraak, 2019). Many businesses accept responsibility for avoiding harm to the environment: increasing numbers of companies are becoming "green" due to the realization that simultaneously reducing pollution and increasing profits is possible while also providing healthier meals for customers. Announced strategic measures arise from the growing interest of all food systems stakeholders including businesses, consumers, investors, and governments. Certain governments have made some progress by introducing national legislation that either bans single-use plastic or taxes disposable plastic bags.
Starbucks, a large global chain restaurant, as well as small restaurants appear to have successfully increased interest in reusable bags and containers. However, Covid-19 pandemic created setbacks for these businesses, and sustainability activities were placed on hold as food service providers adapted their business models.

**Challenges for promoting sustainable production and consumption in the restaurant and food service sectors**

Until 2019, restaurant initiatives centered on environmental and social sustainability were on the rise. According to the National Restaurant Association (NRA), sustainability was an emerging theme for restaurants across the United States in 2018, and restaurant owners and operators attended closely to issues such as recycling, food waste reduction, and local sourcing (NRA, 2018). However, the primary focus of consumers and restaurants drastically shifted to health and hygiene concerns due to Covid-19. The Centers for Disease Control and Prevention (CDC) initially prompted restaurants to “use disposable food service items” and “avoid use of food and beverage utensils and containers brought in by customers” as the results of several studies have shown that reusable bags can carry and spread viruses and bacteria (Barbosa, Albano, Silva, & Teixeira, 2019; Williams, Gerba, Maxwell, & Sinclair, 2011). This reversed the progress toward “going green” and made environmentally conscious changes more difficult for restaurants due to a significant increase in waste from food, disposable items, and personal protective equipment (PPE). A majority of restaurants seem to have suspended sustainability efforts until they regain lost sales. For example, chain food services such as Starbucks and Dunkin’ Donuts suspended the use of reusable cups, and nearly all restaurants returned to using single-use plastic bags, cups, and containers.

In the meantime, restaurants have had to drastically change business models for customer service. Many restaurants reconfigured operations to offer take-out, curbside pick-up, and delivery services. Restaurant operators collaborated with delivery services such as Grubhub, UberEATS, DoorDash, and Postmates, which can reach millions of customers every day and can affect purchasing practices, eating habits, and environmental management practices (Goggins et al., 2018). As delivery options increased during the pandemic, the phenomenon of plastic usage has become more serious as this shift requires greater utilization of plastic containers and packages. Estimates suggest the global online food delivery market will reach $151.5 billion revenue and 1.6 billion users in 2021, a 10% increase year-over-year (stockapps.com). A strong causal link exists between air pollution and plastic waste arising from demand for food delivery (Chu, Liu, & Salvo, 2021). The packaging-related greenhouse gas
emissions for a single order of food delivery range from 0.15 to 0.29 kg CO2e (Arunan & Crawford, 2021), leading to significant environmental impacts by generating high carbon footprints (Li, Mirosa, & Bremer, 2020). In the midst of pandemic-induced hardship, a few restaurants have advanced sustainability initiatives by developing more plant-based diets and using more biodegradable materials.

Call to action for the industry and consumers
Questions arise: Needing or using plastic utensils accompanying takeout or delivery food orders, or recycling the packaging of the order. Post-pandemic estimates suggest that the increase in takeout and delivery will continue, and while the focus is rightfully on minimizing the spread of disease, the consequential impact on the environment is undeniable. However, perhaps the situation is simply an opportunity for the industry and consumers alike to jointly revisit and champion sustainability efforts.

Shifting industry perceptions on sustainability
One of the core struggles in the food service industry is for a few industry leaders to recognize environmental opportunities as a major source of revenue growth. Greening is often framed in terms of risk reduction, redesign, or cost reduction, and rarely associated with strategy or technology development. As a result, most businesses are unaware of these opportunities. For example, firms can view sustainability strategy as a vehicle to raise capital.

Environmental, social, and governance (ESG) data are standards of company operations used by socially conscious investors to select potential investments, which includes companies’ carbon footprints. Investors are sensitive to ESG data because it helps investors avoid companies that may pose greater financial risks due to environmental or other practices (Accenture, 2021). Therefore, if food service companies used ESG’s real-time data to help evaluate and modify strategies and business models with sustainability efforts properly factored in, the result is a potential avenue for external capital investment.

Saving the environment one fork at a time
In order for sustainable management to have an actual effect on the environment, long-term and short-term strategies are necessary, and the restaurant industry would first have to practice small actions and gradually expand upon them.

One easy target involves single-use, plastic utensils which may or may not be necessary for pick-up or delivery orders. In particular, for an online order and delivery, excluding utensils or condiments should be a visible option to customers when
completing the order. If providing utensils and condiments are a default option, as is widely the case today, consumers will often accept utensils and condiments without ever considering whether or not a true need exists. Despite increased takeout and delivery to homes, plastic utensils are often not necessary when homes already have flatware. Foodservice establishments and online food delivery companies could require explicit consumer requests for including condiments and utensils for orders, or proactively ask consumers at the time of transactions whether or not these accessories are necessary.

Second, the restaurant industry could execute sustainability strategies by using eco-friendly containers that naturally decompose and are composed of recyclable raw materials. As the use of online delivery companies increases, the delivery companies themselves are in a position to positively impact the environment. For example, Grubhub is working with the Green Restaurant Association (GRA) to provide subsidized support to small- and medium-sized restaurants looking to implement sustainable practices including packaging, waste reduction, composting, water efficiency, and more.

As a further step, consumers as well as restaurants could adopt reusable containers. Although many consumers may be initially reluctant to dine from reused containers, education on industrial cleaning and disinfection practices could exacerbate hygiene concerns. One challenge in execution of this initiative will be managing costs as related to return logistics: restaurants need to identify how to collect the reusable containers after use. If local restaurants, in the same town, collaborate by using the same reusable containers that consumers can return to any local restaurant, and receive monetary incentives, both restaurant and consumer would benefit. Furthermore, such an arrangement could be a prime value-add activity for delivery companies whose assets and contract delivery partners participate in restaurants’ return logistics.

Third, food service businesses can adopt new digital tools to reduce waste. One increasingly common trend involves having consumers scan a QR code to view the menu rather than printing and supplying disposable menus. Although this is a small change at the individual restaurant level, if scaled across the industry, a significantly beneficial impact to the environment becomes a reality. Furthermore, research indicates that consumers’ perception of a restaurant’s innovativeness leads to customers’ value co-creation behavior (Kim, Tang, & Bosselman, 2019), perceived quality (Kim, Nicolau, & Tang, 2021), and, in turn, loyalty (Kim et al., 2019; Kim et al., 2021). Food service practitioners should employ simple technological innovations as an opportunity to provide a hygienic environment while also capturing consumers.
Adopting to shifting consumer preferences
As Millennials and Generation Z customers gradually comprise the main economic generators and consumers of society, recognizing that these groups are more interested in sustainability and corporate social responsibility (CSR) initiatives are important because these market segments value CSR practices more than other age groups. Millennials and Gen Z are increasingly concerned with sources of harvested food. They want companies to use less single-use plastic, and they also want companies to invest in developing technologies to reduce reliance on plastics. Since these factors affect their patronage, a wise strategy for restaurants would be to consider sustainability strategies in an effort to meet consumer demands. Further, research indicates millennials are willing to pay a premium to support green initiatives (Nicolau et al., 2020), leading to financial motivation for the industry to pursue such strategies. Regardless, continuous education and discourse needs to occur between the industry and the consumer. Restaurants could encourage consumers to participate in sustainable brand communities to share ideas and experiences that can help shape corporate strategies and initiatives (Jang & Kim, 2021). Community members could provide constructive feedback on brands, products, and services. In exchange for insights, consumers would have the opportunity to influence corporate perspectives toward sustainability and simultaneously build more meaningful relationships with brands.

Takeaway Messages
The new global paradigm creates an environment in which carryout, curbside pickup, and delivery on demand are the new norm for restaurants and food service establishments in a post-Covid-19 world. One of the consequences of this shift is the increase in food and packaging waste. Both industry and consumers alike have an obligation to cooperate and address this universal problem. To design and achieve future sustainability, foodservice managers, advisedly, should engage primary consumer groups in critical decisions regarding environmental solutions through diverse communication channels (Jang, Zheng, & Bosselman, 2017). While working harmoniously, both parties will be able to identify innovative environmental initiatives. The good news is that a passionate new generation of consumers exists, combined with an industry aware of new financial incentives, which creates a positive outlook for the future.
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