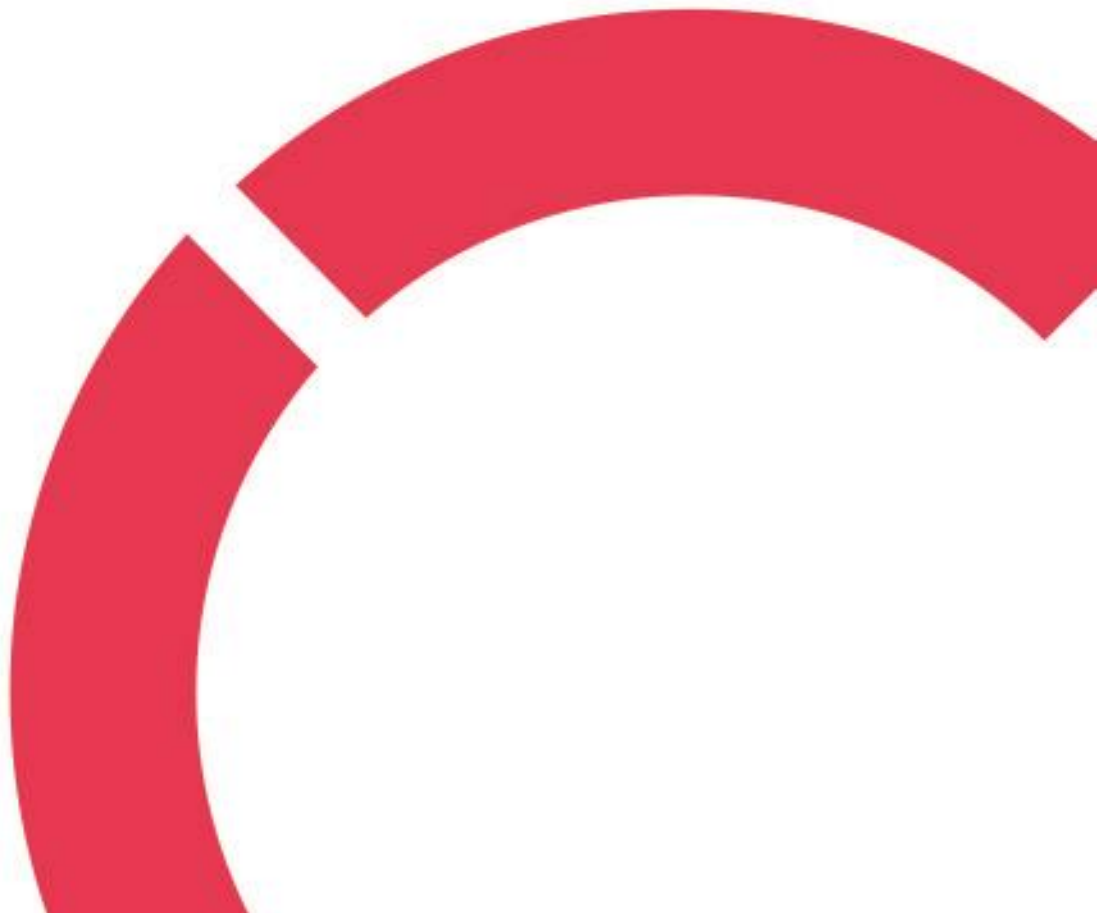


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**SUSTAINABILITY PRACTICES AND CONSUMER BEHAVIOR IN  
FOOD DELIVERY SERVICES**

**A case study**

**Thesis  
CENTRIA UNIVERSITY OF APPLIED SCIENCES  
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**ABSTRACT**

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<p>The global imperative of sustainability influences organizational structures, industrial processes, and consumer purchasing behavior. Consumers' demands for convenience have increased due to the industry's rapid growth, which is a result of the use of packaging materials and transportation requirements. The objective of our study was to identify sustainability practices implemented by a selected company in the food industry, to assess consumer awareness and perceptions, and to analyze their impact on consumer purchasing behavior. This research was a case study.</p> <p>The research deployed a mixed method design survey and interviews. Fast delivery, transparent pricing, and green initiatives are among the main factors influencing consumer behavior. The results revealed that conservative scepticism or reluctance to adopt new sustainability practices, cost versus benefit, and operational challenges are some of the issues that are increasingly being noted as constraints to the broader push for sustainability. However, as we see that sustainability efforts are positively associated with customer satisfaction, it can be seen that going green has the potential to not only improve customer satisfaction but also brand loyalty and competitive advantage.</p> <p>This case study presents useful insights into the changing dynamics between sustainable business practices and consumer behavior in the context of digital food delivery and provides recommendations for industry stakeholders working towards long-term environmental and commercial sustainability.</p>		
<b>Key words</b> Consumer behavior, eco-friendly packaging, environmental impact, food delivery services, green logistics, sustainability		

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## 1 INTRODUCTION

The global imperative of sustainability influences organizational structures, industrial processes, and consumer purchasing behavior. Given how climate change, resource depletion, and environmental degradation impact its operations, the food delivery sector is at the forefront of sustainable developments. Consumers' demands for convenience have increased due to the industry's rapid growth, which is a result of the use of packaging materials and transportation requirements. This study examines consumer behavior and environmental criteria for the food delivery industry. Food delivery systems' ability to manage environmental effects while also satisfying evolving consumer demands for sustainable practices determine how sustainable they will be. The sector has transformed as a result of technological advancements, societal urbanization trends, and lifestyle modifications.

Sustainable practices are increasingly expected by stakeholders, the government, and consumers across the board. In the food industry, delivery services rely largely on plastic packaging, which produces a lot of waste and causes environmental problems. Carbon emissions from logistics show how important it is to use environmentally friendly shipping techniques and energy-efficient operational procedures.

As global awareness about climate change and environmental deterioration increases, sustainability positions itself as a vital topic in worldwide discussions. Through extensive food delivery service options, companies have a chance to promote sustainable initiatives throughout their operational processes. The findings of this study are timely because sustainable practices keep growing in popularity while customers seek environmentally responsible business options. The expanding global food delivery market stands to benefit from this research by learning strategies that promote both growth and sustainability to accomplish lasting business success and environmental advantages.

The objective of our study is to identify sustainability practices implemented by a selected company in the food industry, assess consumer awareness and perceptions, and analyze their impact on consumer purchasing behavior. The study examines trends in the food sector and the strategic methods used by this food delivery company. The market has been completely transformed for companies by the creative fusion of effective logistics, an intuitive digital platform, and excellent customer support. Through a number of operational areas, the companies connect customers with nearby restaurants and offer a seamless ordering experience. This business has been able to grow quickly while adapting to changing

consumer preferences and market developments because of innovation in marketing and data-driven decision-making.

The following research questions will be utilized:

What are the sustainability practices implemented by the food industry?

What is the consumer's awareness and perceptions of these sustainability practices?

How does this awareness of sustainability practices impact on consumer purchasing behaviour?

The research will employ both qualitative data collection methods by conducting interviews and focus groups with case company management and consumers, and quantitative data by administering online surveys to establish the consumers' awareness, attitudes, and behavioural intentions about the case company's sustainability practices.

The literature review in chapter two covers theories of the environmental impact of food delivery services' sustainability, the role of technology in sustainability, the impact of customer behaviour on sustainable practices. Chapter three, the research methodology, includes the research method, data collection, and data analysis. Chapter four, results and analysis, includes interview results, survey results. Chapter five, conclusion, includes the overall review of this thesis and the further opportunities.

## **2 LITERATURE REVIEW AND THEORETICAL BACKGROUND**

Over the past couple of decades, the food delivery industry has grown significantly due to varying consumer behaviour, modern technology, and how easy it is to order online. This rapid growth came with apprehension regarding its social and environmental consequences. Sustainability within food delivery services includes the reduction of carbon emission, waste, and the use of unethical sourcing. This study delves into the fundamental pillars of sustainability in food delivery services and offers solutions to counter social and environmental issues.

Sustainability in the food industry has become a crucial focus due to increasing environmental concerns, rising consumer awareness, and regulatory pressures. The food sector significantly impacts natural resources, greenhouse gas emissions, and waste production. Therefore, companies are adopting sustainable practices to mitigate their environmental footprint while ensuring long-term business viability. The food delivery services have greatly contributed to the environment's degradation. With the rise of food delivery services comes a greater need for food delivery vehicles, which raises carbon emissions alongside urban air pollution. This thesis explores key sustainability initiatives in the food delivery industry, covering areas such as sustainable sourcing, waste management, energy efficiency, water conservation, and ethical labour practices. (Garnet 2013.)

### **2.1 Introduction to sustainability practices implemented by the food industry**

One of the most important aspects of sustainability in the food industry is the responsible sourcing of raw materials (Jones & Patel 2022). Companies are increasingly adopting sustainable agricultural practices, such as organic farming, crop rotation, and integrated pest management, to reduce environmental degradation. Moreover, businesses are prioritizing the use of Fair Trade-certified and Rainforest Alliance-certified products, ensuring ethical sourcing and fair wages for farmers. (Smith et al. 2021.)

Large food corporations, including Nestlé and Unilever, have implemented sustainable sourcing programs that emphasize biodiversity conservation and soil health improvement. Additionally, many brands are switching to locally sourced ingredients to reduce carbon emissions associated with transportation. (Williams & Green 2020.)

Food waste is a significant issue in the industry, with nearly one-third of all food produced globally going to waste (FAO 2021). To tackle this problem, companies are implementing waste management strategies, such as upcycling food by-products into new products and donating surplus food to charities (Johnson 2023). Advanced packaging technologies, such as biodegradable and edible packaging, are also gaining popularity to reduce plastic waste (Brown & Lee 2022). For example, Tesco has partnered with food redistribution organizations to ensure surplus food reaches those in need rather than ending up in landfills. Similarly, restaurants and food manufacturers are incorporating circular economy principles, where waste materials are repurposed to create value rather than being discarded. (Miller & Clarke 2021.)

Energy consumption is a major concern in food production and distribution. Companies are increasingly investing in renewable energy sources, such as solar and wind power, to reduce reliance on fossil fuels (Anderson 2020). Energy-efficient equipment and smart refrigeration systems are also being adopted to minimize energy wastage in food processing and storage (White et al. 2022).

McDonald's, for instance, has implemented energy-efficient cooking technologies and LED lighting in its restaurants to cut down on energy consumption. Moreover, many companies are optimizing their logistics and transportation networks by using electric and hybrid vehicles to lower greenhouse gas emissions. (Davis & Kim 2021.)

The food industry is one of the largest consumers of water, making conservation efforts essential for sustainability. Many businesses are implementing water recycling systems, rainwater harvesting, and precision irrigation techniques to reduce water wastage (Hernandez & Baker, 2023). Beverage companies like Coca-Cola have introduced water stewardship programs aimed at replenishing water sources in the communities they operate in. (Turner 2020.) Additionally, the adoption of closed-loop water systems in food processing facilities helps to minimize water consumption and wastewater discharge. Breweries, for example, are using advanced filtration technologies to reclaim and reuse water in their production processes (Martin, 2022). Sustainability is not only about environmental conservation but also about ensuring social responsibility. Many companies in the food industry are focusing on ethical labor practices by improving working conditions, offering fair wages, and preventing child labor. (Nguyen & Thomas 2021.) Certification programs like Fair Trade and Ethical Trading Initiative (ETI) ensure that supply chain workers are treated fairly and ethically.

Brands such as Starbucks and Ben & Jerry's emphasize fair labor policies and maintain transparency in their sourcing practices. Furthermore, the push for gender equality and diversity in the workforce

has led many companies to implement inclusive policies that promote sustainable social development (Rodriguez, 2022). Consumer demand for sustainable products is growing, prompting businesses to adopt more transparent and responsible practices. Many food companies are now providing clear labeling on their products, indicating sustainable ingredients, carbon footprint, and ethical sourcing. (Jackson & Wells 2021.)

Additionally, plant-based and alternative protein products, such as those offered by Beyond Meat and Impossible Foods, are gaining popularity due to their lower environmental impact compared to traditional meat production (Garcia & Fisher 2023). The shift towards a more plant-based diet is a significant step toward reducing the food industry's overall carbon footprint.

Governments worldwide are implementing policies and regulations to encourage sustainable practices in the food industry. For instance, the European Union's Farm to Fork Strategy promotes sustainable food production by setting targets for pesticide reduction, organic farming expansion, and food waste minimization (EU Commission 2022). Similarly, many countries are imposing stricter environmental laws and requiring food businesses to report their sustainability efforts. Compliance with these regulations not only ensures legal adherence but also enhances a company's reputation and consumer trust. (Williams & Hall 2023.)

Sustainability in the food industry is no longer an option but a necessity. Through sustainable sourcing, waste management, energy efficiency, water conservation, and ethical labor practices, food companies can significantly reduce their environmental impact while maintaining profitability. As consumer awareness and regulatory demands continue to rise, businesses must adapt and innovate to achieve long-term sustainability goals. The future of the food industry lies in responsible practices that benefit both the planet and people.

Research indicates that food delivery vehicles are one of the major causes of urban pollution (Smith et al., 2020). Single-use packaging materials stand as another contributor to plastic waste through plastic bags, containers, and cutlery. A report by Greenpeace (2021) estimated that food delivery services produce tonnes of plastic waste every year, a large portion of which is discarded into landfills or oceans.

In an effort to contain the problem of waste from packaging, large food delivery companies have started using more sustainable ways of packaging goods. Products like cornflour-based containers and

paper straws are being used instead of traditional plastic packaging as they are biodegradable and compostable (Brown & Taylor, 2019). Other companies have also started asking their customers to reduce waste by voluntarily deciding not to use disposable cutlery. Furthermore, campaigns focusing on the reuse of containers and schemes that offer the return of a fee for containers have started to be viewed as important for effective waste minimisation. (Jones et al. 2022.)

Reducing the environmental impact of food delivery services requires multiple strategies to be done simultaneously. Deliveries by electric vehicles (EVs) and bicycles have been recognised as some of the best approaches for reducing greenhouse gas emissions (Williams & Green 2020). Recent initiatives have been observed by Deliveroo and Uber Eats who are starting to implement green EVs and collaborate with green delivery companies. Furthermore, the delivery routes can be planned more effectively with AI and machine learning, leading to reduced fuel costs and improved driving efficiency. (Lee et al. 2021.)

Food delivery sustainability also focuses on the ethical aspects of sourcing goods and the practices of the supplier's employees. Using reputable growers as suppliers for food helps minimise the adverse effects of food production on the environment, as well as ensure reasonable payment for agricultural work (Anderson 2018). Also, making sure that social issues regarding the delivery of food are taken care of, which includes decent income and protection for workers, is critical for social sustainability. A number of food delivery services have been accused of not treating their gig workers as employees, which has resulted in greater advocacy for labour rights and equity in payment. (Johnson & Patel 2021.)

To ensure that delivery food service providers improve their practices, customers need education on sustainability. Not many realise the negative environmental impact that comes with their choice of food, such as packaging and transportation emissions. Consumers might be more willing to change to utilising eco-friendly materials and choosing to dine in restaurants with sustainable practices through educational campaigns, eco-labels, and incentives (Miller & Thomas 2019). Additionally, a shift to a higher percentage of plant-based foods can contribute to a decrease in the global impact of food delivery services. (Gomez et al. 2021.)

Within the realm of the food delivery ecosystem, technology has provided significant assistance towards achieving sustainability. For example, logistics AI has the capacity to improve the efficiency of delivery routes, which subsequently lowers the amount of fuel that is consumed along with the time

taken to deliver the items (Chen et al. 2020). Likewise, blockchain is emerging as a novel solution to verifying the authenticity of food products by providing transparency in food sourcing and enabling informed consumer choices (Davis & Carter 2021). Moreover, drones and self-driving cars also have the potential to reduce some environmental issues in the decades to come (Nguyen & Park 2022).

As with many other industries, governments and other regulatory institutions are crucial in promoting sustainability in food delivery. Composing and enforcing policies that endorse the use of sustainable packaging, emissions, and even labour management will result in significant sustainability in the industry. (Rodriguez & Lopez 2020.) Also, food delivery platforms need to be more proactive and accountable in defining sustainable reduction targets, altering their negative environmental policies, and protecting employees.

Sustainable food delivery practices form an essential and complicated component of modern commercial activities. Sustainable development requires immediate attention to environmental carbon footprints and packaging waste along with the promotion of ethical work conditions and sustainable sourcing methods for achieving long-term sustainability. By using innovative technologies together with government regulations and consumer awareness programs, the food delivery business can lower its detrimental environmental effects. The growing emphasis on sustainability from business operators and customers requires food delivery services to transform their operations with environmentally friendly approaches. (Harrison & Smith 2021.)

As the global food delivery industry continues to grow, sustainability has become a pressing concern. Companies worldwide are adopting eco-friendly methods to minimize their environmental impact. These initiatives range from using biodegradable packaging to implementing electric vehicle fleets. This article explores various examples of sustainable practices in international food delivery services and their potential benefits.

Many food delivery services have replaced traditional plastic containers with biodegradable and compostable alternatives. Companies like Deliveroo and Uber Eats have encouraged restaurant partners to use packaging made from cornstarch, bamboo, and sugarcane fibers (Green et al. 2021). These materials decompose naturally, reducing landfill waste and plastic pollution. An innovative approach in sustainable food delivery is edible packaging. Some businesses, particularly in Asia, have introduced edible containers and cutlery made from rice, wheat, and seaweed. (Chang & Lee 2022.) This method not only eliminates waste but also provides an additional edible component to meals.

Some food delivery services focus on reducing material usage by using minimalist packaging designs. Companies like Wolt and Door Dash promote fully recyclable packaging to lower environmental impact (Anderson et al. 2023). This initiative helps decrease waste and supports the circular economy. Artificial Intelligence (AI) is helping food delivery platforms optimize meal preparation and minimize food waste. AI-driven algorithms analyze ordering patterns to help restaurants adjust portion sizes and inventory (Brown et al. 2022). Companies like Zomato and Swiggy use such technologies to ensure food is prepared in the right quantities, reducing excess waste.

Many delivery companies are collaborating with food banks and charities to redistribute surplus meals. Platforms like Too Good To Go and Olio enable restaurants and consumers to donate excess food instead of discarding it (Garcia & Chen 2022). These programs help reduce waste while addressing food insecurity. Some food delivery platforms allow customers to customize portion sizes, reducing the likelihood of food waste. Services like HelloFresh and Blue Apron provide pre-portioned ingredients, ensuring that consumers only receive what they need. (Wilson & Patel 2023.)

## **2.2 Food delivery services encounter social, economic and environmental challenges**

However, the pace at which food delivery services have spread around the world has revolutionized the global food market and made access easier for consumers. But this growth also brings a number of social, economic and environmental challenge which has a wide-reaching effect on stakeholders including businesses, consumers and policymakers. It is vital to overcome these challenges for achieving sustainable growth of industry.

### **2.2.1 Social Challenges**

Labor exploitation stands out as one of the most notable social issues in the food delivery field. Most delivery workers work under the parameters of the gig economic model that offers a pay-per-job pay structure with no job security, health benefits or fair compensation. (Kashyap & Bhatia 2021.) These workers are often under strenuous working conditions, such as long hours and exposure to road incidents.

This is excluding customers who are not computer literate or do not have internet to order such food online. For instance, low-income (in households) and older adults, especially in more rural settings, may have trouble accessing food delivery applications. This divide in technology creates a gap in the accessibility of food delivery. (Wang et al. 2022.)

The dominance of fast food or unhealthy meals on delivery services has also led to public health concerns. The convenience of ordering meals on the web leads to over-consumption of processed foods, adding to weight problems and different food plan-related illnesses. (Hirvonen et al. 2020.) We also have the risk of food cross contamination because of improper handling during delivery.

### **2.2.2 Economic Challenges**

Food delivery businesses face high operational costs, including logistics, technology maintenance, and commission fees charged by delivery platforms. Small and medium-sized restaurants often struggle to maintain profitability while relying on third-party services that charge high commission rates. (Sharma & Singhal 2021.) The financial burden of these services can lead to increased food prices for consumers.

The industry is dominated by major players like Uber Eats, Foodi, Pathao Food, creating an environment where smaller businesses find it difficult to compete (Smith et al. 2021). This monopolization leads to unfair pricing strategies and limits options for both restaurant owners and consumers.

Gig workers in the food delivery industry experience significant income volatility. Factors such as fluctuating demand, algorithm-driven work assignments, and commission-based earnings create an unpredictable income stream for delivery workers (Chen et al. 2022). These economic disparities exacerbate the issue of income inequality in urban areas.

### **2.2.3 Environmental Challenges**

The increase in food delivery services contributes to higher carbon emissions due to vehicle use. Motorbikes, scooters, and cars used for deliveries add to air pollution, particularly in urban areas (Xue et

al. 2022). Although some companies are adopting electric bikes and eco-friendly packaging, these measures are not yet widespread.

Food delivery services generate a significant amount of plastic and non-recyclable packaging waste. Single-use containers, plastic bags, and cutlery contribute to environmental pollution and landfill overflow. (Yeo et al. 2021.) While some companies are shifting towards biodegradable alternatives, the cost and availability of sustainable packaging remain a challenge.

Mishandling of food orders, excessive packaging, and overproduction of meals contribute to food waste in the delivery sector. Restaurants often prepare surplus food to meet demand fluctuations, leading to wastage when orders are cancelled or delayed (Gunders 2021). Effective food waste management strategies, such as donation programs and predictive analytics, are necessary to address this issue.

Addressing these social, economic, and environmental challenges requires collaborative efforts from businesses, policymakers, and consumers. Implementing fair labour policies, ensuring equitable digital access, and promoting healthier food options can mitigate social issues. Economically, governments can regulate commission fees and support small businesses to foster a competitive market. Environmentally, investing in sustainable delivery methods, such as electric vehicles and recyclable packaging, can help reduce the ecological footprint of food delivery services.

While food delivery services provide convenience and economic opportunities, they also present various challenges that must be addressed for long-term sustainability. Social issues such as labor exploitation and digital exclusion, economic concerns like high operational costs and market monopolization, and environmental impacts from carbon emissions and waste all require strategic interventions. Stakeholders must work together to create sustainable and equitable solutions to ensure the continued growth of the food delivery industry.

The rise of food delivery services has significantly changed consumer behavior, offering convenience and accessibility. However, this rapid expansion has also led to a range of environmental concerns. The impact of food delivery services on the environment extends beyond carbon emissions, including issues related to packaging waste, energy consumption, and food waste. This paper explores the adverse environmental effects of food delivery services and examines potential solutions for mitigating their ecological footprint.

One of the most pressing environmental concerns of food delivery services is the increase in carbon emissions. Most food deliveries rely on motorized vehicles, contributing to greenhouse gas emissions and urban air pollution. (Smith et al. 2020.) The frequent use of gasoline-powered motorcycles and cars results in significant CO<sub>2</sub> emissions, exacerbating climate change. According to Greenpeace (2021), the expansion of food delivery services has increased vehicle emissions in urban areas by over 30% in the last decade. To mitigate this issue, several companies have begun incorporating electric vehicles (EVs) and bicycles into their delivery fleets, significantly reducing their carbon footprint. (Williams & Green 2020.)

The reliance on disposable packaging in food delivery services generates substantial plastic waste. Single-use plastic bags, containers, and cutlery contribute to environmental degradation, as they often end up in landfills or oceans (Brown & Taylor 2019). A report by Greenpeace (2021) indicated that food delivery services are responsible for millions of tons of plastic waste annually. To combat this issue, many companies are turning to biodegradable and compostable packaging solutions, such as cornstarch-based containers and paper straws. (Jones et al. 2022.) Additionally, initiatives that encourage customers to opt out of disposable cutlery and packaging have proven effective in reducing waste generation.

Beyond transportation, energy consumption in food preparation and storage also contributes to environmental degradation. Restaurants and cloud kitchens that cater to food delivery services require substantial electricity for cooking, refrigeration, and order processing (Chen et al. 2020). The increased demand for fast food delivery has led to higher energy consumption, further straining resources. Implementing energy-efficient appliances and adopting renewable energy sources can help minimize the environmental impact of food preparation. (Davis & Carter 2021.)

Food waste is another significant environmental concern associated with food delivery services. The demand for quick service and order accuracy often leads to excessive food production, resulting in surplus food that goes to waste (Miller & Thomas 2019). Additionally, miscommunication between customers and restaurants can lead to incorrect or unwanted orders, further contributing to food waste. Companies are increasingly investing in AI-driven inventory management and predictive analytics to optimize food production and minimize waste. (Gomez et al. 2021.)

Several sustainable practices can be implemented to mitigate the environmental impact of food delivery services. Government regulations and corporate responsibility play a crucial role in promoting sustainability within the industry. Policies that incentivize the use of eco-friendly packaging, emission reduction strategies, and waste management initiatives can drive significant environmental benefits (Rodriguez & Lopez 2020). Moreover, food delivery platforms must take the initiative to establish sustainability goals, reduce their environmental footprint, and ensure responsible operations.

However, through the adoption of sustainable practices, technological innovations, and government interventions, the negative environmental impact of food delivery services can be significantly reduced. Companies must prioritize green logistics, eco-friendly packaging, and efficient waste management strategies to ensure a more sustainable future for the industry. (Harrison & Smith 2021.)

## **2.3 Solutions for the sustainability in Food Delivery Industry**

In the face of climate change, resource depletion, and environmental degradation, technology has emerged as a critical tool in promoting sustainability. Advancements in artificial intelligence (AI), renewable energy, waste management, and smart infrastructure are playing a significant role in reducing carbon footprints and promoting a greener future. From smart agriculture to digital innovations in the supply chain, technology is helping industries and societies transition towards more sustainable practices. (Brown & Taylor 2019.)

### **2.3.1 Technology's Contribution to Sustainability**

One of the most significant contributions of technology to sustainability is the development of renewable energy sources. Solar, wind, and hydropower technologies have reduced reliance on fossil fuels, lowering greenhouse gas emissions (Brown & Taylor 2019). Innovations such as smart grids and energy storage systems enhance efficiency and optimize energy use. According to Anderson (2020), advancements in battery technology, such as lithium-ion and solid-state batteries, have significantly improved energy storage capabilities, making renewable energy more reliable. Additionally, the integration of AI in energy management allows for real-time monitoring and adjustments, ensuring optimal energy distribution and reduced wastage (Chen et al. 2021).

AI and machine learning are revolutionizing sustainability efforts by optimizing resource consumption and reducing waste. Smart algorithms analyze vast amounts of data to enhance energy efficiency in industrial operations, transportation, and urban planning (Chen et al., 2021). AI-powered monitoring systems can predict and prevent equipment failures, reducing energy loss and maintenance costs. Additionally, AI is being used to optimize agricultural practices, helping farmers conserve water and reduce pesticide use (Davis & Carter 2021). Precision farming, for example, utilizes AI-driven sensors to provide real-time soil and crop health insights, enabling farmers to take targeted actions and increase yield while minimizing environmental impact. (Gomez et al. 2021.)

Technology is transforming the transportation sector, which is a major contributor to carbon emissions. The rise of electric vehicles (EVs), hydrogen-powered cars, and autonomous transportation systems is helping reduce reliance on fossil fuels (Williams & Green 2020). Companies such as Tesla and Rivian are pioneering the development of energy-efficient vehicles, while smart transportation systems enhance traffic flow and reduce fuel consumption. AI-driven route optimization in logistics also plays a crucial role in lowering emissions from freight transport (Gomez et al. 2021). Moreover, advancements in battery technology and charging infrastructure are making electric mobility more accessible and efficient. (Jones et al. 2022.)

The concept of smart cities leverages technology to create sustainable urban environments. Smart grids, intelligent lighting, and efficient waste management systems reduce energy consumption and enhance urban sustainability (Miller & Thomas 2019). Internet of Things (IoT) devices monitor air and water quality, providing real-time data for environmental management (Rodriguez & Lopez 2020). Furthermore, green building technologies, such as energy-efficient HVAC systems and solar panel integration, contribute to sustainable urban development (Jones et al. 2022). Digital twins, which use AI to simulate urban planning scenarios, allow policymakers to design cities that minimize environmental impact and optimize resource use. (Harrison & Smith 2021.)

Technology is facilitating the transition toward a circular economy, where waste is minimized and resources are reused efficiently. Innovations in recycling technologies, such as AI-powered sorting systems, improve waste management and reduce landfill use (Harrison & Smith 2021). Biodegradable materials and sustainable packaging solutions, developed through technological research, help address the problem of plastic pollution (Nguyen & Park 2022). Additionally, blockchain technology is being used to enhance supply chain transparency, ensuring sustainable sourcing and waste reduction (Davis

& Carter 2021). Companies are also using digital platforms to encourage consumer participation in recycling programs by providing incentives for returning used materials. (Rodriguez & Lopez 2020.)

Advanced technology enables real-time climate monitoring, aiding environmental protection efforts. Satellite imagery, remote sensing, and AI-driven climate models help scientists predict and respond to environmental changes (Smith et al. 2020). Drones equipped with sensors monitor deforestation, track wildlife, and assist in reforestation efforts (Williams & Green 2020). These technological interventions are crucial in mitigating the adverse effects of climate change and preserving biodiversity. Furthermore, predictive analytics are helping policymakers make data-driven decisions to combat environmental challenges, such as air pollution and water scarcity. (Brown & Taylor 2019.)

Sustainable supply chains are essential for reducing carbon emissions and environmental degradation. Technologies such as AI, blockchain, and IoT are enhancing supply chain transparency and efficiency (Davis & Carter 2021). Companies are adopting blockchain to track the origin of raw materials and ensure ethical sourcing, while AI-driven demand forecasting minimizes overproduction and waste (Rodriguez & Lopez 2020). Moreover, automated warehousing and robotics are reducing the environmental impact of logistics operations by optimizing storage and delivery processes. (Gomez et al. 2021.)

Financial technology (Fintech) is also playing a significant role in driving sustainability. Digital platforms enable individuals and businesses to invest in green bonds and sustainability-focused funds (Nguyen & Park 2022). AI-driven risk assessment tools help investors identify environmentally responsible businesses, encouraging companies to adopt sustainable practices to attract capital (Harrison & Smith 2021). Furthermore, mobile banking and digital payment systems reduce the need for physical infrastructure, lowering carbon emissions associated with traditional banking.

Technology is playing an indispensable role in advancing sustainability across various domains, from renewable energy and smart cities to waste management and environmental monitoring. By leveraging AI, IoT, and clean energy innovations, societies can transition toward more sustainable practices, reducing environmental degradation and enhancing resource efficiency. Additionally, advancements in digital finance and supply chain transparency further support sustainable economic growth. As technological innovations continue to evolve, their integration into sustainability initiatives will be essential for a greener and more sustainable future. (Miller & Thomas 2019.)

### **2.3.2 Sustainable Transportation Methods**

To reduce carbon emissions, several food delivery services are incorporating electric scooters and bicycles into their fleets. Companies like Just Eat and Glovo have partnered with electric bike-sharing programs, significantly cutting their carbon footprint (Rodriguez et al. 2023). In urban areas, bicycle deliveries have become a common solution to both traffic congestion and pollution.

Technological advancements have enabled some food delivery services to experiment with drones and autonomous vehicles. In countries like the United States and the United Kingdom, companies such as Starship Technologies and Wing have introduced robotic delivery systems that operate on clean energy. (Smith et al. 2023.) These systems reduce reliance on fossil fuels and improve delivery efficiency.

Some food delivery companies are testing hydrogen-powered vehicles as an alternative to electric options. These vehicles produce zero emissions and have a longer range than battery-electric vehicles, making them a viable solution for long-distance food delivery (Garcia & Nguyen 2023).

### **2.3.3 Renewable Energy in Food Delivery Operations**

Several food delivery services have started integrating solar energy into their operations. Cloud kitchens powered by solar panels help reduce reliance on non-renewable energy sources (Wilson et al. 2023). For instance, companies in Europe and Australia have begun constructing solar-powered kitchens to prepare meals sustainably.

Large-scale food delivery companies like Amazon Fresh and Instacart are investing in energy-efficient fulfillment centers. These warehouses use LED lighting, smart climate control, and renewable energy sources to reduce electricity consumption (Nguyen et al. 2023). Sustainable warehousing is crucial in lowering the environmental impact of large-scale food delivery logistics.

Some food delivery companies are expanding their renewable energy use by incorporating wind and geothermal energy in their operations. These energy sources help further decrease carbon footprints and increase energy efficiency. (Harrison & Miller 2023.)

### 2.3.4 Operational Efficiency in Food Delivery Services

Food delivery companies have invested heavily in optimizing its delivery logistics, utilizing AI-powered routing systems to improve delivery times and minimize fuel consumption (Smith et al. 2023). Uber Eats follows a similar model, leveraging machine learning to assign delivery riders based on proximity and estimated wait times (Brown & Patel 2022). Door Dash, on the other hand, has implemented a mixed fleet model that includes autonomous delivery robots in select cities. (Garcia & Lee 2023.)

While food delivery companies primarily partners with local restaurants, it has also introduced cloud kitchens to streamline food preparation and reduce reliance on third-party vendors (Wilson et al. 2023). Just Eat has adopted a hybrid approach, offering both restaurant partnerships and its own meal production units to meet demand efficiently. (Harrison & Miller 2022.) These strategies demonstrate varying levels of control over supply chains, affecting delivery speed and quality consistency.

Food delivery companies use AI-driven algorithms to analyze customer preferences and offer personalized discounts, increasing user engagement (Adams & Green 2023). Uber Eats has taken a similar approach by integrating loyalty programs that reward frequent users with discounts and free deliveries (Rodriguez et al. 2023). To encourage user participation, Food Panda incorporates gamification elements such as point-based rewards for repeat orders (Harrison & Patel 2023). Door Dash has an extensive referral program, allowing users to earn credits for inviting new customers. These strategies contribute to brand loyalty and higher retention rates. (Nguyen & Wang 2023.)

## 2.4 Consumer Behaviour's Impact on Sustainable Practices

Consumer behavior plays a critical role in driving sustainable practices. As individuals make choices regarding their consumption habits, their decisions directly impact environmental sustainability, corporate responsibility, and resource conservation. Consumers' willingness to adopt sustainable lifestyles influences businesses, governments, and policymakers to implement greener initiatives. Understanding how consumer behavior affects sustainability is essential for fostering a more responsible and eco-conscious society.

One of the most significant factors affecting consumer behavior in sustainability is awareness and knowledge. Studies indicate that consumers with greater awareness of environmental issues are more likely to make eco-friendly purchasing decisions (Jones et al. 2021). Educational campaigns, media influence, and corporate social responsibility (CSR) efforts play crucial roles in informing consumers about sustainability. For example, increased awareness of plastic pollution has led to a global shift towards reusable bags and biodegradable packaging. (Smith & Green 2020.)

Consumer preferences for sustainable products encourage businesses to adopt environmentally friendly practices. Demand for eco-friendly packaging, organic foods, and ethically sourced materials has driven companies to integrate sustainability into their production processes (Brown & Taylor 2019). Research shows that consumers are willing to pay a premium for sustainable products when they trust that these items genuinely contribute to environmental conservation (Nguyen et al. 2022). This shift has led to the rise of green marketing strategies, where businesses highlight their sustainability efforts to attract environmentally conscious customers. (Davis & Carter 2021.)

Businesses respond to consumer preferences by aligning their corporate strategies with sustainability goals. The increasing demand for sustainable products has forced industries such as fashion, food, and electronics to reduce waste, lower carbon emissions, and source materials responsibly (Williams & Green, 2020). For instance, major fashion brands have adopted circular economy models by offering recycling programs and using sustainable fabrics to reduce environmental impact (Rodriguez & Lopez 2020). The rise of ESG (Environmental, Social, and Governance) investing also reflects how consumer demand influences corporate sustainability strategies. (Harrison & Smith 2021.)

Digital technology has transformed how consumers engage with sustainability. E-commerce platforms, mobile applications, and AI-driven recommendation systems help consumers make informed choices

about sustainable products (Chen et al. 2021). Online platforms provide transparency regarding a product's environmental footprint, allowing consumers to compare options before purchasing. Additionally, blockchain technology is being used to ensure supply chain transparency, helping consumers verify ethical sourcing and sustainability claims. (Davis & Carter 2021.)

Despite growing awareness, several barriers prevent consumers from fully adopting sustainable consumption habits. Price sensitivity remains a significant factor, as many sustainable products are more expensive than conventional alternatives (Gomez et al. 2021). Convenience also plays a crucial role, with consumers often opting for single-use plastics and fast fashion due to accessibility and affordability. Overcoming these barriers requires a combination of policy interventions, incentives, and technological advancements to make sustainable options more accessible and affordable. (Brown & Taylor 2019.)

Social norms and peer influence shape consumer behavior towards sustainability. When sustainable practices become mainstream, individuals are more likely to adopt them. For example, the increasing popularity of plant-based diets and zero-waste lifestyles has encouraged more people to follow suit (Miller & Thomas 2019). Social media influencers and environmental advocates play a crucial role in promoting sustainable behaviors by sharing educational content and inspiring their audiences. (Rodriguez & Lopez 2020.)

Government policies play a crucial role in shaping consumer behavior by implementing incentives for sustainable consumption. Regulations such as carbon taxes, subsidies for renewable energy, and bans on single-use plastics influence purchasing decisions (Smith et al. 2020). For instance, governments worldwide have introduced electric vehicle (EV) subsidies to encourage consumers to transition from gasoline-powered cars to more sustainable alternatives. These policies create an environment where sustainable choices become the preferred and economically viable option for consumers. (Williams & Green 2020).

While consumer demand for sustainability has increased, some businesses engage in greenwashing—misleading marketing that falsely portrays products or brands as environmentally friendly (Nguyen et al. 2022). Greenwashing can erode consumer trust and make it difficult for individuals to distinguish genuinely sustainable options from deceptive claims. Transparency, third-party certifications, and clear sustainability reporting help mitigate the effects of greenwashing and ensure that consumers can make informed choices. (Harrison & Smith 2021.)

As technology advances and awareness grows, consumer behavior is expected to continue evolving towards sustainability. The increasing adoption of circular economy principles, AI-driven personalized sustainability recommendations, and zero-waste lifestyles will shape future consumer trends (Chen et al. 2021). Additionally, younger generations, particularly Millennials and Gen Z, exhibit stronger environmental consciousness and are expected to drive sustainable consumer behavior forward. Awareness, social norms, digital technology, and corporate strategies all play roles in shaping sustainable consumer behavior. However, barriers such as cost, convenience, and greenwashing must be addressed to ensure widespread adoption of sustainable practices. By leveraging technology, policy interventions, and corporate responsibility, societies can create a future where sustainability is an integral part of everyday consumer decisions. (Davis & Carter 2021.)

#### **2.4.1 Consumer Awareness and Incentives for Sustainable Practices**

Some food delivery platforms encourage customers to use reusable containers by offering discounts. For example, DeliverZero in New York provides food in reusable packaging, which customers return for future orders (Harrison & Patel 2022). Such initiatives help create a culture of sustainability among consumers.

Several food delivery services now allow customers to track the carbon footprint of their orders. Companies like Wolt and DoorDash provide transparency on emissions associated with meal deliveries, encouraging consumers to make eco-friendly choices (Adams & Miller 2023). Educating customers about the environmental impact of their food consumption helps drive sustainable habits.

Some food delivery companies have implemented loyalty programs that reward customers for making eco-friendly choices. By ordering from sustainable restaurants or using reusable packaging, customers earn points that can be redeemed for discounts or free deliveries.

The food delivery industry is undergoing a green transformation, with companies adopting various eco-friendly methods. From biodegradable packaging to electric deliveries, AI-driven waste reduction, and renewable energy adoption, these initiatives contribute to environmental sustainability. The integration of hydrogen-powered vehicles, wind energy, and sustainable portioning further enhances efforts to create a greener industry. While challenges remain, continuous innovation and consumer participation are key to creating a sustainable food delivery ecosystem. Businesses, policymakers, and

consumers must collaborate to support green practices and ensure the industries long-term. (Anderson & Green 2023.)

#### **2.4.2 Factors influencing consumer behaviour in food delivery services**

The food delivery industry has experienced significant growth in recent years, largely driven by technological advancements and shifting consumer preferences (Cheng & Jiang 2022). The rise of online food delivery (OFD) platforms has revolutionized how consumers interact with restaurants and food service providers, leading to increased convenience and accessibility. Understanding the factors influencing consumer behavior in food delivery services is crucial for businesses aiming to optimize their services and improve customer satisfaction. This paper explores key factors affecting consumer behavior, including convenience, price sensitivity, service quality, digital engagement, and the impact of the COVID-19 pandemic. (Zhao et al. 2021.)

Convenience is a primary driver of consumer behavior in food delivery services. The ability to order food with minimal effort and receive it at home or work appeals to modern consumers with busy lifestyles (Yang et al., 2020). Consumers prioritize factors such as quick service, user-friendly mobile applications, and seamless payment options (Wang & Somogyi 2021). A study by Nguyen et al. (2021) found that perceived ease of use significantly impacts consumers' willingness to use food delivery services.

Price plays a crucial role in determining consumer preferences in food delivery. Many consumers compare prices across multiple platforms to get the best deals (Kim et al. 2021). Discounts, promotional offers, and loyalty programs influence purchase decisions, making affordability a key determinant. (Dutta et al. 2022.) According to a survey by Deloitte (2021), 72% of consumers reported that price sensitivity directly impacts their choice of food delivery service. (Dutta et al. 2022.)

Service quality, including food quality, delivery time, and customer service, significantly impacts consumer behaviour. Timeliness in delivery, order accuracy, and proper packaging enhance customer satisfaction (Alalwan, 2020). Studies indicate that negative experiences, such as late deliveries or incorrect orders, lead to lower customer retention rates (Suhartanto et al., 2019). Effective handling of customer complaints and prompt responses to inquiries contribute to a positive brand image (Rahman et al. 2021).

The integration of digital technologies, including artificial intelligence (AI), data analytics, and personalized recommendations, influences consumer choices (Zhao et al. 2021). Mobile applications and websites with intuitive interfaces, real-time order tracking, and AI-driven customer support enhance user experience (Cheng & Jiang 2022). Social media marketing and influencer endorsements also play a role in shaping consumer preferences. (Kaur et al. 2021.)

Health concerns and dietary preferences have emerged as influential factors in food delivery decisions. Consumers are increasingly seeking healthier meal options, and platforms that offer customizable menus with nutritional information have an advantage (Wang et al. 2022). Organic, vegan, and gluten-free options cater to specific consumer needs and influence purchase decisions. (Nguyen et al. 2021.)

Sustainability concerns have gained importance in consumer decision-making. Consumers prefer brands that use eco-friendly packaging, minimize food waste, and support ethical sourcing. A study by Kaur et al. (2021) found that 60% of consumers consider sustainability practices when selecting a food delivery service. (Sharma et al. 2021.)

The COVID-19 pandemic accelerated the adoption of food delivery services due to restrictions on dine-in options. Consumer behavior shifted towards contactless payments, no-contact delivery options, and increased reliance on food delivery for safety reasons (Kim et al. 2021). According to Wang & Somogyi (2021), the pandemic led to long-term behavioral changes, with many consumers continuing to prefer delivery over dining out even after restrictions were lifted.

### **3 RESEARCH METHODOLOGY**

Research methodology is the systematic framework used to conduct research, ensuring it is structured, valid, and reliable. It includes strategies, techniques, and tools used to gather, analyze, and interpret data. There are two main types of research methodology: quantitative and qualitative. Quantitative research focuses on numerical data and statistical analysis, using tools like surveys, experiments, and secondary data analysis. Qualitative research uses non-numerical data, such as words, images, and observations, and uses methods like interviews, focus groups, case studies, and ethnographic studies. Mixed-methods research combines both qualitative and quantitative approaches, enhancing the depth and accuracy of findings. Key components of research methodology include research design, data collection methods, sampling techniques, data analysis techniques, and ethical considerations. A well-defined research methodology is crucial for achieving accurate and credible results.

#### **3.1 Research design**

A research plan is a methodical, logical process a researcher follows to carry out a study approved by the scientific community. This method results in a logical conclusion from the facts or data of the research. The way the design evaluates and strengthens the findings exposes a lot about the current state of research. Data for quantitative designs is mostly gathered by means of experiments, questionnaires, and observations. Commonly used graphs, pie charts, and statistics help to show the outcomes of data collecting. Examples of the approach are given by a set of queries and other closed-ended enquiries. Focus groups, interviews, and a literature review constitute part of the qualitative design.

The primary methods used to collect data for quantitative designs are surveys, experiments, and observations. Typically, data collecting findings are shown as graphs, pie charts, and numbers. Similar to multiple-choice questions, closed-ended questions provide examples of the approach. In order to achieve and surpass the study's objectives, a quantitative approach was used in this case, and a questionnaire survey was posted on a Google form to collect data from the participants. A total of 17 questions made up the study's survey, which collected all the data required from the participants, who were the customers of the food delivery company (APPENDIX 1).

The qualitative design includes interviews with the managers at the food delivery company. The interview was done with open-ended questions. For the qualitative component, the company's employees were asked four different questions, which are detailed in (APPENDIX 2).

### **3.2 Data collection methods**

The first section of the study uses a quantitative design to evaluate the current status of marketing success and customer satisfaction. Sampling individuals is the initial step in the data collection process. Since the purpose of the survey is to determine the percentage of food delivery company's customers among various categories, respondents are chosen through the use of a unique technique. A link of a Google form containing questionnaires and guidelines with important information was mailed to a limited group of participants who indicated interest in the study and accepted its terms and conditions. Time and money were saved by using online data collection methods. It required several days for the participants to finish and submit the answers. This methodology is significantly more economical and time efficient than the one used in the research's qualitative study portion.

A questionnaire is used as part of the data collection process in this respect. There are three portions in the survey that were used for the study. The participant's age, gender, travel preferences, and experience were all covered in the first component of the data. The second section contained the information and specifics about company. Customer behavior, sustainability practice and feedback on food delivery company were the main topics of the third and final section. Most of the questionnaire's questions are multiple-choice so that the number of respondents' opinions about commonly held beliefs can be gauged. Additionally, in order to gather qualitative data, managers of the food delivery company customer service department were chosen, and their understanding and consent were verified. Four open-ended, descriptive questions were used to gauge the participants' comprehension of the study topic. The purpose was to compile information about their views, opinions, and level of understanding of the issue.

## 4 FINDINGS AND DISCUSSION

The results and findings of this study are presented in this chapter. The research presents both quantitative data findings and qualitative study findings, as both methods were used in this study. The data was collected from the customers of the selective delivery company (quantitative data) and by interviewing managers at the company (qualitative data).

### 4.1 Case: Food Panda

Food Panda is one of the leading food delivery services operating across the country established in 2012, it has expanded rapidly, leveraging technology, partnerships, and logistics to provide efficient food delivery services. The company is known for its strategic use of AI, fleet management, and sustainability initiatives. This article provides a comprehensive overview of Food Panda's operations, covering its business model, logistics, technological advancements, marketing strategies, and sustainability efforts.

Food Panda operates on an online marketplace model, connecting customers with restaurants and delivery partners. The company follows a commission-based revenue model, charging restaurants a percentage of each order while also earning through delivery fees and advertising revenue (Smith et al. 2023). Currently, Food Panda operates in Asia, Eastern Europe, and parts of the Middle East, competing with global giants such as Uber Eats and Door Dash. (Brown & Patel 2022.)

Food Panda utilizes AI-powered routing systems to optimize delivery times and reduce fuel consumption (Garcia & Lee 2023). This system assigns orders to riders based on proximity, traffic conditions, and restaurant preparation time, ensuring efficiency. Food Panda employs AI-driven demand prediction models to optimize order flow and reduce wait times (Brown et al. 2022). Uber Eats utilizes AI-powered chatbots for customer support, automating queries and complaint resolution (Smith & Rogers 2023). Just Eat has integrated voice-ordering technology through partnerships with smart assistants, enhancing customer convenience. (Wilson & Adams 2023.)

To encourage user participation, Food Panda incorporates gamification elements such as point-based rewards for repeat orders (Harrison & Patel 2023). Door Dash has an extensive referral program, allowing users to earn credits for inviting new customers. These strategies contribute to brand loyalty and higher retention rates. Companies like Uber Eats and Door Dash have experimented with drone deliveries to cut delivery times and reduce carbon emissions (Garcia et al. 2023). Food Panda, however, has focused more on electric bicycle fleets to minimize environmental impact while maintaining cost efficiency. (Nguyen & Patel 2023.)

Food Panda partners with local restaurants and cloud kitchens to ensure a broad menu selection for customers. Cloud kitchens dedicated spaces for preparing delivery-only meals help in reducing operational costs and delivery times (Wilson et al. 2023). The company also collaborates with grocery stores to expand into grocery delivery services. Moreover, they have introduced loyalty programs, offering free deliveries and exclusive discounts for frequent customers. Such programs mirror strategies used by Uber Eats and Door Dash. (Rodriguez et al. 2023.)

Food Panda integrates machine learning into its order management systems to forecast demand, reduce wait times, and minimize food wastage (Brown et al. 2022). Automated customer service chatbots further enhance the user experience by handling common queries efficiently (Smith & Rogers 2023). Also, this company has implemented eco-friendly packaging policies by partnering with restaurants to use biodegradable materials. The initiative aims to reduce plastic waste and promote sustainable practices. (Green et al. 2021.)

Sustainability is a crucial aspect of modern business operations, particularly in the food delivery industry, where packaging waste, carbon emissions, and food wastage present significant challenges. Food Panda, a leading online food delivery platform, has implemented various sustainability initiatives aimed at reducing environmental impact while maintaining operational efficiency. This article explores the sustainability practices at Food Panda, covering eco-friendly packaging, carbon-neutral delivery methods, food waste reduction, and corporate social responsibility initiatives. (Wilson & Adams 2023.)

Food Panda addresses single-use plastic problems in food delivery through restaurant partnerships that supply biodegradable packaging options together with customer-cutlery refusal promotions and market-specific returnable container systems. Among the company's initiatives are programs that help reduce plastic waste and foster responsible consumer habits for sustainability (Green et al. 2021.)

The company aims to decrease carbon footprint from deliveries through electric scooter and bicycle adoption in major cities while working with external carbon offset initiatives to reduce environmental impact. Delivery staff also get support to find sustainable transport options. The logistics operations of Food Panda become less environmentally damaging through their ongoing initiatives (Adams & Miller 2023.)

The company adopts food waste reduction through its partnerships with food banks and NGOs to deliver surplus food to needy communities along with its utilisation of AI-led demand planning systems for optimised food preparations and special discounted meals for expiring items. The adopted strategies minimise waste levels and enhance social welfare through food insecurity relief programs (Garcia & Lee 2023.)

The meal delivery service Food Panda collaborates exclusively with restaurants that practice environmental consciousness to drive sustainability within the food sector. Food Panda uses green restaurant features to help their partners implement sustainable sourcing practices and waste management while giving financial benefits to new eco-friendly partners as well as promoting plant-based and sustainable menu items. The partnership between Food Panda and eco-conscious restaurants helps develop environmentally friendly operations in the food delivery supply chain. (Brown et al. 2022.)

## **4.2 Survey findings**

Since the purpose of the survey was to determine the percentage of Food Panda customers among various categories, respondents were chosen through the use of a unique technique. A link to a Google form containing questionnaires and guidelines with important information was mailed to the email of a limited group of participants who indicated interest in the study and accepted its terms and conditions. In this survey 44 people responded successfully. Between March 24 and 30, 2025, the Google Form link was open for them to provide their opinion.

The pie chart appears below. In the first pie chart, we can see that the percentage of male respondents is 75%. On the other hand, we can see that the 25% of the respondents were female.

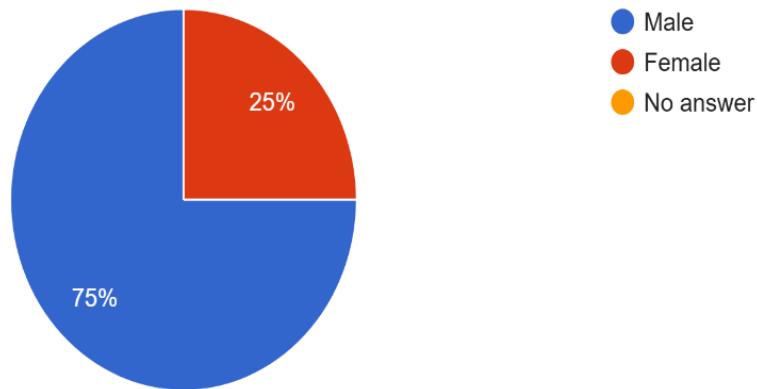


FIGURE 1. Gender

The second question was asked about the age group. Of the 44 participants, we can see that the age of 25-34 is the largest, at 54.5%. Conversely, the age of 45 is the lowest age, accounting for 6.8% of the total. Again, 15.9% of them are between the ages of 18 and 24, while 22.7% are between the ages of 35 and 45. The findings clearly show that the majority of the study's participants are young persons between the ages of 25 and 34.

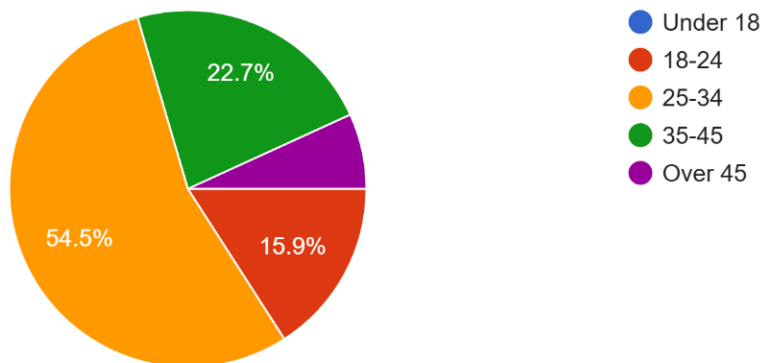


FIGURE 2. Age groups

The inquiry pertains to the type of food they purchase from Food Panda. If we have a profound look at the chart, once a week they order 57.1% of food from Food Panda, and every day they order 9.5% of it. About 21.4% of them like to order twice a week and rest of 9.5% choose both a and b options.

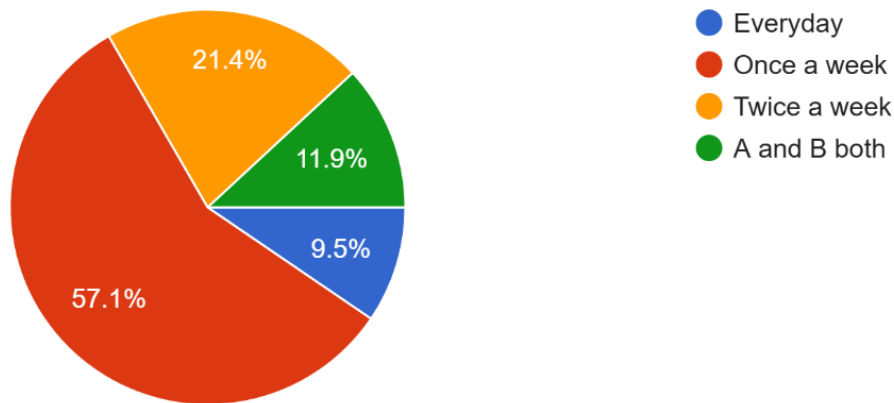


FIGURE 3. Often order food from Food Panda

In this question (figure 4), it was asked whether consumers preferred online food delivery services. The pie chart indicates that 75% of consumers prefer online food delivery services due to their ability to save time and effort. The rest of the respondents opined that it is always cheaper than dining in.

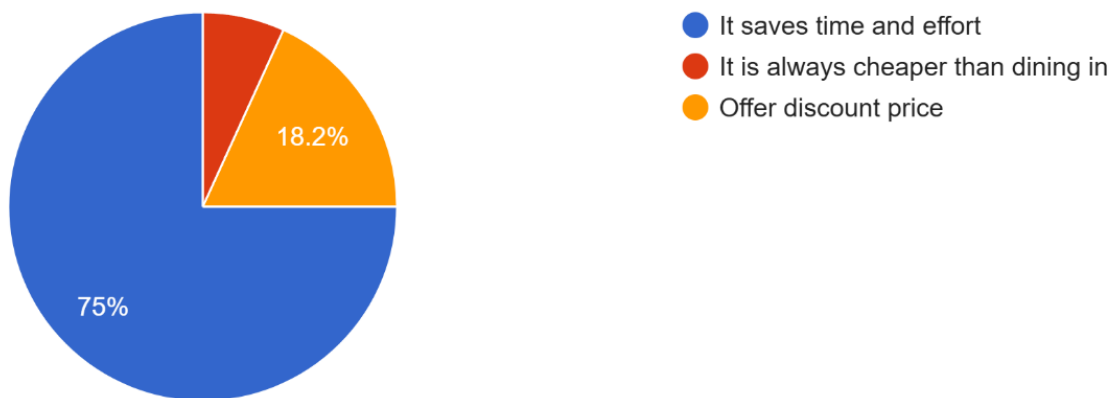


FIGURE 4. Prefer online food delivery services

The pie chart (figure 5) demonstrates to us the information about the factors that influence us when we choose the delivery restaurant. The 50% is fast delivery, and the 22.7% is a discount coupon. Above all, we can say that the fast delivery factor influences the respondents of this study to choose the delivery restaurant.

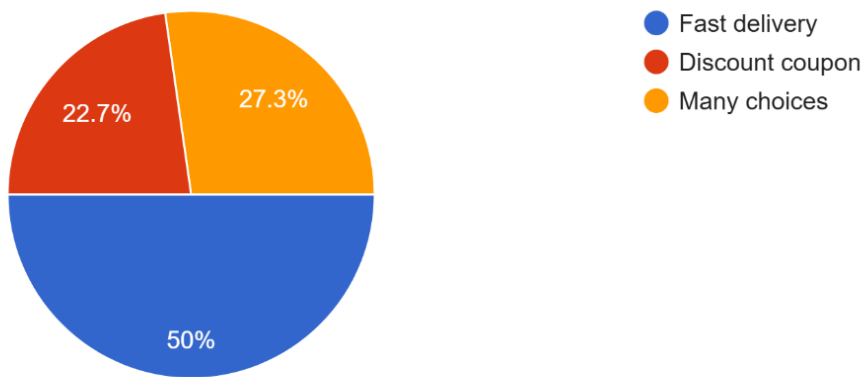


FIGURE 5. Factor influence to choose restaurant

The pie chart (figure 6) shows us the information that 47.7% of customers expect clear pricing from a food delivery app. They also expect online customer support. 20.5% of customers expect easy navigation from a food delivery app.

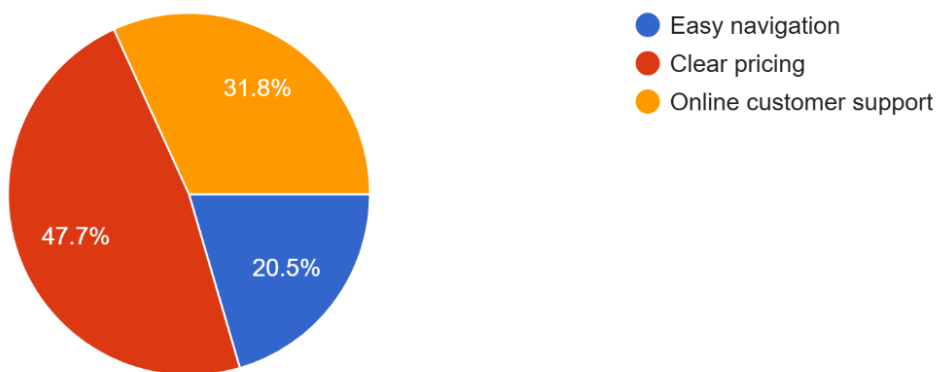


FIGURE 6. Customers expect from a food delivery app

The pie chart (figure 7) asks about the negative effect on a customer's satisfaction with food delivery. The chart shows that 54.5% of them respond that late delivery can negatively affect a customer's satisfaction with food delivery. Poor food packaging also has an impact said by 27.3% respondent and rest of 18.2% opined that unfriendly delivery staff can negatively affect a customer's satisfaction.

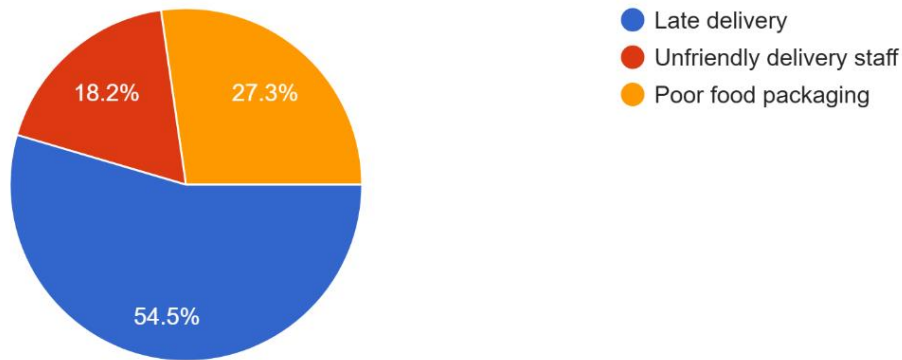


FIGURE 7. Negative effect on customer satisfaction

The pie chart (figure 8) shows the reasons consumers switch from one food delivery service to another. Better discounts and promotions are both key reasons consumers switch from one food delivery service to another and it is 40.9%. There is also the best price (52.3%), which is a key reason consumers switch from one food delivery service to another.

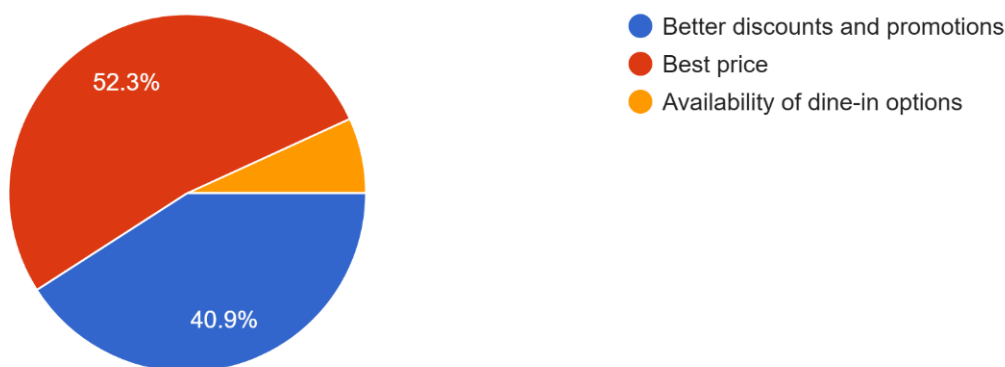


FIGURE 8. Key reason behind customer switch to another delivery service

The pie chart (figure 9) asks about people's opinions. Is an environmentally friendly delivery service important for them? 70.5% of people opined positively, 13.6% respond negative and rest of 15.9% opined maybe. It is clear that an environmentally friendly delivery service was important for most the respondents.

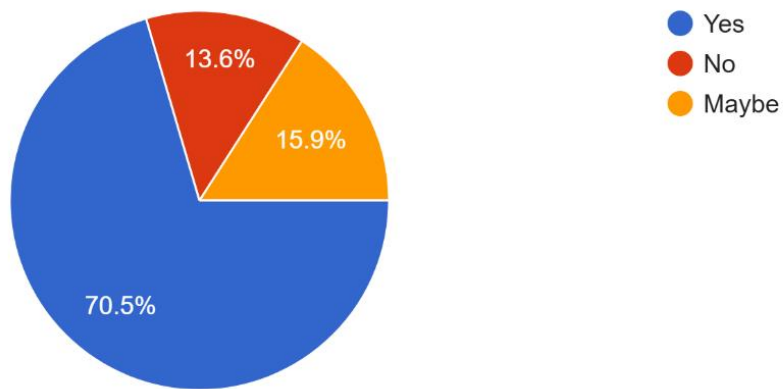


FIGURE 9. Importance of environment friendly delivery service

The provided pie chart illustrates the influence of sustainability on their satisfaction, revealing a 90.9% rate. Even though they only 9.1% of the total respondents, gave contradicting answers. So, we can say that sustainability impacts their satisfaction.

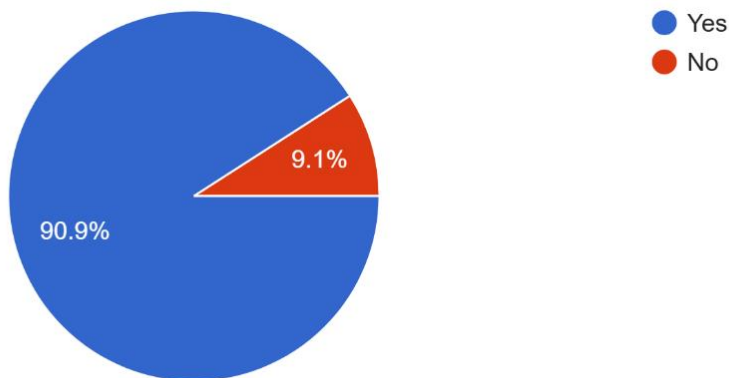


FIGURE 10. Sustainability impact on satisfaction

The pie chart (figure 11) seeks to understand why individuals choose one food delivery restaurant over another, specifically citing their awareness of its sustainability values. The pie chart shows that 84.1% of people choose one food delivery restaurant over another because they are aware of its sustainability values and rest of 15.9% opined negatively.

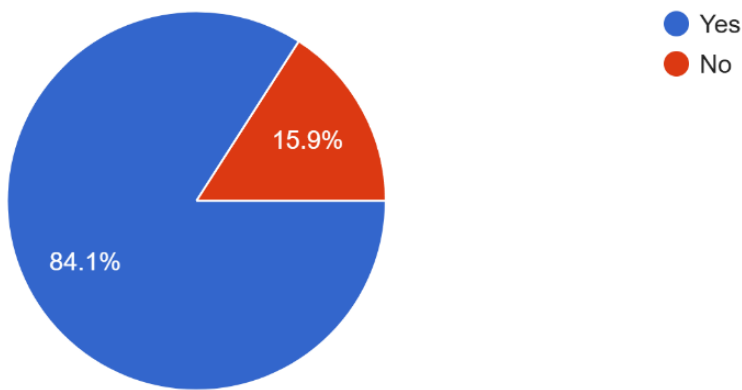


FIGURE 11. Aware of sustainability values

The survey (figure 12) results indicate that out of all respondents, 71.4% of respondents are willing to pay more for food delivery if the restaurant promotes sustainability values, while 28.6% are not willing to pay more.

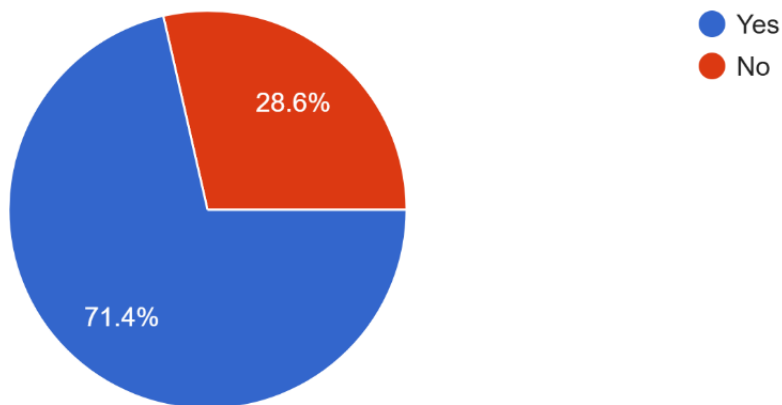


FIGURE 12. Willing to pay more for the food delivery

The vast majority (86.4%) believe food delivery companies can promote sustainability, indicating strong public support for eco-friendly initiatives. Only 13.6% responded "no", showing minimal scepticism. This suggests a favourable attitude toward sustainable practices in the industry.

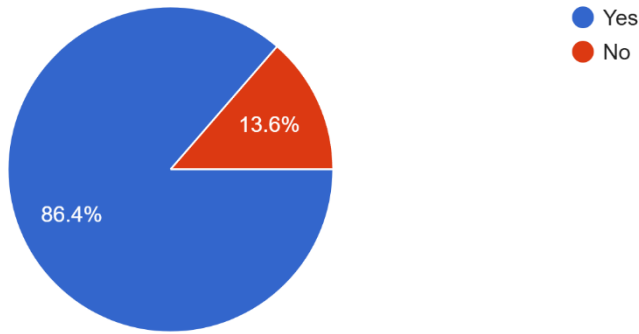


FIGURE 13. Companies can promote sustainability

The leading concern (34.1%) is the higher cost of sustainable food delivery options. Lack of awareness follows at 29.5%, showing a need for better education on sustainability. Convenience (22.7%) and limited availability (13.6%) also contribute, but to a lesser extent. This highlights that affordability and awareness are key barriers.

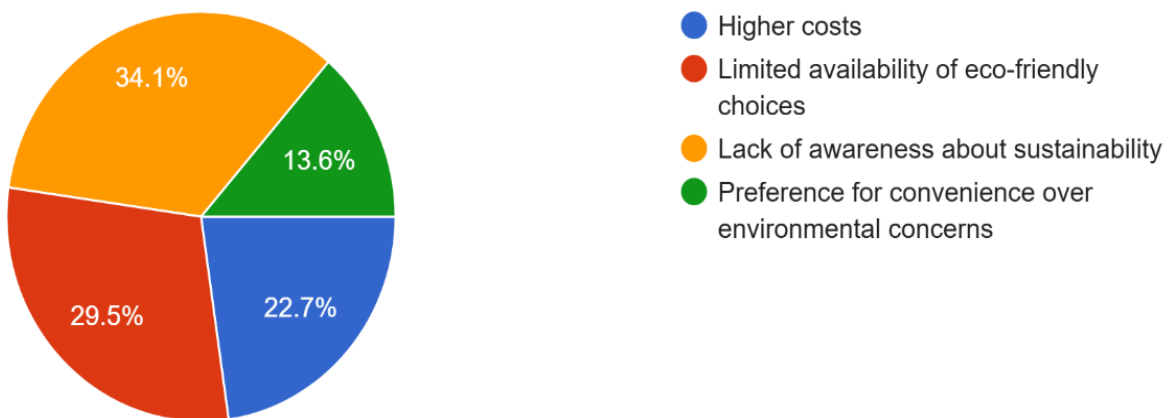


FIGURE 14. Choose sustainable food delivery options

According to the pie chart (figure 15) among all the respondents, 84.1% of respondents choose a food delivery restaurant over another because they are aware of its sustainability values, while 15.9% do not.

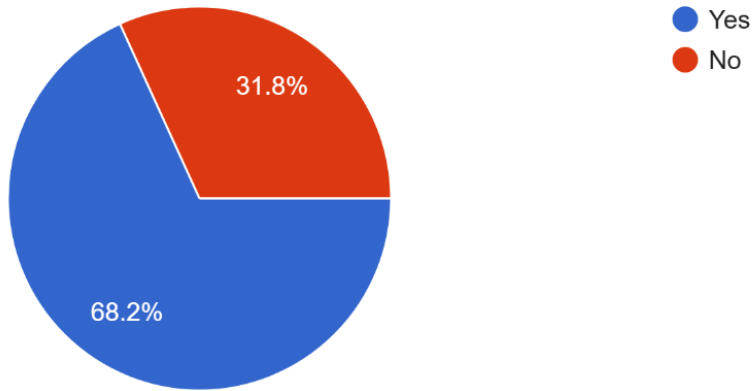


FIGURE 15. Food Panda promote eco-friendly practices

The majority of respondents (40.9%) believe that offering discounts would best improve customer service. Timely delivery of orders follows closely at 36.4%, indicating its high importance. Meanwhile, 22.7% prefer having more restaurant choices. This suggests customers value both savings and speed the most.

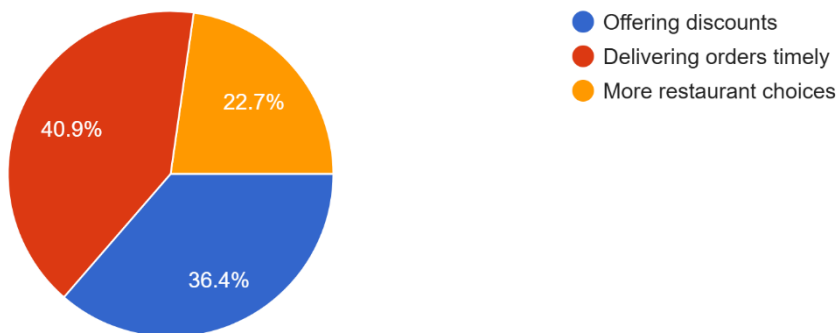


FIGURE 16. Restaurant improve customer experience

In the figure 17 most respondents rated Food Panda positively, with 36.4% giving it a 4 and 25% rating it a full 5. A smaller portion (22.7%) gave a neutral score of 3, while only 15.9% rated it 2. Notably, no one gave it the lowest score of 1, suggesting overall satisfaction with the service.

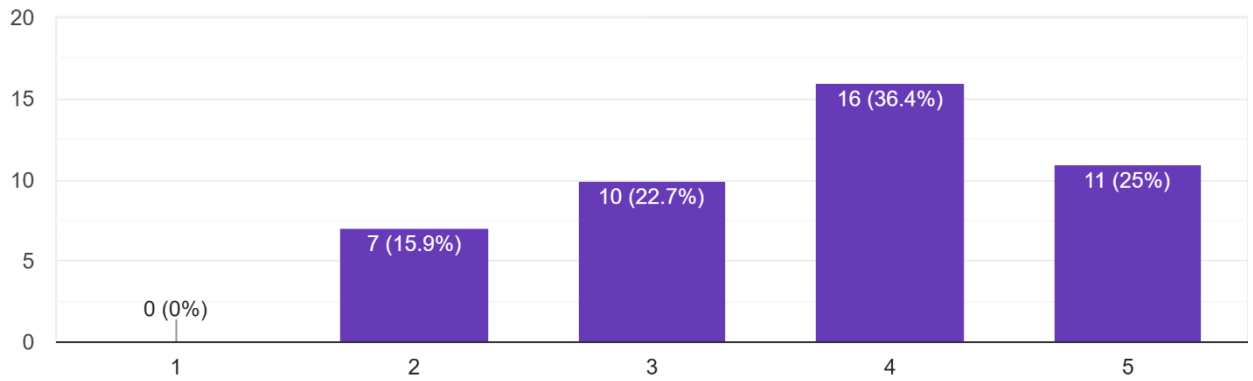


FIGURE 17. Rate Food Panda

#### 4.2.1 Summary of the survey findings

This study aimed to identify sustainability practices undertaken by food delivery services at Food Panda, examine consumer awareness and perceptions of these practices, and determine whether sustainability awareness influenced consumer buying behavior. The results of 44 respondents to the online survey answer the research questions and correlate with the insights discovered during the review process in the literature in the second chapter.

These findings give some credence to the report; we have already seen sustainability being more of a concern among consumers. 70.5% of the respondents said they are environmentally aware, and 86.4% agree that companies like Food Panda are able to do something for sustainable development. This sentiment mirrors that found in the academic literature regarding corporations pivoting toward environmentally sound packaging, electric vehicles, and renewable energy (Brown & Taylor, 2019; Harrison & Smith 2021). However, the survey also identified significant obstacles, specifically the higher cost of sustainable options (34.1%) and a lack of awareness (29.5%), which aligns with the complaints made by Gomez et al. (2021).

A substantial proportion of respondents (84.1%) recognized Food Panda for encouraging eco-friendly practices. This concurs with the literature's trajectory establishing companies coursing globally (e.g., Uber Eats, Deliveroo) to integrate sustainability through greener logistics and packaging (Green et al.

2021; Rodriguez et al. 2020). Survey results reveal that consumer awareness about sustainability is significant: 84.1% select a food delivery service primarily based on its sustainability principles, while 90.9% of respondents said sustainability impacted their satisfaction. Thus, the results confirm that more awareness drives willingness and demand for sustainable options (Jones et al. 2021; Nguyen et al. 2022.)

In fact, the fact that 71.4% of respondents are willing to pay more for sustainable food delivery further reinforces the findings of Davis & Carter (2021) and Brown & Taylor (2019), who acknowledged a shift in consumers towards environmental consciousness despite trade-offs in the economy. This awareness also translates into expectations, which is interesting. Consumers desire transparent pricing (47.7%) and dependable support services, indicating that when it comes to sustainable promotion, transparency and trust are significant.

More importantly, the survey strongly backs the hypothesis that sustainability is a factor in consumer purchasing decisions. More than half of participants (52.3%) frequently switch between food delivery services due to lower prices, and 40.9% find more discounts and promotions motivating. However, for those who do maintain affinity for a service, sustainability values play a significant role. Evidence suggests that while pricing remains a primary motivator, eco-consciousness is increasingly impacting consumer loyalty.

The most influential factors for restaurant selection were fast delivery (50%), followed by discounts (22.7%), similar to the findings of Wang & Somogyi (2021) and Kim et al. (2021), which revealed that price sensitivity and convenience are significant factors influencing food ordering decisions. Yet the overlay of sustainability as a competitive advantage is clearly expanding.

Moreover, 36.4% of respondents indicated that discounts would enhance the customer experience, while the same number indicated that timely delivery is a key factor. This finding suggests that while sustainability is important, operational efficiency is fundamental. Both expectations are supported by the literature (Miller & Thomas 2019), which indicates a need for environmental initiatives to be complemented by customer satisfaction.

The survey results confirm the central hypotheses and research questions of the thesis. Consumer awareness of sustainability practices in the food delivery industry is very high, and they value and con-

sider them an influencing factor when purchasing. The sustainable initiatives in the literature are evidently in line with the expectations of the consumer. However, barriers to more widespread adoption include cost and awareness.

Food Panda appears to have garnered recognition for their efforts, effectively aligning themselves with the good global practices discussed in chapter two. The report has provided valuable knowledge and is yet another reminder that sustainability is not just good for the world but essential for business. As the survey and literature demonstrate, ongoing innovation, education, and government support will be critical in maintaining this momentum. (Smith et al. 2023.)

### **4.3 Interview findings**

The information we discovered during the online interview is summarised here. Online interviews took place in March 2025 for a thorough study of individual data to obtain complete answers. The interviews took place on Zoom. Each of the interview was taken individually and those took average of ten minutes for per interview. The participants in this interview included adults who ranged from 25 years old to 40 years old. Interviewee A, B, C and D are respectively the Marketing manager, HR Admin, Sales Associate and Delivery Manager of Food Panda Gazipur zone.

#### **4.3.1 The interviews**

The first question to interviewed persons A, B C and D was ‘What are sustainability entities that are most commonly updated or adopt by food delivery services?’. Interviewee A replied that many food delivery services use eco-friendly packaging and offer an option to opt out of receiving plastic cutlery. Some also use electric bikes or scooters to reduce pollution. Interviewee B replied that food delivery services commonly adopt sustainability initiatives, such as using eco-friendly packaging. Additionally, these services can reduce the use of single-use plastics and promote the use of bioelectric vehicles. It also promotes the use of bioelectric vehicles to minimise carbon emissions. Interviewee C responded by stating that food delivery services typically implement various sustainability initiatives. The respondent thinks companies are shifting toward eco-friendly packaging, opting for low-bind biological guard bases and recyclable things they were using, and like significant initiatives like carbon offset

programs and amusing investments in environmental projects for companies for their delivery products. Indeed, the initiative has put Panda's environmental impact on a positive path. She also added that Food Panda helps the environment by letting people say no to using plastic. This is a wonderful initiative because people are using bioproducts like paper instead of plastic. Interviewee D mentioned that food delivery services employ three popular sustainability methods: using compostable or biodegradable packaging, offering customers the option to skip cutlery, and implementing carbon emission reductions through route optimisation, electric bikes, and partnerships with environmentally focused restaurants. Food Panda launched which initiative to minimize waste, according to the second inquiry? The no cutlery option became available as a checkout choice through Food Panda to lower the amount of plastic waste. Food Panda works together with restaurants both to promote sustainable packaging solutions and to spread environmentally peaceful operating practices across their system.

For the question 'What sustainability initiatives has Food Panda introduced to reduce waste?' Interviewee A responded that Food Panda has fewer customers and no culinary plastic waste reduction. They also work with restaurants to use greener packaging. The next questions was what is the primary goal of sustainability practices in food delivery services? The main goal is to protect the environment and reduce waste. This contributes to making the planet cleaner and healthier. Interviewee B answered that Food Panda has introduced several sustainability initiatives for reducing waste, including the sustainable packaging program, which can offer restaurant partners compostable and also 100% plant-based eats. And recently they launched the Green Label certification in Singapore, to identify and promote restaurants with sustainable practices.

Then the respondent was asked if they used alternative sustainability package for food delivery platforms. Interviewee A responded that the use of materials made from paper and cardboard is on the decline. All plant-based materials in this dong are faster and better for leisure. According to interviewee C the food delivery platforms commonly use sustainable packaging alternatives. Interviewee C stated that a popular alternative to traditional packaging is avoiding plastic in favor of plant-based materials, such as paper bags and various types of fibers. Interviewee D thinks that food delivery platforms commonly use sustainable packaging alternatives, which form the topic of the following inquiry. He identified biodegradable packaging made from corn-starch and sugarcane bagasse, along with recycled paper and bamboo, as the main alternative option for sustainable delivery. Normal decomposition occurs with these materials without damaging the environment.

To the question ‘what is the primary goal of sustainability practices in food delivery services?’ interviewee B opined the primary goal of sustainability practices in food delivery services is minimizing environmental impact by reducing waste and also lowering carbon emissions and promoting eco-friendly packaging and operations. Eco-friendly is necessary for the environment right now. What sustainable packaging alternative do food delivery platforms commonly use? Interviewee B replied that the common sustainable packaging alternative used by food delivery platforms is obviously compostable packaging was made from plant-based materials like corn-starch or sugarcane. Essentially, the primary focus is on eco-friendliness. This is the primary focus. According to interviewee C the main goal of sustainability is the delivery process. It safeguards the environment by using less plastic, reducing waste, and saving energy, all of which contribute to keeping the planet clean and safe for future generations. Interviewee D thinks that reducing of environmental impact while minimizing waste and carbon emissions and promoting responsible consumption practices are the main purpose aims to establish long-term ecological balance and corporate social responsibility.

What is the major challenge of implementing sustainability in food delivery services? Interviewee A answered that the major challenge is that eco-friendly packaging can cost more money. Furthermore, not all places have good recycling systems. Cost is a key barrier in implementing sustainability in food delivery services. The higher cost of sustainable options is a significant barrier. Some restaurants and companies find it too expensive. Interviewee B answered that the major challenges for implementing sustainability in food delivery services include the high cost of eco-friendly materials, lack of consumer awareness, and logistical complexities in managing sustainable operations. Indeed, it all begins with raising awareness and using eco-friendly materials.

Then the next question was asked what is the key barrier to implementing sustainability in food delivery services? Manager A answered that it's the high cost of using eco-friendly packaging and materials. This is the primary obstacle to implementing sustainability in food delivery services. According to interviewee C the primary challenges are the increased cost of sustainable materials and their scarcity. Many students who work as delivery drivers find it difficult to afford the cost of sustainable materials. This makes it difficult for the trend to go green even if they want to help the environment but they cannot. The interviewee, D, identified key barriers to sustainability in food delivery, which include high sustainability material prices, weak recycling and composting infrastructure, scarce eco-friendly vendor connections, and consumer and restaurant reluctance to sustainable choices.

The question was asked if they think sustainable practices of food delivery services impact customer decision-making. Interviewed A responded many individuals prefer to participate in a friendly survey. This makes them feel positive about their choices. Interviewee B believed that sustainable practices in food delivery services have the potential to influence consumer decision-making. And as many people prefer to support eco-friendly businesses, it's critical and he thinks it's impacting. Interviewee C answered that many people care about the environment. When companies use eco-friendly packaging or cut down on the plastic, it makes customers feel positive about their choice. Such information can aid in their decision-making process, and customers are more likely to choose eco-friendly restaurants for their dining experiences. Additionally, consumers prefer eco-friendly packaging when it comes to imports. The most effective marketing strategy is highlighting how the service benefits the environment, like using less plastic or offering reusable containers. For example, marketing this through social media helps create a positive impact and makes customers more likely to support the services.

The interviewee D stated affirmatively and mentioned specifically consumers who care about environmental issues. Many customers choose brands that match their values by showing sustainability practices. Companies with transparent green operations experience improved customer relationships and brand reputation. During the interview, the author asked what marketing approaches deliver the best results for sustainable food delivery promotion. The most effective promotional strategy includes content marketing and social media campaigns showing customer involvement and green initiatives and partnerships with eco-friendly brands, according to Interviewee D certifications or badges for “green restaurants” on the platform also increase consumer trust and engagement. To the question ‘which method is easier and more effective in promoting sustainability in food delivery?’, interviewee A responded that demonstrating different levels of sustainability, such as eco-friendly or sustainable choices, can be very beneficial. Sharing stories and engaging with all social media platforms also works well. Interviewee B responded that, currently, social media is the primary source of information. For him, the primary focus is social media. To promote sustainable food delivery, we clearly demonstrate eco-friendly practices and benefits through social media and app promotion.

### **4.3.2 Analysing of interview findings**

Some common sustainability packages include decreasing paper cardboard and plant-based materials for faster and more enjoyable delivery. However, implementing sustainability in food delivery services can be challenging due to higher costs and lack of good recycling systems. Cost is a key barrier, and

some restaurants and companies find it too expensive. Customer decision-making is influenced by sustainability practices, with many preferring friendly surveys to feel good about their choices. To promote sustainability in food delivery, it is important to show eco-friendly or sustainable choices, share stories, and engage with social media. Overall, promoting sustainability in food delivery is a complex process that requires careful planning and execution.

Interviewee B talked about food delivery services which are increasingly adopting sustainability initiatives to minimize environmental impact and reduce carbon emissions. These initiatives include using eco-friendly packaging, reducing single-use plastics, and promoting bioelectric vehicle deliveries. Food Panda has introduced several sustainability initiatives to reduce waste, including the sustainable packaging program, which offers compostable and 100% plant-based meals. They have also launched the Green Label certification in Singapore to identify and promote restaurants with sustainable practices.

The primary goal of sustainability in food delivery services is to minimize environmental impact by reducing waste, lowering carbon emissions, and promoting eco-friendly packaging and operations. Common sustainable packaging alternatives used by food delivery platforms include compostable packaging made from plant-based materials like corn-starch or sugarcane. However, major challenges for implementing sustainability in food delivery services include the high cost of eco-friendly materials, lack of consumer awareness, and logistical complexities in managing sustainable operations.

Interviewee C opined that food delivery services are increasingly adopting sustainability initiatives, such as eco-friendly packaging, low-bind biological guard bases, recyclable products, carbon offset programs, and investments in environmental projects. Food Panda, for example, is promoting sustainability by reducing plastic usage and using bioproducts like paper instead. The primary goal of sustainability in food delivery services is to protect the environment by using less plastic, reducing waste, and saving energy.

Sustainability practices in food delivery services impact consumer decision-making. When companies use eco-friendly packaging or reduce plastic usage, customers feel more positive about their choice, leading to more eco-friendly dining experiences. Consumers also prefer eco-friendly packaging when it comes to imports. The most effective marketing strategy is highlighting how the service benefits the environment, such as using less plastic or offering reusable containers. Marketing this through social media can create a positive impact and make customers more likely to support the services.

Interviewee D discussed about sustainability practices to reduce environmental impact, minimize waste, and promote responsible consumption. These practices include using compostable or biodegradable packaging, offering customers the option to skip cutlery, implementing carbon emission reductions through route optimization and electric bikes, and partnering with environmentally focused restaurants. Food Panda has launched a "no cutlery" option to reduce plastic waste, and works with restaurants to promote sustainable packaging solutions and environmentally friendly operating practices.

Sustainability initiatives in food delivery services aim to establish long-term ecological balance and corporate social responsibility. Biodegradable packaging, made from corn-starch, sugarcane bagasse, recycled paper, and bamboo, is the main alternative. However, obstacles include high material prices, weak recycling infrastructure, scarce eco-friendly vendor connections, and consumer and restaurant reluctance. Transparent green operations improve customer relationships and brand reputation. Effective promotional strategies include content marketing, social media campaigns, partnerships with eco-friendly brands, and certifications for "green restaurants" on platforms.

Insights from the interview helped focus the core research objectives around recognizing sustainability practices among food delivery services, awareness and perceptions of sustainability among consumers, and how the information impacts consumer behavior. We also interviewed Food Panda employees, who revealed some of the following practices: These involve the use of compostable or biodegradable packaging (e.g., used corn-starch, sugarcane, or bamboo materials), reduction of single-use plastic with an option, such as a "no cutlery" plan, and delivery with electric bikes or route optimization to decrease carbon emissions. The latter findings directly respond to the first research query and are in sync with the literature cited in Chapter 2, most notably that of Jones et al. (e.g. 2022) and Brown & Taylor (2019) on sustainable packaging and logistics as essential aspects of eco-friendly delivery models.

The second research question discussed consumer awareness and perception. Interviewees mentioned that environmentally conscious consumers want to see companies taking a green approach. Sustainability impacts purchasing decisions, and customers prefer services that match their values. This adds to previous work from Nguyen et al. and Smith & Green (2020) and (2021), further supporting that greater awareness and education among consumers leads to eco-friendly choices and a preference for brands showing sustainability.

With regard to the influence of sustainability awareness on consumer behavior, the third research question all interviewees attested to its role. Here are some examples of eco-initiatives that are distributed openly (on app features, social media campaigns, and/or “green restaurant” certifications) that help companies build trust and loyalty among consumers as they plan their visits. These findings support the theory outlined in the literature review regarding Davis & Carter (2021) and how digital transparency and environmental labeling influence preferences for toiletries to be purchased.

It is important to note that all interviewees identified major barriers, including the high cost of environmental packaging, poor recycling infrastructure, and limited supplier networks. Such constraint resonates with the literature’s focus on economic and operational limitations experienced by the organizations that attempt to foster green initiatives. (Rodriguez & Lopez 2020.)

The key barrier to implementing sustainability in food delivery services is the high cost of eco-friendly materials and materials. However, sustainability practices can impact customer decision-making, as many people prefer to support eco-friendly businesses. The most effective marketing strategy for promoting sustainable food delivery is social media, as it allows customers to learn about eco-friendly practices and benefits through platforms like Facebook and Instagram. Overall, sustainability practices in food delivery services are crucial for reducing environmental impact and promoting sustainable practices.

## 5 CONCLUSION AND RECOMMENDATIONS FOR FURTHER STUDIES

The findings from the survey shows the environmental awareness of customers. Plastic waste, climate change, and resource depletion are all defining issues of our time, and food delivery services have responded. According to the results, consumers are not only thinking about sustainability but are changing their purchasing behavior because of it. The imperative of sustainability in food choices became evident, as 84.1% of respondents selected food delivery services according to their sustainability values and 71.4% stated that they were willing to pay significantly more for environmentally responsible options. Consumers are more satisfied and loyal to those brands that maintain eco-friendly packaging, green logistics, and clear sustainability messaging.

Qualitative interviews with Food Panda employees show that the operational challenges are cost, infrastructure limitations, and consumer reluctance to implement green initiatives. Despite the challenges ahead, Food Panda has been proactively implementing strategies for sustainability, such as offering biodegradable packaging to restaurants, reducing plastic through the customer service model, encouraging customers to avoid cutlery, using electric bikes for deliveries, etc.

The results reiterate the importance of sustainability in mitigating the ecological impact of food delivery services and in affecting customer loyalty and competitive edge. Yet several hurdles remain before they can practice 100% sustainably, including consumer awareness gaps, high eco-material costs, and operational challenges. In food delivery, sustainability is critical to long-term success. When businesses act in accordance with environmental principles, they foster trust, retain customers, and collectively address climate change issues.

The study aimed to identify sustainability practices in food delivery services, examine consumer awareness and perceptions of these practices, and determine whether sustainability awareness influenced consumer buying behavior. The results of 44 respondents to the online survey confirmed the central hypotheses and research questions of the thesis. Consumer awareness of sustainability practices in the food delivery industry is very high, and they value and consider them an influencing factor when purchasing. However, barriers to more widespread adoption include cost and awareness.

The survey results confirm the central hypotheses and research questions of the thesis. Consumer

awareness of sustainability practices in the food delivery industry is very high, and they value and consider them an influencing factor when purchasing. The sustainable initiatives in the literature are evidently in line with the expectations of the consumer. However, barriers to more widespread adoption include cost and awareness.

Food Panda appears to have garnered recognition for their efforts, effectively aligning themselves with the good global practices discussed in chapter two. The report has provided valuable knowledge and is yet another reminder that sustainability is not just good for the world but essential for business. As the survey and literature demonstrate, ongoing innovation, education, and government support will be critical in maintaining this momentum.

The research focuses on recognizing sustainability practices among food delivery services, consumer awareness and perceptions of sustainability, and how this information impacts consumer behavior. Food Panda employees revealed practices such as compostable or biodegradable packaging, reduced single-use plastic, and delivery with electric bikes or route optimization to decrease carbon emissions. Consumer awareness and perception are crucial as environmentally conscious consumers want companies to adopt a green approach, which impacts purchasing decisions and preferences for eco-friendly choices. Sustainability awareness plays a significant role in consumer behavior, with open-distributed eco-initiatives building trust and loyalty.

However, major barriers include the high cost of environmental packaging, poor recycling infrastructure, and limited supplier networks. The interviews validate and complement the findings of the theoretical frame, with Food Panda's sustainability practices following global trends and consumer attitudes corroborating previous studies on awareness and marketing for sustainable consumption. This research supports existing theories and provides solid, contextual evidence from the food delivery market.

While the study generates useful findings relating sustainability to consumer behavior in food delivery services, it recommends further studies on cultural and regional influences, longitudinal studies on shifts in consumer preferences, assessments of the financial and operational impacts of sustainable change initiatives, how institutions can help facilitate new policy and national regulatory frameworks, the effectiveness of consumer incentives in achieving sustainable food delivery services, the role of technology integration in sustainable logistics, factors contributing to green washing and consumer trust and behaviors, the gig economy and its implications for social sustainability in the provision of

food delivery services, consumer education practices for behavior change, and the potential role of emerging technologies in improving sustainability across the food delivery supply chain.

There is the need for research on cultural and regional influences on consumer behavior, changes to consumer awareness, preferences, and willingness to pay in response to anti-greenwashing initiatives and industry learning in measuring sustainability, and the role of emergent technologies in promoting sustainability within the food delivery supply chain.

Future research should also focus on the social sustainability of food delivery platforms, especially the labor conditions and working environment of delivery riders, as well as the role of consumer education and nudges in the decisions of customers. Future studies can therefore focus on filling these gaps to offer a much more rounded understanding of the sustainability aspect of digital commerce and food logistics, paving the way for a more responsible industry that is still in its infancy.

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**Questions for quantitative research part-**

1. What's your gender

- A) Male
- B) Female
- C) Prefer not to say

2. What's your age group?

- A) Under 18
- B) 18-24
- C) 25-34
- D) 35-45
- E) Over 45

3. How often do you order food from Food Panda

- A) Everyday
- B) Once a week
- C) Twice a week
- D) A and B both

4. Why do consumers prefer online food delivery services?

- A) It saves time and effort
- B) It is always cheaper than dining in
- C) Offer discount price

5. Which factor influence you when you choose the delivery restaurant?

- A) Fast delivery
- B) Discount coupon
- C) Many choices

6. What do customers expect from a food delivery app?

- A) Easy navigation
- B) Clear pricing

C) Online customer support

7. What can negatively affect a customer's satisfaction with food delivery?

A) Late delivery

B) Unfriendly delivery staff

C) Poor food packaging

8. What is a key reason consumers switch from one food delivery service to another?

A) Better discounts and promotions

B) Best price

C) Availability of dine-in options

9. In your opinion, is environment friendly delivery service important for you?

A) Yes

B) No

C) I do not know

10. Does sustainability impact your satisfaction?

A) Yes

B) No

11. Do you choose a food delivery restaurant to another because you are aware of its's sustainability values?

A) Yes

B) No

12. Are you willing to pay more for your food delivery, if you know the restaurant promote sustainability values?

A. No

B. Yes

13. Do you think food delivery companies can promote sustainability?

- A) Yes
- B) No
- C) Maybe

14. Why would you hesitate to choose sustainable food delivery options?

- a) Higher costs
- b) Limited availability of eco-friendly choices
- c) Lack of awareness about sustainability
- d) Preference for convenience over environmental concerns

15. In your opinion, does Food Panda promote eco-friendly practices?

- A) Yes
- B) No

16. How can a Food delivery restaurant improve customer experience?

- A) Offering discounts
- B) Delivering orders timely
- C) More restaurant choices

17. On a scale of 1 to 5, how you would like to rate Food Panda?

- A) 1
- B) 2
- C) 3
- D) 4
- E) 5

**Questions for the interview**

1. What are sustainability initiatives that most commonly adopted by food delivery services?
2. What sustainability initiative has Food Panda introduced to reduce waste?
3. What is the primary goal of sustainability practices in food delivery services?
4. What is a common sustainable packaging alternative used by food delivery platforms?
5. What are the major challenges for implementing sustainability in food delivery services?
6. What is a key barrier to implementing sustainability in food delivery services?
7. Do you think sustainability practices in food delivery services impact consumer decision-making?
8. Which marketing strategy is most effective in promoting sustainable food delivery?