



ENHANCING FOOD SERVICE EXPERIENCE THROUGH TECHNOLOGY INTEGRATION AND SUSTAINABLE PRACTICES IN NIGERIA TOURISM INDUSTRY

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Abstract

This research investigates the food service experience with technological integration and sustainable practices in the tourism industry, using secondary data from journal articles, magazines, reports, dissertations, thesis, books, and other research and internet sources. In contrast to the previous study on food service experience in the tourism industry, factors and different dynamics in the spectrum that affected or influenced travelers were discussed. Very few studies delved deeply into technology integration and sustainable practices in the food services and tourism industry. This study discovered new trends, technology benefits, and travelers' sustainable food service experience. Most tourism food vendors have lost potential customers in the food service area; therefore, there is a need to implement sustainable and technological trends. Sustainable practices will revolutionize the food service industry, enabling establishments to enhance efficiency, improve customer experiences, and adapt to changing consumer preferences. Technological advancements have significantly impacted food service operations like mobile applications, online ordering delivery, locally sourced food, and eco-friendly packaging. Therefore, the research suggests prioritizing technology to streamline processes and educating employees on the importance of sustainability to facilitate customer experiences.

Keywords: Food Service, Tourism, Sustainable Practices

Introduction

Food service is a valuable resource in modern tourism that welcomes and cares for visitors' needs. Rendering good food and quality food service experience is the heart of hospitality. It is a part of tourism that prioritizes the safety of its guests. Tourism and food service are interconnected by the shared dynamics of service delivery and guest impression (Tapan and Satyabrat, 2014 pp.54-69). As a result of the industry's intertwined nature with the natural world, tourism is limited to the principles of sustainable development. (Abdou, 2020).

Understanding the concept of 'enhancement' is essential to grasping the meaning of sustainable development and technology. Investments in people, systems, and the natural environment contribute to development. Economic, scientific, technological, social, and cultural spheres are all included in the enhancing concept. (Dangi et al, 2016. Para.7).

Sustainable development is a principle-based, all-encompassing idea. Sustainable growth and consumption means using only some of the planet's resources and leaving nothing for the next generation. The concept of sustainability was first put forth in 1987. Sustainable practices are a concept that advocates a balance between human needs and the regenerative capacity of the natural environment. Suga, (2021). According to Galvani et al. (2020) the current generation's overconsumption or misuse of natural resources leaves fewer and more degraded resources for future generations. Sustainable practices are about providing for people without damaging the planet's natural resources or ecological balance.

The success of the tourism industry heavily relies on providing exceptional and memorable experiences to travelers, with food service playing a crucial role in shaping these encounters. According to De Jong & Varley (2018). 'The implementation of innovative technologies, create seamless and personalized dining experiences for tourists' (pp. 277-295). And is becoming a necessity for quality food service experience. It is true adopting sustainable practices, (Dash & Paul 2021). Using locally sourced ingredients, reducing food waste and using eco-friendly packaging. Dixit (2015) stated that by evaluating the impact of technology and sustainability on customer satisfaction, loyalty, and destination image, there would be a remarkable food service experience. This analysis will present future trends and recommendations for food service and tourism stakeholders to enhance customer experiences while promoting eco-consciousness and sustainable growth (Duralia, 2017).



The Objective of the Study

The primary objective of this study is to investigate the impact of technology integration and sustainable practices on enhancing the food service experience in the tourism industry. The study aims to achieve the following specific objectives:

1. To assess the extent of technology integration in food service establishments within the tourism industry.
2. To evaluate the adoption of sustainable practices in food service operations.
3. To analyze the impact of technology and sustainability on customer experiences and satisfaction in food service and tourism.
4. To identify best practices and success factors for enhancing the food service experience through technology and sustainability.

Literature Review

The food service and tourism industries are intrinsically linked, as the pleasure of indulging in diverse cuisines and dining experiences often serves as a highlight for travelers during their journeys Bessiere (2013). The tourism industry's continued growth and success are contingent upon providing exceptional and unforgettable experiences to tourists, where food service plays a pivotal role in shaping these encounters. (Alcobia, 2019) stated that tourists seek not only exploration of new places but also opportunities to savor local delicacies, immerse themselves in culinary traditions, and connect with the culture of their destinations.

Travelers' expectations have evolved as the world becomes increasingly interconnected and technologically advanced; demanding seamless and personalized experiences (Choo et al. 2016, pp 818- 838). Integrating technology in food service has emerged as a transformative approach to meet these changing demands, offering convenience, efficiency, and enhanced interactions between customers and food establishments. Mobile applications, however enable tourists to discover nearby restaurants, access digital menus, place orders in advance, and receive real-time updates on their dining experiences. (Anuar et al.2014, pp 552-557) Augmented reality and virtual reality present new dimensions for menu presentations and interactive dining, captivating and engaging tourists in novel ways.

In parallel, Dangi et al. (2016) discuss the growing awareness of environmental and social concerns that have sparked a global movement toward sustainable practices across industries, including food service and tourism. Sustainable food service initiatives like: Sourcing locally and seasonally, reducing food waste, using eco-friendly packaging, and adopting energy-efficient practices. Resonate with eco-conscious travelers seeking responsible and ethical experiences. For many tourists, environmentally friendly practices enhance their overall journey's perceived value and authenticity, fostering brand loyalty and a favorable destination reputation. Integrating technology and sustainable practices can significantly impact the food service experience in the tourism industry. (Anuar et al. 2014)

Benefit of Enhancing Food Service in Tourism

Enhancing food service in the tourism industry holds immense significance for various stakeholders involved in the travel ecosystem. Lee et al. (2015) stated that the benefits can be understood through the following:

1. **Memorable Travel Experiences:** Food is integral to a traveler's journey, and exceptional culinary experiences can create lasting memories. Tourists often seek local flavors and authentic cuisines, and by enhancing food service, destinations can offer unique and immersive experiences that leave a lasting impression on travelers.
2. **Economic Impact:** Food tourism contributes significantly to the economic growth of destinations. Tourists are willing to spend more on quality dining experiences, leading to increased revenue for local businesses and job opportunities in the food and hospitality sectors.
3. **Destination Promotion:** A destination's culinary offerings can serve as a promotional tool, attracting food enthusiasts worldwide. Food-focused marketing campaigns, food festivals, and gastronomic events can position a goal as a culinary hotspot, drawing food tourists and creating a buzz on social media platforms.
4. **Customer Satisfaction and Loyalty:** Food service directly impacts customer satisfaction during travel. Satisfying food experiences can lead to higher levels of customer loyalty, repeat visits, and positive reviews, ultimately contributing to the growth of a destination's tourism industry.
5. **Technology-driven Efficiency:** Integrating technology in food service streamlines operations, reduces wait times, and enhances convenience for tourists. Mobile apps, online reservations, and contactless payment systems create a seamless dining experience that meets modern travelers' expectations.



6. **Environmental Sustainability:** Embracing sustainable practices in food service, such as sourcing local and organic ingredients, reducing food waste, and implementing eco-friendly packaging, appeals to environmentally conscious travelers. It helps destinations and businesses demonstrate their commitment to sustainability and responsible tourism practices.

According to O'Connor (2018), enhancing food service in the tourism industry goes beyond satisfying hunger; it creates an avenue for cultural exchange, economic growth, and sustainable development. By embracing technology and sustainable practices, destinations and food establishments can elevate the travel experience, positively impact the environment and society, and stand out in the competitive global tourism market.

Methodology

This study adopted secondary data to examine the best ways to enhance the food service experience in the tourism industry, as well as technology integration and sustainable practices. Nigeria's Food services are facing some awkward experiences; therefore, they must be updated with new technology trends and sustainable touches in various tourism destinations. Due to the time and necessary expense, longitudinal is rare in social sciences (Liu, 2014). However, secondary data analysis provides more profound insights into the experiences, perspectives, and challenges related to technology and sustainability in food service. Fitzmaurice, et al (2012) Researchers can adapt longitudinal studies using secondary data, which is crucial for social sciences research since it allows tracks of social development. Journals, articles, magazines, reports, dissertations, theses, books, and other research and internet sources were used as secondary tools.

Findings

Several technological advancements have significantly impacted food service operations. Kattiyapornpong and Chuntamara (2020) highlighted some vital technological innovations in food service, transforming how customers interact with food service establishments. Restaurants and cafes offer mobile apps allowing customers to browse menus, place orders, make reservations, and even pay for their meals using smartphones. This convenience reduces wait times and enables personalized and contactless experiences. The rise of online food delivery platforms has made it more convenient for customers to order food from their favorite restaurants and deliver it to their doorstep. Restaurants can partner with delivery services or develop delivery apps to expand their reach and cater to a broader customer base. Tableside tablets and digital menus have become popular in upscale restaurants. Customers can browse through menu options, view images and descriptions of dishes, and place orders directly from the tablet, enhancing the overall dining experience. And others like Contactless Payment Systems, Customer Feedback and Analytics, Robotics and Automation, Internet of Things (IoT), and AI-powered Personalization

WTO and Basque Culinary Center (2019), These Technological innovations demonstrate the potential for food service establishments to leverage technology to optimize their operations and provide exceptional customer dining experiences. Embracing these advancements not only streamlines processes but also strengthens customer relationships, ultimately contributing to the success and growth of the food service industry. Tapan & Satyabra (2014). Sustainable practices in food service have become increasingly important as businesses and consumers recognize the environmental and social impacts of the food industry De Jong & Varley (2018). By adopting sustainable initiatives, food service establishments can contribute to preserving natural resources, reducing waste, promoting ethical sourcing, and catering to the growing demand for environmentally responsible dining experiences. Gagić et al. (2013) discuss some critical sustainable practices in food service. Restaurants and food establishments can prioritize sourcing ingredients locally and seasonally. This not only supports local farmers and reduces the carbon footprint associated with transportation but also ensures that the ingredients are fresher and more flavorful. Implementing strategies to minimize food waste is crucial. Restaurants can track and analyze their food waste, adjust portions, donate excess food to local charities, and repurpose food scraps for other culinary uses, such as composting. Opting for eco-friendly packaging materials, such as biodegradable or compostable containers and utensils, helps reduce plastic waste and its adverse environmental impact.

Food service establishments can invest in energy-efficient appliances, lighting, and HVAC systems to reduce energy consumption. Simple steps like switching to LED lighting and using programmable thermostats can significantly affect energy conservation. Proper food storage and inventory management practices help prevent food spoilage and minimize waste. By implementing efficient inventory tracking systems, businesses can reduce food losses and save on costs. Above complement WWF's (2021) sustainable practices, including water conservation, sustainable seafood sourcing, plant-based and meat-reduced menus, community engagement, social responsibility, and transparent



sustainability communication. Incorporating sustainable practices into food service operations will help establishments contribute to environmental conservation and attract and retain environmentally conscious customers. Embracing sustainability in food service will benefit the planet and align with the values discerning consumer base, ultimately contributing to the long-term success and viability of the food service and tourism industry.

Discussion

The importance of food service experience to travelers and their communities cannot be overstated. Previous study on food service experience addresses, factors, and other dynamics in the spectrum that affect or influence travelers. Also, some researches have considered aspects like culture, need and desire. Very few studies, from the perspective of the researchers, delved deeply into technology integration and sustainable Practices. The findings of this study were similar to some researchers. Vanharanta et al. (2017) focused on small details that significantly impact quality food service for travelers. Since the challenges were the same in drawing out the best technology for efficient food service, Qin et al. (2009) opined quality mobile applications, contactless payment, and self-service -kiosks as the best technology for effective food service operation and tourism development. Also, the results align with O'Connor (2018) on some best sustainable practices for the food services and tourism industry, according to research by Jaini et al. (2018). Good food service experience is the soul of travelers and the tourism industry.

Conclusion

Integrating technology and sustainable practices in the food service industry holds immense potential to transform the customer experience in the tourism sector. Technology-driven solutions, such as mobile applications, self-service kiosks, and contactless payment systems, have streamlined operations, reduced wait times, and provided personalized dining experiences. These advancements have enhanced convenience for customers and contributed to a safer and more seamless dining environment, particularly in the wake of the global pandemic. Moreover, sustainable practices, including locally sourced ingredients, reduced food waste, eco-friendly packaging, and responsible sourcing, have resonated with environmentally conscious customers. These initiatives have showcased food service establishments' commitment to ethical and environmentally responsible practices, building customer trust and loyalty. To ensure continued growth and competitiveness, food service establishments, policymakers, and tourism stakeholders must collaborate, share best practices, and invest in employee training to drive a collective commitment to sustainability and technology integration to create a more sustainable, memorable, and enriching experience for travelers, fostering a harmonious relationship between tourism and the environment.

Recommendations

Based on the research findings, the following recommendations are proposed to enhance the food service experience in the tourism industry through technology integration and sustainable practices:

1. Food service establishments should prioritize adopting technology to streamline operations and enhance customer experiences.
2. Investing in user-friendly mobile applications, self-service kiosks, and tableside tablets can improve ordering efficiency, reduce wait times, and offer personalized dining options.
3. Consider contactless dining and establishments with touchless payment systems and digital menus.
4. Establish partnerships with local communities and suppliers to promote sustainable practices and development.
5. Educating employees on the importance of sustainability can facilitate a culture of environmental responsibility.

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