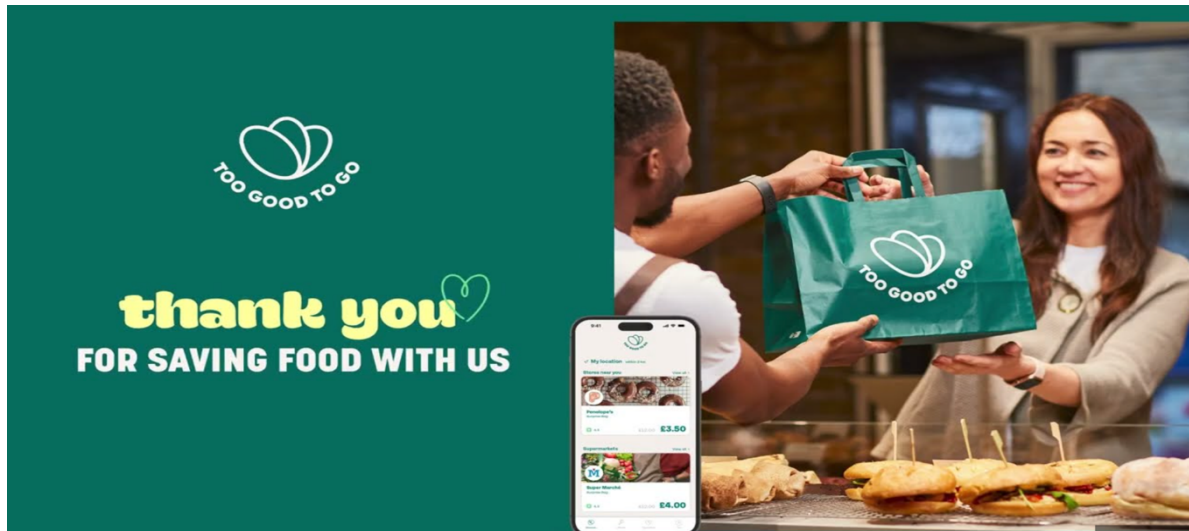**AALBORG UNIVERSITY**

Exploring Role of Digital Apps in Promoting Sustainable Consumption in Tourism: A Case of 'Too Good To Go' Mobile App

Master in Tourism

Master Thesis

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Abstract

In recent years, sustainable concept of food consumption in tourism industry has become a major concern as it impacts in environmental sustainability. The growth of digital technology has opened ways for different platforms to contribute their effort to act in promoting sustainability, however little research has been done with in the field. This research focus on the effectiveness of 'Too Good To Go' app, a digital application, to promote the sustainable food consumption concept. In particular, the study identified major challenges individuals are experiencing that hinders the sustainability objectives while using the app. In this context, through an open interviews conducted with individuals who are aware with the functionality of the app and have used the app in various destination, this research aims to analyze and evaluate the behavioral impacts and perceptual shifts regarding sustainable food consumption.

Furthermore, the analysis of the data showed the role of app in reducing the environmental degradation and enhancing tourists' awareness and commitment to sustainable consumption. Users shows and expresses positive attitude and high level of satisfaction with the service and social impact of the app. On this basis, it is recommended that app developers and sustainable tourism operatives should acknowledge the potential of mobile technology to promote the environmental awareness among tourists. Conclusively, the study shows how using technology can help to achieve sustainable consumption within the tourism industry. Moreover, due to lack of past research on the topic, further research is needed to explore long-term impact of the subject.

Keywords: Sustainable Consumption; Responsible Tourism ; Digital Technology; 'Too Good To Go' app.

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List of Abbreviation

TGTG   –   Too Good To Go

VBN   –   Theory of Value Belief Norm

TPB   -   Theory of Planned Behavior

Introduction

The consumption of food while travelling is widely acknowledged as a crucial aspect of the tourist experience(de Jong & Varley, 2018). Culinary tourism can serve multiple functions, including being a growing trend in the tourism sector and a pivotal factor in travellers' selection of destinations. While some individuals view food as a basic necessity to satisfy their hunger, others regard it as an essential component of their travel adventures, excited to discover new flavours and gastronomic customs (Delgado et al., 2023). Personal taste, cultural influence, and social interactions all contribute to shaping the dining experience of travellers while travelling, where food expenses might make up a significant portion of their overall spending (de Jong & Varley, 2018; Tekinbaş Özkaya et al., 2021).

Sustainable Food Consumption

According to Wolff & Schönherr (2011), sustainable consumption involves making socially and environmentally responsible choices while purchasing, using, and disposing of goods and services. With the increasing world population but limited natural resources, sustainable food consumption has become a pressing concern that has wide-ranging effects on the environment, public health, economy, and society as a whole (Delgado et al., 2023). The issue of sustainable food consumption has gained significant attention in recent times due to the alarming rate of food loss and waste on a global scale (Genova & Allegretti, 2024). Therefore, this article explores the potentiality of a digital application, called 'Too Good To Go', in reshaping our attitudes towards consumption and production. By shifting our perspective about the surplus food, the app can drive significant changes and play a vital role in promoting sustainable food consumption in tourism.

There are various methods available to encourage individuals to adopt more sustainable consumption practices (Wolff & Schönherr, 2011). This includes advocating for sustainable eating habits, reducing food waste, and reusing the used resources. In the last few decades, there has been a noticeable shift towards healthier and mindful eating habits(Orea-Giner & Fusté-Forné, 2023; Wood, 2022 March). More and more individuals are curious about the origins and nutritional content of their food. With a particular focus on the younger generation who prioritize sustainability and advocate for environmentally friendly purchasing decisions (Wood, 2022 march). As people become more aware of the impact of their food choices on the planet, it is expected that future consumption patterns will be saved by broader global concerns such as sustainability, long-term consumer behaviour, and life cycle models(de Jong & Varley, 2018; Delgado et al., 2023).

The Case of 'Too Good To Go'

The app was founded in Copenhagen in 2015, and it currently serves over 90 million users across 17 countries in Europe and North America (TGTG, 2024). The app aligns with the increasing focus on sustainable tourism through its efforts to promote sustainable consumption while reducing food waste. The 2023 Impact Report of TGTG revealed that the app prevented the wastage of 121,686,720 meals through its various offerings, marking a 46% increase from the previous year. This data suggests that the app is gaining momentum and could significantly contribute to promoting sustainable food consumption (TGTG, 2024).

Similarly, travellers who prioritize minimizing their environmental impact may choose to visit destinations that endorse similar green initiatives, ultimately encouraging eco-conscious tourism practices. Destinations that actively support the 'Too Good To Go' initiative can have

the opportunity to establish themselves as leaders in sustainable practices. This could result in increased online attention and positive publicity, ultimately driving tourism. By promoting a sustainable way of life and widely adopting 'Too Good To Go', destinations can attract eco-conscious travelers. As, these travelers are often inclined to support businesses that prioritize sustainability, leading to an increase in the support of local eateries. Additionally, this initiative can encourage tourists to sample local cuisine they may not have otherwise tried. By purchasing surplus food from nearby restaurants, travelers can immerse themselves in authentic regional dishes, enhancing their cultural experience. Thus, this app might help to create a unique touristic experience for individuals while reducing the environmental impact.

Problem Statement

Technological advancement and the use of social media have transformed the way people plan and enjoy their trips, making the tourism industry more accessible and interconnected than ever before (Tekinbaş Özkaya et al., 2021). There is a variety of digital applications available that assist individuals in planning their vacations in a sustainable manner (Pencarelli, 2020). These apps provide users with tools to organize and monitor their travel plans, ultimately promoting sustainable practices during their trips. Additionally, the use of these platforms plays a significant role in improving communication and collaboration between sustainable suppliers and consumers, thereby making a substantial contribution towards sustainable consumption. By embracing the opportunities presented by digital platforms, food suppliers can decrease food wastage and contribute to creating an eco-friendlier environment. According to Apostolidis et al. (2021), the improved communication and collaboration enabled by these platforms allow for a more effective and organized approach to addressing the issues related to surplus production and helping to promote sustainable consumption.

The primary objective of this research is to assess the effectiveness of mobile applications, specifically 'Too Good To Go', in promoting sustainable consumption behaviour among tourists. Our study will examine the functionalities of the app and analyze how tourists can utilize it to promote sustainable consumption practices. This detailed analysis will provide a good foundation for our future research endeavors, as we seek to enhance our understanding of sustainable food consumption in the tourism industry, and the role that mobile applications can play in helping it. As a result, this study presents a unique perspective on the sustainable consumption of food in the tourism industry by illustrating the potential impact of mobile applications in this field.

Research Question

In our study, we seek to delve into the various elements that play a role in shaping traveler's choices when it comes to incorporating the Too Good To Go app into their sustainable consumption practices while on vacation. Our specific focus is on those tourists who have already utilized the app during their holiday periods. As a result, this inquiry gives rise to our central research question.

How does the TGTG app affect traveler's attitudes and actions around sustainable food consumption, and what factors impact its effectiveness in promoting sustainable consumption?

In order to get a deeper understanding of the main research question and to explore the factors influencing tourists' use of TGTG app during travel, we have outlined the following sub-questions.

- What role 'Too Good To Go' play in promoting sustainable consumption of food among tourists?

- What factors influence tourists' use of the Too Good To Go app for sustainable consumption while traveling?

- How do tourists' perceptions of the Too Good To Go app align with their actual experiences in reducing food waste during travel

Objectives

The main objective of this research is to examine how a digital application can encourage sustainable consumption practices among travelers. This study aims to explore the impact and effectiveness of using technology to promote environmentally friendly behaviors within the tourism industry. To overview the project, we have set the following objectives

- To explore the efficiency of the app in promoting sustainable consumption of food

- To understand the impact of apps on tourist for making their purchase decision while travelling

- To evaluate the role of digital technology in making travelling decisions

Research Significance

The purpose of this case study is to evaluate the effectiveness of the 'Too Good To Go' app in promoting sustainable consumption within the tourism industry. Through a comprehensive analysis of the app's features and their impact, this research seeks to uncover the potential

benefits of utilizing digital platforms to facilitate sustainable food consumption practices among travelers.

Practical Significance

The aim of this study is to evaluate how the 'Too Good To Go' app contribute to the promotion of sustainable consumption of food in tourism sector. Through analyzing the app's influence on tourists' habits and its connections with local food providers, this research aims to reveal important findings that can guide future efforts to optimize the app's effectiveness. By identifying key challenges and benefits associated with the app, this research aims to improve the overall experience of both tourists and food suppliers. Additionally, the research paper will showcase the app as a successful solution for promoting sustainable consumption of food in tourism industry.

Theoretical Significance

This research project aims to fill a significant gap in existing literature by providing concrete data on how technology-based strategies, like the 'Too Good To Go' app, can contribute to promoting sustainable consumption of food within the tourism industry. By examining the implementation and outcomes of the app within a specific environment, the study will increase our understanding of the various factors that influence the adoption and efficiency of such initiatives in promoting sustainable consumption of food in the tourism industry.

Organization of the study

The paper is divided into five chapters. The first chapter gives the brief introduction about the topic. It also provides some background information about sustainable food consumption habits

and its current situation. In addition, it also includes study objectives and main research question of this project.

In the second chapter, the reviews of past studies in the context of sustainable tourism, digital technology in tourism and consumer behaviour in sustainability has been included. In addition, the chapter also provide theoretical development of this paper.

The third chapter consists of research methodology and research design that has been used in this paper. In particular, this section will explain about qualitative data collection method through open interview.

In the fourth chapter, the collected data is analyzed and evaluated within the theoretical framework. Themes generated from the qualitative data are assessed and evaluated for the case study.

Finally, the last chapter provides the summary of the analysis along with the recommendation for the case study.

Literature Review

In this chapter, an in-depth understanding about the concept of sustainable food consumption in tourism industry is discussed. Similarly, the process of digitalization in tourism sector, as well as the role of digital applications in shaping the sustainable behavior has been highlighted. This part will also further underline the theory of planned behavior and the VBN (Value-Belief-Norm) theory of environmentalism, and its linkage with sustainable consumption behavior.

Sustainable Consumption Practice

The issue of the sustainability of consumption is particularly essential in the modern world (Fischer et al., 2023). Major environmental issues caused by widespread human meddling, such as pollution, global warming, land degradation, and biodiversity loss, have a direct impact on the sustainability and quality of the environment and ecosystem (Dimitrova et al., 2022). Individuals, on the other hand, have a difficult time understanding the consequences of their consumption (Fischer et al., 2023). According to (Martin, 2023), the earth is rapidly running out of resources as populations continue to expand. If the world's population hits 9.8 billion by 2050, it will need nearly three planets to produce the resources that are needed to support existing lifestyles. So, we must shift our consumption patterns, and one of the most important adjustments we need to make if we want to minimize our consumption levels is to switch to more sustainable energy sources. Thus, significant changes are required in the way societies, organizations, and people create and use their commodities and services (Fischer et al., 2023). However (Mont & Plepys, 2005) state, that since the early 1990's, significant progress in the eco-efficiency movement, which aims at improving the environmental profile of production processes and products, has taken place. The notion of sustainable consumption (SC) is often used as an umbrella term for issues related to human needs, equity, quality of life, resource

efficiency, waste minimization, lifecycle thinking, consumer health and safety, consumer sovereignty, etc.

The term 'sustainable consumption' was formally introduced by the Oslo Symposium in 1994, and, it has attracted the attention of scholars from many different disciplines worldwide (Schrader & Thøgersen, 2011). As a result, the concept of sustainable consumption is still debated, with various interpretations. Depending on the factors of research, sustainable consumption has been described according to its impact, whether environmental or social (Haitmy, 2020). In 1994, the United National Environment Programme (UNEP) first define sustainable consumption, as 'the use of services and related products which respond to basic needs and bring a better quality of life, while minimizing the use of natural resources and toxic materials as well as emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations' (Y. Liu et al., 2017). Another scholar Wang et al. (2014, p. 154) pointed out by saying, "Sustainable consumption is an umbrella term that brings together several key issues, such as meeting needs, enhancing the quality of life, improving resource efficiency, increasing the use of renewable energy sources, minimizing waste, taking a life cycle perspective and taking into account the equity dimension". Theoretically, sustainable consumption originated in ethical consumer research, where early studies focused on one facet of sustainable consumption only and attempted to understand it: for instance, the environmental aspect of the sustainable consumption phenomenon (Dimitrova et al., 2022). The scholar (Guillen-Royo, 2019) mentioned that sustainable consumption approaches involve energy-saving behaviors and the consumption of energy and materially efficient products with low impact in terms of emissions and pollution. 'Strong' sustainable consumption perspectives are associated with a culture of simplicity, entailing absolute reductions in the total level of consumption, not merely improvements in

material or energy efficiency. Each individual has a negligible impact on solving wicked sustainability problems, and the private costs of taking sustainability actions may be larger than the private returns received by the decision maker. However, according to (Testa et al., 2020), consumer habits have changed rapidly in recent decades: consumers are now less likely to make purchasing decisions based on brand loyalty or price and try to select products that align with their values, expressing a preference for more sustainable products from an environmental, ethical and social point of view.

SUSTAINABLE DEVELOPMENT GOAL

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Responsible Consumption and Production

Fig. 1: Sustainable Development Goal (Adapted and taken from Roser, 2023)

One of the outcome reports of the World Summit on Sustainable Development, the Johannesburg Plan of Implementation, included recognition for SCP in 2002. To accelerate the transition to SCP, the Johannesburg Plan of Implementation stressed the necessity of creating a 10-year framework of programs to support national and regional activities. SCP emerged as one of the key elements of the 2030 Agenda for Sustainable Development in 2015 (Sen & Kumar, 2023). The 2030 Agenda for Sustainable Development acknowledges the need for

immediate and significant changes and calls for government participation given their authority to enact laws that compel consumers to adopt a sustainable lifestyle. In light of this, the sustainable consumption (SC) option is becoming increasingly important, primarily due to its implications for modern society's consumption patterns and a host of environmental issues (Vargas-Merino et al., 2023). The importance of sustainable consumption is considered to have had a great impact on modern societies. To date, sustainable consumption has been analyzed from various perspectives (Y. Liu et al., 2017). The goal of environmentally responsible consumption is to consume products and services that fulfill consumer demands and improve quality of life while constantly minimizing environmental damage and potential risks to human well-being and health. To achieve more sustainable consumption, we have to first modify our consumption habits by replacing inefficient and destructive goods and services with less harmful alternatives. Second, consumption levels will be reduced, resulting in fewer services and smaller volumes of commodities (Fischer et al., 2023). As a result, for the world's most wealthy consumers, budget cuts in direct and indirect resource consumption, and hence the amounts of products and services consumed, become inescapable in practice (Thøgersen, 2023).

Understanding the Sustainable Consumption in Tourism and its Significance

According to (J. E. Dickinson & Peeters, 2012), tourism is an example of consumptive-orientated leisure where demand, provision, improved technology, and infrastructure are driving tourists further away, faster, more often, for fewer days per trip. Analysis of tourism's contribution to greenhouse gas (GHG) emissions shows that travel to a destination is a key contributor. According to Sharpley (2021), increased demand inspires higher levels of

production, which in turn motivates enterprises to create novel products, expand their market shares, boost profits, and increase demand from customers in a 'circle' of growth that, in the end, contributes to the degradation of resources and depletion. This dynamic is visible at the destination level; according to the author's findings, the growing demand for tourism in Siem Reap, Cambodia, has resulted in an explosion in hotel building and service supply, as well as an upsurge in exploitation of resources. As a result, to achieve sustainable resource usage, there is a general need for lower (or more sustainable) levels of consumption. Additionally (Nepal et al., 2019) mentioned that much has been discussed about sustainable tourism during the last two decades. More recently, critics have called into question its practicalities given the expanding global economy which demands increased production and consumption of material resources. There is an impossibility of achieving sustainability, given that we live in a period of a limitless materialistic and consumptive culture, rapidly depleting stocks of fossil hydrocarbons in an era of ecological scarcity and irreplaceable biological and geological resources. However (Liu, 2003), argues that tourists are growing more experienced, critical, and quality-conscious, seeking new experiences as well as 'excellent value for money'. But the adverse effects of the tourism industry have become a major worry that must be addressed immediately. With this in mind, the idea of sustainable tourism arose to reduce the negative consequences of tourism activities, and it has become virtually generally regarded as a desirable and politically suitable strategy for tourism development (Zolfani et al. 2015). It is becoming increasingly necessary for businesses in the 21st century to address environmental sustainability. Various industries have used different techniques for environmental protection. Furthermore, popular tourist destinations throughout the world are dealing with increased competition from other leisure businesses and destinations, as well as shifting visitor preferences and behavior (Liu, 2003). Global warming and sustainable development challenges are increasing interest in sustainable tourism, with an increasing number of visitors seeking to

become more environmentally conscious travelers (The Principles of Sustainable Tourism | Vieux Loup De Mer, 2023).

In addition, there is continual evidence to support adhering to the principles of sustainable tourism in several industry initiatives, certification schemes, the creation of sustainability indicators, the formation of organizations like the Global Sustainable Tourism Council (GSTC), and the alignment of tourism with the UN's Sustainable Development Goals. The goal of sustainable tourism development is explicitly stated in numerous local and national tourism development plans (Sharpley, 2021). Furthermore, several hospitality companies are taking a more proactive approach to greening their operations, services, and logistics in response to these pro-environmental demands. For instance, the European Commission (EC) is engaged in many environmental initiatives, such as managing destination risk, encouraging the use of ecolabelling tourism services, minimizing adverse environmental effects at tourist destinations, and utilizing eco-friendly transportation options (Nekmahmud et al., 2022). Sustainability has been largely seen as a promising tool for resolving the issues of negative tourist impacts while also ensuring the industry's long-term existence. It is a constructive strategy aiming to alleviate the conflicts and friction caused by the intricate relationships between the tourism sector, visitors, the environment, and the host communities, to sustain the long-term viability and quality of human and natural resources (Liu, 2003). The World Tourism Organization (UNWTO) 2005 defined the concept of Sustainable Tourism as "one whose practices and principles can apply to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments". Sustainability principles refer to the environmental, economic, and socio-cultural aspects of tourism development, and a suitable balance must be established among these three dimensions to guarantee its long-term sustainability (Santos-Roldán et al., 2020). Another scholar, (1999) stated that in the context of tourism, an

appropriate description of sustainable tourism is "tourism that can maintain its ability to thrive in an area for a long period." The World Tourism Organization, also known as the WTO, defines sustainable tourism as something that serves the demands of current visitors and host regions while both conserving and expanding prospects for the future. Resources are managed such that all of the economic, social, and environmental elements are taken care of (Ullah et al., 2021). The United Nations (UN) has set 17 Sustainable Development Goals (SDGs) to be achieved by 2030 (UN, 2015). Tourism, being a major worldwide business, has an important role in achieving the 17 SDGs, and SDG8 expressly addresses this (Seeler et al., 2021). As stated in the preceding description, sustainable tourism incorporates three key concepts of sustainable development: environmental preservation, social and cultural sustainability, and economic sustainability.
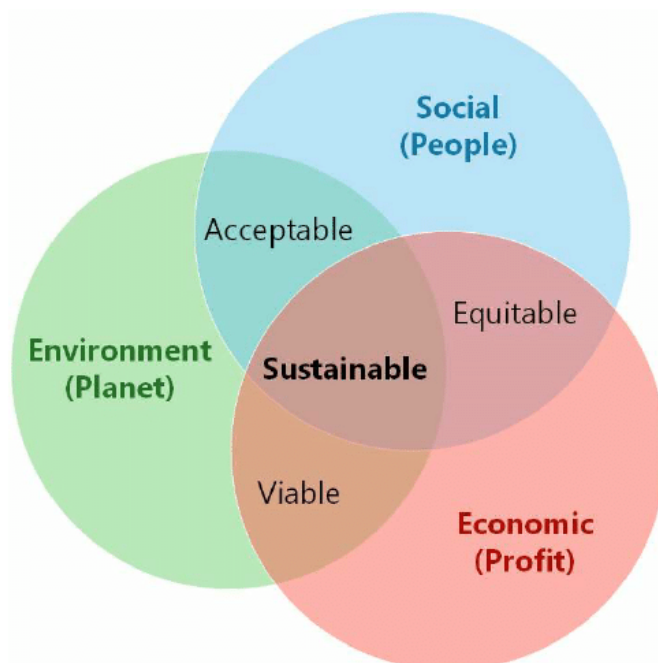

Fig. 2: Key aspects of sustainable development (International Union for Conservation of Nature (IUCN) (2005)

The notion of sustainability was initially proposed during the 1972 United Nations Conference on the Environment, but it wasn't until 1987 that it truly began to take shape, with the release

of the Brundtland Report ("Our Common Future"), which outlined the objectives of sustainable development. The three pillars or concepts of environmental, social, and economic sustainability—also referred to as ESG (Environmental, Social, and Governance)—were presented in the same study. A business that wants to practice sustainable development must support social advancement, economic expansion, and environmental sustainability. According to Purvis et al. (2018), the three-pillar idea of (social, economic, and environmental) sustainability has gained widespread acceptance. It is typically shown as three intersecting facets with holistic sustainability at the focal point. The three pillars of sustainability help us comprehend that everything is interrelated, actions and repercussions should be balanced, and no human being, business, or country functions independently (Brightest, n.d.).

To promote wide-ranging involvement and collaboration, sustainable tourism development requires an educated presence of all pertinent stakeholders in addition to strong political leadership. Achieving sustainable tourism is an ongoing process that calls for ongoing impact monitoring and, where needed, the introduction of preventative and/or corrective actions (Sustainable Development, n.d.). Adhering to the concepts of sustainable tourism, also known as sustainable consumption in tourism can be characterized as any attitude or behavior related to consumption that aims to support ecological, social, cultural, and/or economic sustainability while on holiday (Mehmetoglu, 2009). The requirement to transition to more environmentally friendly lifestyles and consumption—that is, to limit one's consumption to environmentally friendly goods and services and avoid needless or wasteful consumption—is becoming increasingly generally understood on a worldwide scale (Sharpley, 2021). According to (Robaina & Madaleno, 2018), for companies, it is possible to minimize the environmental effects and impacts of the use of resources during the product life cycle (production-consumption-waste), with improvements in productivity and minimum costs. It is necessary to

reorient the production process towards sustainable development with more ecological processes, products, and services. In other words, it is possible to combine ecological efficiency with economic efficiency. At present, we can see that more tourism industry is actively taking an approach towards sustainability and promoting sustainable practices as well. Various case studies have explored the destinations that have successfully implemented sustainable tourism practices. For example, (Becken & McLennan, 2017) explores the interconnected usage of water and energy in environmentally certified hotels, The research shows that when hotels invest in saving water or energy, they often end up saving both, which benefits their finances and the environment. This finding supports the idea of managing resources together rather than separately. The study also suggests that while the connection between water, energy, and waste isn't as strong, using an integrated approach to manage these resources can still help hotels make better investment and management decisions. Similarly, another scholar (Sharma et al., 2023) conducted a study to identify green hotel attributes that influence visitors' adoption of eco-friendly hotel and their intentions to partake in green initiatives, where he found that green hotels' adoption of eco-innovations and engagement strategies significantly impact visitors' green consumption behaviors. The successful implementation of sustainable practices not only contributes to environmental conservation but also offers substantial economic benefits for hotels. By understanding the drivers of sustainable behavior, hotels can better design and promote their eco-friendly initiatives, fostering a culture of sustainability among guests. Sustainable consumption methods aim to provide each person with a comfortable and healthy life while taking into account Earth's limited resources. The environmental behavioral tendency of intense consumers to choose green alternatives is a key component in the realization of this discourse. The alternative paradigm for sustainable consumption acknowledges that altering lifestyle choices and consumption patterns should promote human well-being through social structures (Roy, 2021). According to (Nekmahmud et al., 2022), the tourism industry has to

become more environmentally sustainable by utilizing green products, buying locally produced bioproducts, encouraging eco-efficiency, and educating travelers about more ethical behavior.

The role of tourists in sustainable consumption

In our modern society, the creation of products and services frequently hurts the environment. Each manufactured product has an evolution that begins with something that comes from the earth, then travels to the user, and is ultimately recycled or discarded. A disproportionate amount of roughly 8% of carbon emissions is attributed to tourism as a whole, despite tourism being a consuming activity enjoyed by only a tiny percentage of the world's population. More specifically, the majority of tourism is non-essential lifestyle consumption. Considering that the richest 10% of the world's population accounts for around 50% of all carbon emissions related to lifestyle consumption, it follows that individual tourists contribute significantly and disproportionately to global warming, not to mention the other unfavorable effects of excessive tourism development. Therefore, it's reasonable sense that the total amount of tourism consumption has to be decreased to more sustainable levels (Sharpley, 2021). While individual limitations and desires play a role in the unsustainable choices and behaviors of individual consumers, environments that encourage unsustainable options may bear even more responsibility. For instance, private vehicle travel is frequently preferred over public transportation or non-motorized alternatives to transportation due to city layouts and infrastructure. Individual decisions are also limited by cultural significance and social conventions that shape how the person views the world. These constraints are less obvious but equally substantial (Thøgersen, 2023). The reality that not all forms of consumption place an equal strain on the is nevertheless crucial. In general, food, transportation, and housing are the three consumption categories that are responsible for the majority of environmental concerns. Therefore, it appears obvious that the primary focus of both engaged consumers and

sustainability policies should be on altering behavior in these three sectors of consumption (Thøgersen, 2023). The actions of humans as it stands today are an extreme waste of the world's resources. However, by purchasing things that have been created in methods that do not damage the earth, individual customers may effect enormous change by donating their money to firms that generate products without damaging the environment (Ford, 2023). In other words, adopting environmentally friendly practices of consumption and production is essential to ensure that development meets the needs of all people while reducing undue stress on the earth (Journal, 2024). Tourists typically have a favorable attitude toward the environment and do not want to engage in ways that negatively impact the ecosystem. The consumption habits of people need to change urgently to maintain a safer and healthier lifestyle for the present and future generations. Moreover, sustainable consumption behavior (approaching, purchasing, and consuming products in an environmentally friendly manner) is considered an indispensable requirement for promoting sustainable development (Nekmahmud et al., 2022). Social psychology theories explain why humans behave in specific ways, such as the theory of planned behavior, and propose that attitudes, among other things, influence behavior. Ajzen (1991) proposed the Theory of Planned Behavior (TPB), which is used to comprehend the intentions for behavior of customers in a variety of contexts. Three components contribute to TPB: perceived behavioral control, attitude, and subjective norm. The theory states that a person's view of behavior under the influence of society is referred to as subjective norms, and purpose arises from individual attitudes. In pro-environmental behavioral research, such as environmental psychology, green purchasing, green consumption, organic food consumption, and so forth, the TPB has been widely used in recent times. We present to you the theoretical frameworks that guide our investigation. To further investigate how attitudes, social factors, and perceived control of tourists impact their sustainable consumption habits within the larger context of tourism, we specifically draw on ideas from the Theory of Planned Behavior.

Developing measures to encourage eco-friendly behaviors can be aided by having an understanding of the elements that impact people's choices to engage in sustainable activities. By looking at the underlying psychological elements that affect individuals' behavioral intentions and behaviors, TPB offers a thorough framework to investigate this gap.

According to (Xiang et al., 2021), Sustainable tourists are eco-travelers who take environmental preservation into account when they travel. The environment in which people live is currently under a lot of strain due to the massive growth in consumption. Promoting sustainable ecotourism relies heavily on the choices and actions of travelers. A portion of the energy used for lodging, sightseeing, and entertainment is consumed during tourist activities, which raises carbon emissions. Additionally, the possibility of a crisis or safety concern for visitors during their unusually high-risk tourism consumption process can, in part, heighten their awareness of self-defense and create a negative mindset, which in turn may lead to different consumption behaviors that waste resources.

Tourists play a vital role in promoting sustainable consumption today's date. Sustainable tourists are green travelers who prioritize environmental conservation throughout their trips. Currently, the massive growth in consumption has put a significant strain on our everyday life environment. The key to fostering sustainable ecotourism is to understand tourist behavior and travel preferences. Tourist activity includes lodging, sightseeing, and entertainment, all of which use energy while contributing to carbon emissions (Xiang et al., 2021). Despite consumers' greater knowledge of sustainability challenges over the previous two decades, sustainability ideals have had little effect on tourist behavior (S & M, 2009). Finally, customer preference is impacted by consumption-related knowledge accessible through social media platforms. A tourist can begin a trip with a variety of relationships and may form new ones

during and/or after the vacation. When viewed through the lens of relationships, consumer behavior suggests that the following relationships influence consumer behavior: relationships with residents and environments, relationships between tourists and suppliers of tourism-related goods and services, and relationships between tourists and other tourists through recommendations and/or reviews made during or before tours (Kim & Kim, 2017). Tourist sustainable consumption includes decreasing the direct environmental impact of tourism and actively participating in responsible tourism (Xiang et al., 2021). Encouraging sustainable tourism requires addressing the travel preferences and behaviors of tourists. Accommodation, sightseeing, and entertainment are all examples of tourist activities that include energy consumption as well as contributing to greenhouse gas emissions (Xiang et al., 2021). To safeguard the hopes of future generations, sustainable consumption behavior, as a composite concept, refers to the process of achieving present needs through decreased or more sensible consumption and use of resources from nature, adoption of environmentally friendly lifestyle practices, adoption of green habits, and consumption of green products. Several factors have been linked to sustainable consumer behavior in the past, including values, attitudes, knowledge about the environment, sustainable lifestyles, and demography. Studies have determined that social networks affect consumers' attitudes, behaviors, and perceptions during the whole decision-making process for the purchasing process (Biswas & Roy, 2017). Tourists play a vital role in promoting sustainable consumerism, as does the combined effort of economic growth and ecological society. Sustainable tourists are green travelers who prioritize environmental conservation throughout their trips.

According to (Nekmahmud et al., 2022), tourist sustainable consumption (TSC) is described as "sustainable practices friendly consumption, i.e. purchase green goods or services, anti-consumption, and sustainable discarding practices while traveling." Visitors are increasingly

interested in environmentally friendly products (for example, eco-friendly lodgings, restaurants, ships for cruises, airline companies, destinations, hotels and resorts, and casinos) and have a willingness to get involved in sustainable consumption. Tourist activities include lodging, sightseeing, and entertainment, all of which require resources while contributing to carbon emissions. Understanding the link between tourists' consumption behavior in an uncommon setting and their desire to replace consumption may increase visitors' willingness to participate in sustainable tourism consumption (Xiang et al., 2021).

According to a survey (Haitmy, 2020), 17% of European shoppers look for sustainable brands and product information before making a purchase. The survey also found variances in opinions based on gender and age, with young males showing a greater interest in learning if the company practices sustainability. According to studies, implementing sustainable operational procedures such as environmental buying improves a company's profitability, cost of products supplied, and overall performance. Similarly, (Xiang et al., 2021) found that consumers' personality traits have a substantial impact on their moral points of view and that certain aspects of consumers' moral beliefs have a strong predictive effect on their desire to purchase sustainable products. The findings indicate that when personal identification is important, the goal of overcoming the self has a greater impact on sustainable spending than the aim to advance one's self-interest. When social identity is important, the impact of the aim to rise above the self and promote one's self-interest in sustainable purchasing is comparable.

To ensure sustainable tourism consumption, it is crucial to recognize present tourist consumption patterns as well as their desire for environmentally friendly products and services. As a result, the purpose of this study is to look into tourists' consumption values and behavior when it comes to using mobile applications for sustainable consumption while on vacation (Nekmahmud et al., 2022). In recent years, investigations on the variables affecting sustainable

consumption intention have concentrated on customer behavior and cognition (Xiang et al., 2021), They observed that customers' innovation consciousness influences their propensity to consume sustainably. Xiang et al discovered that customer personality traits have significant effects on their moral views and that certain aspects of consumers' moral beliefs had a strong predicting effect on their desire to purchase sustainable products. The important point, however, is that these research studies currently focus on the level to which consumers are willing to modify their behavior as tourists; little or no consideration has been given primarily to the importance of tourism as a form of consumption, and, undoubtedly, why visitors aren't as willing to adapt their behavior (in particular, minimize their consumption of travel and tourism) in comparison to other forms of consumption (Sharpley, 2021). Sustainable tourism consumption could mean traveling more locally, staying longer when traveling long distances, using the most efficient mode of transportation, or paying significantly more to minimize the trip's overall environmental effects in terms of emissions, energy use, and environmental damage are examples of sustainable tourism consumption.

Digitalization in Tourism Industry

Role of Digitalization in promoting Sustainable Consumption Practices

One of the megatrends that will define the twenty-first century is digitalization. The widespread acceptance of digitization by people, businesses, and governments is progressively propelling economic growth. Additionally, digitization is frequently commended for having a major and advantageous effect on economic expansion, and it is still changing society, the workplace, and daily life (Bäckström et al., 2023). Digitization has become a disruptive factor across many different sectors and companies. The introduction of digital technologies and their broad use have completely changed how companies function, interact, and engage with stakeholders (N.

Roy & Pandey Sharma, 2022). In addition to increasing tourism's competitiveness, innovation and the development of modern technology for communication and information have made it easier for travelers to obtain information. The age distribution of travelers who use contemporary information and communication technologies to plan their trips is comparable to that of Internet users (Bănescu et al., 2021). According to (Kostruba, 2018), technology has emerged as a crucial tool for the sustainable tourism sector, assisting in minimizing the negative effects of travel on the environment and enhancing the quality of experience for tourists by offering tools for real-time information, personalized recommendations, and seamless transactions (for example, mobile apps can offer information about nearby restaurants, attractions, and events, and electronic wallets can make it simpler to pay for goods and services). The way we live and travel is significantly impacted by platforms, electronic payment methods, and social media, to name several of them. Additionally, according to Digital Transition of Tourism (n.d.), it may offer travelers integrated, user-friendly, remote information on events, activities, maps, services, offers, readily available infrastructure, sustainability, and safety standards.

The dematerialization of communication mediums and procedures eliminates the demand for tangible documents, lowering paper usage and its environmental effect. Digitalization, such as e-tickets, smartphone applications, and online booking platforms, makes it easier to organize responsible travel. Similarly, digitalization has permitted the introduction of car-sharing services, such as electric automobiles and scooters, which contribute to lower greenhouse gas emissions. Furthermore, innovation and new technology have made it simpler for tourists to get details about environmentally friendly practices (Ezus, n.d.). Travelers may find and hire eco-friendly vehicles (such as electric vehicles, buses, and bicycles) via smartphone apps, and smart city technology can ease traffic jams and enhance efficiency. Energy-efficient appliances,

lighting controls, and smart thermostats may all contribute to lower energy expenses and waste. Furthermore, hotels and resorts may be powered by sustainable energy sources like wind turbines and solar panels, which helps lessen dependency on fossil fuels. Processes may be streamlined, less work is required, and paper waste can be decreased with the use of digitalization and automation. Digital check-in and payment methods, for instance, can minimize the need for wasteful usage of paper, while automation can lower the amount of work required of humans and the resulting carbon emissions (Kostruba, 2018). Numerous aspects of consumption, such as logistics, the design of goods, company strategies, and consumer behavior, have changed as a result of digitalization. The Internet has been one of the most significant materializations of digitalization in terms of consumption. The World Wide Web was frequently viewed in its early years as collaborative, free, anti-commercial, and unstable. Since then, it has mostly evolved into a commercial endeavor and is now crucial to every facet of consumption (Bäckström et al., 2023). Tourism has changed in the current economic climate, which is defined by globalization and an increase in the use of technological innovations. Trade in goods related to tourism is gradually moving from a physical to a virtual and conceptual dimension, and new communication channels have made it much easier to balance supply and demand (Bǎnescu et al.,2021). Numerous internet resources offer guidance about how you can travel in a more ecologically responsible manner. Some of these strategies include recommending low-carbon travel routes and highlighting tourist locations with sustainability regulations in place. The development of instruments for tracking and evaluating the negative environmental effects of tourism has also been made feasible by digitization. These resources assist companies operating in the industry in determining opportunities to lessen their impact and put sustainability plans into action. Additionally, they provide tourists the choice to select travel routes that are more in line with sustainable development objectives and less harmful to the environment (Ezus, n.d.).

The research by Atwood & Atwood (2024) found that there are applications and digital platforms that recommend environmentally beneficial modes of transportation and incorporate features like measuring emissions and comparing the environmental impacts of different modes of transportation. Modern technological solutions maximize environmentally responsible travel by combining environmental effects, weather, and traffic factors with real-time data on other routes. Additionally, As more people switch to electric vehicles, such as automobiles and buses, air quality improves and greenhouse gas emissions are decreased. In addition, shared mobility products and services, electric scooters, and bike rentals have gained popularity as alternatives to traditional automobile rentals, encouraging more environmentally friendly and healthiest modes of transportation (Nirma_Admin, 2024). (Atwood & Atwood, 2024) emphasized once again that special booking platforms now give detailed eco-ratings, showcasing the ecologically conscious efforts of lodgings, in addition to listings. They help tourists make thoughtful decisions by including eco-certifications, carbon footprint statistics, and details on community assistance efforts.

Businesses may build travel experiences that will be remembered for centuries to come by embracing these advances responsibly and keeping an eye on sustainability principles and individualized service (Ready, 2023). To guarantee that technology promotes sustainable tourism aims and is in line with larger sustainability objectives, stakeholders must cooperate and coordinate their efforts in addition to providing the necessary regulation and monitoring. It is imperative to adopt sustainable tourism practices to safeguard the environment and conserve both cultural and natural assets (Kostruba, 2018).

The Impact of Digital Platforms on Shaping Sustainable Tourism Practices

According to conducted by (Kostruba, 2018), found that raveling alone accounts for almost 8% of global carbon emissions. By examining this data, companies, and decision-makers may pinpoint high-impact regions and create focused strategies to lessen their carbon footprint. The growing desire for environmentally friendly journeys and the industry's efforts to promote eco-friendly lodging and responsible tourism are both highlighted by a few figures and data. These emphasize the significance of environmentally friendly travel as well as the growing awareness of the issue and the steps that tourists, lodging providers, and the travel industry are taking to support it. One of the main trends in travel, according to Altexsoft (2022) and other industry experts is also sustainability. According to a study conducted by Virtuoso poll from 2021, where 70% of participants said that traveling responsibly improves their experience. However, a major concern now is the travel and tourist industry's dreadful environmental effects. In light of these difficulties, eco-friendly travel is becoming more and more of a morally required reaction, as part of a creative strategy that values the environment and nearby communities.

 Digital technologies are paving the way for a future where travel and sustainability go hand in hand, from innovations in eco-friendly transportation to the use of digital platforms for more effective management of tourist flows (Ezus, n.d.). Furthermore, the use of technological innovations has the potential to promote sustainable tourism practices by increasing operational efficiency, lowering waste and emissions, and improving the visitor experience (Archi et al., 2023). The rising digitalization of society has a significant influence on consumer behaviors. The digitalization of social behaviors has emerged as a distinct trend, influencing the near future in many varied and deep ways (Mu et al., 2019). For instance, comparative research of the most popular online review sites revealed that mobile technology has revolutionized the way travelers plan and enjoy their travels (Z. Xiang et al., 2017). Additionally, they discovered that real-time contact between travelers and providers of tourism services has been made easier

by mobile technology, which has enhanced satisfaction and produced more individualized experiences.

 This ethos's use of technology has completely changed the way that travel is planned, experienced, and contributed to, resulting in a new era of ethical and engaging travel. This enables travelers to make conscious decisions and coordinate their vacation plans with cultural sensitivity and environmental principles. Subsequently, (Buhalis & Law, 2008) describes how technology has evolved into a vital tool for the travel business, changing the way travelers organize, schedule, and enjoy their travels. This covers using booking websites, smartphone apps, virtual reality experiences, and online travel agents. Responsible tourism practices and useful information are provided by using Internet platforms for sustainable destination research. With the availability of in-depth guides, reviews, and community forums, travelers may now make better-informed selections that are consistent with their cultural and environmental values. Additionally, there are a ton of cutting-edge applications available to assist in creating sustainable travel plans. These resources include information about lesser-known, off-the-beaten-path locations that support ethical travel (Atwood, 2024). It is also without dispute that consumption needs to become more sustainable; therefore, using digitization as a tool for sustainable consumption will be crucial. Because of the reduced transaction costs and enhanced economies of scale that lead to more efficient consumption, it saves customers money and time (Bäckström et al., 2023). For instance, (Hlee et al., 2018) discovered that businesses may play significant roles in online feedback interaction settings by acting as spectators, mediators, facilitators, or participants on travel-related information platforms like TripAdvisor and Yelps. Travelers provide value for themselves, other travelers, tourism product suppliers, and destination marketing groups because they frequently share their trip experiences on travel-related information platforms. Travel-related information platforms facilitate the posting of reviews and opinions by travelers about tourism services (such as

dining and lodging experiences). As a result, they serve as both an important source of marketing data about tourism experiences for service providers and a helpful co-creation tool for other travelers. The relationship between sustainable habits and a person's values, beliefs, and identity is known as the "individual self-aspect in shift." When consumers' individual preferences and sense of self are in line with sustainability, they have a greater tendency to make sustainable decisions (ASGARKHANI & FERNANDO, 2021).

By leveraging technology, it is feasible to offer more appealing tourist experiences for new travelers who are always looking for a purpose in their journeys. Smartphones have changed customer behavior since they allow them to be more connected at all times and from any location. The features of the new mobile phones enable countless applications and greatly enhance their functionality (Dias & Afonso, 2021). Applications for smartphones, or "apps," provide people with a variety of ways to evaluate the relationships between behavior and welfare (e.g., physical activity and medication for better health; Knight 2014) or between people and science. Mobile apps that connect consumer behavior to biodiversity consequences can provide a real-time purchase decision-making tool and prompt encouragement of sustainable consumption (Nghiem & Carrasco, 2016). According to Archi et al. (2023), mobile applications support responsible tourist behaviors, cultural heritage protection, and the preservation of the environment. These days, a big part of building a more sustainable tourist industry is done using smartphone apps. Using mobile applications, travelers may make more environmentally responsible and intelligent decisions. They can give visitors up-to-date information on the resources in the area, such as water and electricity usage. This enables individuals to choose wisely which activities to partake in as well as which to avoid (Embarkingonvoyage, 2020). The usage of mobile applications, or apps, offers another chance to influence customers' purchasing decisions as mobile devices become more crucial to a

customer's path to purchase. Eco- and health-conscious shoppers are using mobile applications more and more to identify sustainable and healthy products (Weber, 2021). Encouraging tourists to use technology in the pursuit of sustainable tourism significantly improves their travel experiences and guarantees a beneficial global impact. It is now essential to recognize and take advantage of technology's ability to protect the environment through responsible travel to create a sustainable and bright future (Atwood, 2024).

Sustainable tourism and technology are strongly related. To help local governments and tourism groups make educated decisions regarding infrastructure, laws, and regulations that support sustainable tourism practices, technology may offer useful data about visitor behavior and preferences. This can support local communities' well-being, limit the negative effects of the tourism industry on natural and cultural resources, and develop a more sustainable tourist sector. Together, these two domains have the potential to foster a more responsible and sustainable travel and tourism sector (Kostruba, 2018).

The Effectiveness of Mobile Apps in Promoting Sustainable Behavior and Practices

Nowadays, a lot of applications that aim to encourage sustainability concentrate on shaping consumer behavior Isensee et al. (2022). The potential of mobile technology, with its emphasis on features like location monitoring and ubiquitous internet connectivity, for sustainability issues has long been acknowledged. While the long-term implications of using apps in transport, pollution control, disposal of waste, and conservation of water are less certain, they have shown promise in reducing energy usage. Additionally, there is proof that there are strong, positive correlations between the usage of apps, consequences awareness, and taking accountability for "environmental citizen behaviors" (Annadanam & Kota, 2019). Even if there

are many modern eco-friendly technologies accessible, they cannot ensure that sustainable practices will be successfully implemented on their own. Human conduct is the primary cause of environmental issues, and altering it may usually minimize or even eliminate the severity of negative environmental consequences. This makes shifting human behavior the most crucial aspect of attaining environmental sustainability (Xu et al., 2020). With smartphones being used by everyone, mobile applications have emerged as a major force in the sustainability movement. They provide useful resources for leading a more environmentally conscious life, such as carbon footprint tracking and recycling assistance. In addition to increasing knowledge, eco-friendly applications motivate users to make an effort to lead more sustainably in their everyday lives (Emb, 2024).

Mobile applications are becoming an essential part of the travel and tourism sector, giving companies a way to interact with clients and give them a simple, tailored experience. Tourism organizations must have a strong online presence on mobile platforms as more and more individuals use their smartphones for travel research and booking (Alghizzawi et al., 2023). Mobile applications help in the identification and comprehension of travel-related information, goods, and services for customers, and developers frequently employ them in the creation of marketing plans. There are several advantages that mobile applications provide consumers. According to Kadirhan (2023), tourism organizations employ mobile apps not only to make their websites responsive to mobile devices but also to enhance their applications via the integration of diverse technologies. This allows them to execute fundamental marketing and promotional tasks and establish a durable competitive edge. Apps are becoming more and more important in travel decisions and behavior for tourists at every level of tourism consumption (Valeriia Khodzhaeva, 2020). There are a ton of novel approaches and applications for smartphones emerging. This covers applications tailored to tourists, apps for travel and transportation, networking apps, and, in the end, apps that expand social networking to

automobiles and other "things" people require. Apps are becoming more and more important in travelers' decisions and actions across the whole tourism consumption process (Dickinson et al., 2012). These applications allow users to identify local events, locate retailers, compare prices, and learn about discounts. Because mobile applications are easier to use than websites, users may perform better every day as a result. Stated differently, the primary driver behind the increasing adoption of cell phones is their effortless access to the Internet. In light of this, cell phones have also altered the tourist industry's business practices and organizational structure. Travel agencies encourage their clients to make online purchases by offering a variety of smartphone applications (Hatamifar et al., 2021).

The key point is that, to date, these studies have primarily examined how much people are willing to change their behavior when traveling; little to no emphasis has been placed on the importance of tourism as a form of consumption or, perhaps more importantly, the reasons why travelers are less likely to change their behavior when compared to other types of consumption (Sharpley, 2021). Numerous studies of mobile applications have effectively shown how beneficial they are in encouraging sustainable behaviors. The "Too Good To Go" app, for instance, has successfully decreased food waste by allowing consumers to connect with excess food from nearby local places. According to research on "Too Good To Go" by Van Der Haar & Zeinstra (2019), the app has no effect on transforming attitudes, motivation, or behavior because its present users are already very conscious of the need to prevent food waste. To maximize its impact, he recommended that the app try to engage users who tend to be less informed and interested in the fight against food waste. The participants proposed that the efficacy and appeal of the app may be improved by broadening the range of participating retailers and enabling another person to pick up the magic box. Research on the app's potential to promote sustainable tourism behaviors is lacking because it is also often used when traveling.

Thus, the purpose of this study is to investigate how "Too Good To Go" might be used to promote sustainable tourism by reaching a broader population and using a wider range of approaches to lessen food waste when traveling. Additionally, to better understand and improve the app's efficacy in encouraging sustainable tourism habits, we will look at what exactly drives travelers to use it while traveling and connect these motives with the Theory of Planned Behavior (TPB) and Value-Belief Norm Theory (VBN). Comparably, another study published in Environmental Impact Assessment Review (Bode & Umuerri, 2021) looked at the Ecosia trip app, which uses trip booking ads income to pay for tree planting. The study evaluated how the app affected environmentally friendly travel and the decrease of carbon footprints, and it was carried out with Ecosia Travel customers. According to research, the app successfully encourages eco-aware passengers who value convenience and environmental advantages by connecting reservations made for travel with reforestation projects.

However, even though the development of mobile devices has generally improved travel experiences significantly (Dickinson et al., 2012), more research is still needed to identify the drawbacks and shortcomings of mobile applications when used on a holiday. The security, dependability, and legality of the service provided by this digital mobile app system have frequently drawn criticism (Rashid et al., 2020). One of the drawbacks of adopting mobile apps in tourism is the fact not all visitors are proficient in technology, particularly middle-aged individuals who frequently take tours and fall into the tourist group. Given that each application is created using what is known about using or browsing the internet, (Rashid et al., 2020). These days, mobile applications have a lot of promise to help improve sustainable travel since they offer travelers and destination management organizations (DMOs) useful information. Paper maps and guidebooks are becoming obsolete in favor of highly useful mobile

applications for the travel and tourism sector. These days, professional content, knowledge, affordability, and interaction may all be found in one smartphone application (Valeriia Khodzhaeva, 2020). Furthermore, by emphasizing sustainable travel techniques these applications enable tourists to ethically explore worldwide while protecting its natural beauty and cultural legacy for future generations (Rana, 2023).

Theoretical Orientation: Consumer Behavior in Sustainable Tourism

It is important to comprehend consumer behavior if one intends to encourage sustainable tourism practices. The value-believe-norm theory (VBN) and the theory of planned behavior (TPB), which provide important insights into the variables influencing travelers' adoption of sustainable consumption habits, will be the main topics of this study. The applicability of these models to sustainable tourism is examined in this section. While the value-belief-norm model for the environment highlights the significance of moral components when putting environmental behaviors in motion, the theory of planned behavior places more emphasis on the attitudinal aspects of conduct (Del Carmen Aguilar-Luzón et al., 2012). Analyzing the two models and contrasting their prediction capacity and degree of fit for sustainable tourism consumption behaviors was the aim of this study.

Theory of Planned Behavior (TPB)
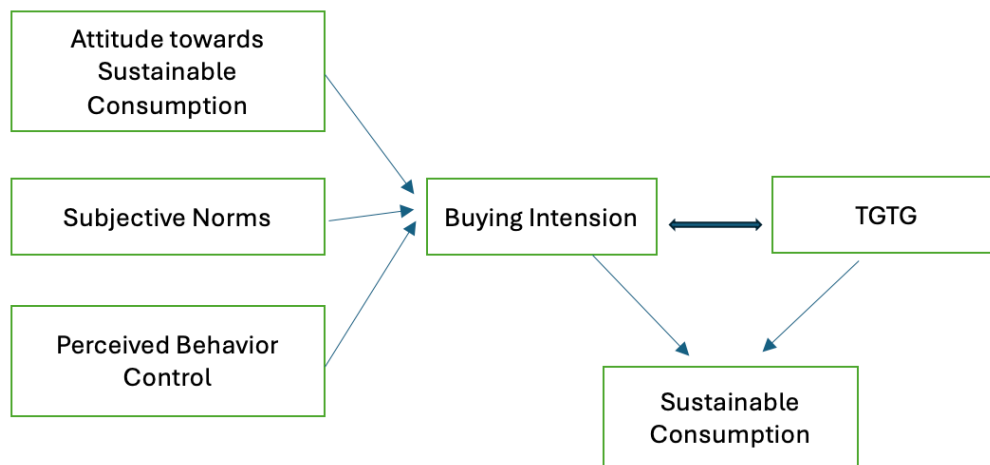
Figure 3: Theory of Planned Behavior

Adapted from Ajzen (1991) and Del Carmen Aguilar-Luzón et al. (2012)

Ajzen (1991) proposed the Theory of Planned Behavior (TPB), which is used to comprehend customers' behavioral intentions in a variety of contexts (Park and Kwon, 2017). Three factors make up TPB: perceived behavioral control, attitude, and subjective norm. The theory states that subjective norms, which are a person's understanding of how others behave, and individual attitudes are what lead to intention (Nekmahmud et al., 2022).

The theory of planned behavior (TPB) has been used by academics to guide numerous studies aimed at explaining why and how consumers might act sustainably. They have offered empirical support for the connection between consumer perceptions of regulated behavior, attitudes, and subjective standards. To identify the many elements associated with sustainable consumer behavior, the present study endeavors to comprehend consumer consumption behavior towards the "Too Good To Go" app during trips, ultimately resulting in responsible travel (Sheoran & Kumar, 2021). The idea of reasoned action concentrated on forecasting

human intents about making decisions, making purchases, etc. Perceived controlled behavior is an additional latent variable that is included in TPB. Three factors—attitude, subjective standards, and perceived controlled behavior—are analyzed by TPB in an attempt to determine the intentions of customers toward a certain action. Additionally, TPB emphasized that the most accurate indicator of customer behavior is intention (Sheoran & Kumar, 2021). The TPB further posits that there are three conceptually independent antecedents or determinants of intention. The degree to which every one of these determinants is present contributes to an individual's desire to carry out a certain conduct. In essence, attitude is a mentality that is shaped by an individual's positive or negative perception of a certain behavior (Sheoran & Kumar, 2021). Our attitudes toward certain things and social entities are reflected in the attitudes we carry with us. In a similar vein, we experience these emotions and ideas when we participate in particular actions (i.e., attitude toward the activity). Engaging in these actions can elicit either positive or negative appraisals from us, such as favorable-unfavorable, pleasant-unpleasant, or good-bad (Nickell and Hinsz, 2023). The likelihood of a customer engaging in a behavior will decrease if they have a negative attitude toward it. To illustrate, travelers are more inclined to select eco-friendly lodging if they think it has a good environmental impact. Another illustration of this is the question of whether or not people consider food waste to be a significant problem deserving of mitigation measures. Whether considered in the context of the TPB or not, it seems to be among the most significant factors found in the research. Because they think the "Too Good To Go" app reduces food waste and benefits local businesses, tourists have good opinions toward using it. For instance, a visitor to Paris may utilize the app to purchase an extra croissant from a nearby bakery in the belief that doing so will reduce waste and boost the local economy. Research indicates that customers have a negative attitude towards food waste due to feelings of guilt and anxiety over it (Sheoran & Kumar, 2021). This attitude is indicative of one important aspect that influences a tourist's intentions and

subsequent likelihood to engage in the action. Understanding specific cases becomes more difficult since consumer purchase decisions frequently involve a wide range of intricate motives. When considered separately, certain attitudes could indicate a particular action; however, this may not hold when the entire buying decision is taken into account. New attitudes enter the picture, influencing behavior in different ways, diminishing the effect of old attitudes, and producing different results. Individuals may have a good mentality, yet when it comes to using their disposable income to promote changes in the environment or animal welfare, they mostly play the passive position of the consumer (Vermeir & Verbeke, 2006).

Subjective norms are the societal pressures placed on an individual to do a certain behavior—or not perform it at all. That is, whether or not TPB is involved, people's actions may be impacted by what society considers appropriate behavior. This can also apply to individual standards or self-imposed expectations, which might be motivated by shame or moral principles (Sheoran & Kumar, 2021). Though they could have a good outlook, individuals generally play a passive role as consumers when it comes to allocating their available funds to support changes in the environment or animal welfare. Tourists have a wide range of complicated reasons when making purchases, which makes it difficult to comprehend specific cases. When viewed in isolation, certain attitudes could point to particular behaviors, but this might not hold when looking at the bigger picture of the buying choice (Vermeir & Verbeke, 2006). However, for these subjective social constraints to affect our actions, we need to be driven to follow our perceptions of these significant people' wants (Hinsz and Nickell, 2023). This could involve the impact of friends, family, and cultural norms on eco-friendly travel in the wider context of tourism. Travelers may have a greater sense of duty to perform environmentally friendly behavior if they believe that significant others in their lives respect sustainable tourism. Travelers may feel pressured to adopt a more sustainable lifestyle if their friends and family use the app and are proponents of sustainability. To join the conversation

and share their own experiences, a traveler whose friends regularly publish their ethical food choices on social media might be motivated to utilize the app while traveling. Food waste, however, is a behavior that is often only observed by the generator; according to studies by Stefan et al. (2013) and Graham-Rowe et al. (2014), subjective standards had no bearing on intention and had little relationship with food waste behavior (Sheoran & Kumar, 2021). Our perception of our capacity to engage in the activity known as perceived behavioral control has an impact on our intent to act as well. We are more inclined to participate in the behavior if we think we can do so successfully. Furthermore, there is a connection between intentions and perceived behavioral control. We are less likely to aim to carry out the conduct if we believe we lack the ability or capability to do so. According to Ajzen (1991), intentions can only affect behavior when it is controlled voluntarily. We cannot aim to engage in the conduct if we don't think we can do it successfully. When volitional control of the behavior is decreased, it is proposed that conduct can be directly predicted by perceived behavioral control (Nickell and Hinsz, 2023). This encompasses elements like the accessibility of eco-friendly choices and travelers' self-assurance in their capacity to participate in eco-friendly activities. For instance, travelers' trust in interacting with the app is increased by its simplicity of use and the availability of collaborating companies. The application facilitates easy navigation and strengthens the user's ability to make sustainable decisions by allowing users to quickly locate a large number of eateries that are selling surplus food. The extent to which this perceived behavioral control exists affects food purchasing and planning more than the objective of reducing food waste (Sheoran & Kumar, 2021). According to Verbeke and Vermeir (2006), another aspect of behavioral control is perceived consumer effectiveness (PCE), which refers to the extent to which a customer believes that fixing problems on his own may help. According to Roberts (1996), consumers need to be persuaded that their actions will positively affect the environment or effectively combat social injustice or environmental degradation in order to be

motivated to modify their behavior. The individual selfaspect in SHIFT, according to (ASGARKHANI & FERNANDO, 2021), is the relationship between sustainable behaviors and a person's values, beliefs, and identity. When sustainability is in line with a consumer's own values and sense of identity, that consumer is more likely to make sustainable decisions (White et al., 2019). Furthermore, studies have demonstrated that consumers are more inclined to act in a way that is socially acceptable in public settings, such as social media, where others may observe and assess what they do. Customers are more inclined to make sustainable decisions in public settings or when status issues are in play.

Consumers' propensity to engage in sustainable purchasing is significantly influenced by their awareness of innovation, according to the findings of another study by Xiang et al. It was discovered that some aspects of consumers' moral views significantly predict their desire to purchase sustainable products and that customers' moral convictions are significantly influenced by their personality traits. The findings indicate that when personal identification is important, going outside oneself has a greater impact on sustainable spending than trying to further one's interests. Similar effects are seen when social identity is important, such as when someone wants to use sustainable consumerism to further their interests and transcend the self. A comprehensive knowledge of tourist behavior towards sustainable consumption while traveling remains lacking, despite several research documenting hurdles and consumer profiles (Vermeir & Verbeke, 2006). Therefore, the current study's goals are to: (1) ascertain travelers' viewpoints and consumption patterns regarding the "Too Good To Go" app when they are on vacation; and (2) ascertain the elements influencing their propensity to utilize the app to encourage sustainable consumption in the context of the contemporary tourism sector.

Value Belief Norm Theory (VBN)

Stern et al. initially developed the VBN theory to explain how human values affect behavior within an environmentalist framework. According to this theory, there are causal links between values, beliefs, norms, and behaviors (Ghazali et al., 2019). Values, beliefs, and personal norms are all included in VBN theory, which also explains the causal relationship between behaviors and values, including the new ecological paradigm (EP), awareness of consequences (AC), ascription of responsibility (AR), and personal norms (PN). It emphasizes the significance of bringing humans and the environment into harmony and makes the case that awareness of the repercussions of actions and an awareness of social obligation can impact behavior related to environmental protection. The VBN model encompasses beliefs, principles, norms, and green behavior. It suggests a hierarchical link between these socio-psychological components and their possible impacts on other factors as well as on each other (Hong et al., 2024). A framework for examining normative elements that support sustainable attitudes and behaviors is provided by Stern's value-belief-norm theory of environmentalism (VBN theory; Stern, 2000, Stern et al., 1999). "A desirable trans situational goal varying in importance, which serves as a guiding principle in the life of a person or other social entity" is how Schwartz (1992, p. 21) defines a value (Roberts, 1996). The VBN Theory states that people have a sense of assigned responsibility when they are conscious of the possible harm to environmental elements that they value and the steps they may perform to lessen the harm. They are thus motivated to act in an ecologically conscious manner by these personal norms. In essence, the VBN Theory offers a thorough framework for comprehending the mental processes that influence people to adopt sustainable behaviors (Ciocirlan et al., 2020).

Four distinct environmental values—egoistic, hedonistic, biospheric, and altruistic—were created by (De Groot & Steg, 2007). Egoistic values concentrate on gaining more money or status as resources. Enhancing pleasure and minimizing work are the goals of hedonistic values.

Biospheric values place a strong emphasis on respecting the natural world and considering how certain acts may affect the environment. Altruistic principles prioritize the well-being of others. Pro-environmental behavior is adversely correlated with egoistic and hedonic values but positively correlated with biospheric and altruistic values. The "Too Good To Go" app and sustainable consumption are the subject of this research, and the VBN Theory is especially relevant in explaining why travelers might want to utilize the app to minimize food waste. According to the theory, tourists who have strong environmental values—such as egoistic, altruistic, or biospheric values—are more likely to be aware of the harmful effects of food waste. They may also be more conscious of others' concerns. This knowledge encourages people to see the value of combating food waste and to recognize their part in reducing it. Travelers are more inclined to mitigate food waste by using apps like "Too Good To Go" when these ideas are combined with a strong feeling of moral obligation or personal norms. The VBN model states that the core of the Norm Activation Model (NAM) theory is norms and behaviors related to improving oneself (EV), the biosphere (BV), and others (AV). EP is an ecological worldview as opposed to universal and immutable principles (Hong et al., 2024). The VBN theory, which emphasizes personal norms, values, and beliefs as factors influencing behavior, has undergone extensive empirical testing. Values, ecological beliefs based on the new ecological paradigm (NEP), awareness of consequences (AC), ascription of responsibility (AR), personal norms (PN), and environmental behavior are all linked together in a causal framework (Stern et al., 1999).

The components of Value Belief Norm Theory (VBN)

A person acts according to their values. Environmental behavior is based on values, which also influence personal norms (PN) and the new ecological paradigm (EP). It is believed that values affect behavior indirectly by drawing attention to and shaping the perception of information

that is consistent with their values (Roberts, 1996). Unlike beliefs, values are seen as elements impacting attitudes and behaviors and function as a solid system in an individual's life. The intention to consume sustainably can be influenced by a variety of values (Hong et al., 2024). According to the categorization of values revealed in earlier research (Stern & Dietz, 1994; Stern, Dietz, & Guagnano, 1995; Stern, Dietz, & Kalof, 1993), pro-environmental activities are based on three value orientations. The biospheric value (Vbio) orientation is the first, and it is described theoretically as those life-guiding principles that demonstrate an individual's commitment to nonhuman species and the biosphere overall (Del Carmen Aguilar-Luzón et al., 2012). A traveler with strong biospheric values, for instance, would be very driven to practice environmentally friendly habits like limiting back on food waste.

Concepts Individual norms and beliefs are directly related, according to VBN theory. Stated differently, individuals who maintain their customary ideas toward environmental sustainability are more inclined to get PN for actions that support the environment. EP is a term used to describe the fundamental ecological worldview and mindset that emphasizes the interdependence of nature and humanity (Hong et al., 2024). According to Del Carmen Aguilar-Luzón et al. (2012), NEP beliefs are defined by Stern et al. (1999) and Stern (2000) as those broad worldviews exhibited in people's stated beliefs about their interactions with the environment and nature. Weakly, but favorably, the NEP is associated with pro-environmental behavior. It will thus affect the possibility of engaging in pro-environmental conduct in the future (EMMA BROUNS, 2018).

Personal Norms are often defined as unofficial guidelines for behavior or thought patterns that are activated when opinions about climate change are discussed. Personal norms, on the other hand, are sentiments of moral duty or obligation to carry out or refrain from particular acts. Numerous empirical studies suggest that a strong feeling of personal responsibility is essential for converting thoughts about climate change into action (EMMA BROUNS, 2018). One of

the main factors driving norm-based pro-environmental conduct is the realization that not adopting the goal behavior would have negative repercussions and that they should bear responsibility for those consequences. Only then can individual norms become activated (Hong et al., 2024). People's value orientations impact their climate change views, which in turn trigger personal norms that make them feel obligated and responsible to act in a way that benefits the environment. Nevertheless, studies reveal that individuals require a sense of freedom to act in a way that is environmentally beneficial in addition to a sense of obligation and responsibility (personal norms). Efficacy is this sense of capability or the conviction that a particular action is effective (Lubell, 2002; Stern, 2000; Steg & de Groot, 2019). Consequently, the shift to pro-environmental behavior is dependent on both effectiveness and norms (EMMA BROUNS, 2018). According to Ünal et al. (2019), those who recognize that they have the power to lessen the negative effects of their behavior also feel obligated to support that behavior morally. According to research, giving people more responsibility raises their Personal Norms (Bronfman et al., 2015; Rezvani et al., 2017) (Hong et al., 2024).

Steg, Dreijerink, and Abrahamse (2005) claim that when AC and AR predict certain behaviors, the prediction value of Value-Belief-Norm models increases. These particular beliefs cause personal norms to activate, and personal norms can have an impact on a range of sustainable behaviors. It also establishes if the person believes that acting in an ecologically responsible manner is ethically required (Lind et al., 2015). Pro-social behavior, such as selecting ecologically friendly forms of transportation, should arise from personal norms about such behavior, according to the norm-activation hypothesis (Schwartz, 1977). According to the theory, people's views about their surroundings have an impact on their perceptions of the positive and negative effects of particular behaviors as well as their belief in their capacity to stop these behaviors (ascription of responsibility, AR). The theory that norm-activation may be significant for a range of sustainable behaviors has received support from several studies (Stern

et al., 1993, Guagnano, 1995). The utilization of VBN Theory in this study involves the investigation and interpretation of travelers' reasons for utilizing the "Too Good To Go" application. Strong environmentalists are probably aware of the harmful effects of food waste and feel morally obligated to minimize it. They may utilize the app as a workable way to reduce food waste when traveling because of this sense of duty and the conviction that their actions may have an impact. To find out how travelers' values, beliefs, and social conventions affect their decision to use the "Too Good To Go" app, we conducted in-depth qualitative interviews with the travelers. We want to investigate the underlying motives and behaviors of visitors utilizing the "Too Good To Go" app by examining the data through the lenses of VBN Theory and finding trends and connections between these psychological variables and real-world behavior.

Sustainable Food Consumption in Tourism

Food is essential to tourism, but improper treatment of it has serious negative effects on the economy, society, and ecology, aggravating global issues Singh and others (2024). Fuel and electricity are frequently the first things that spring to mind when people consider the causes of climate change. But food, which our bodies require as fuel, is frequently disregarded. With 1.5 billion people traveling the world in 2019—all of whom need to eat—tourism plays a major role in the 40% of food produced annually that is wasted (and then carried, again, frequently to a landfill). Furthermore, despite the industry's disproportionate contribution to food waste, it is also at the forefront of implementing strategies to effectively reduce and manage the waste (Staff and Staff, 2023).

Food waste is particularly troublesome in the tourist sector because excessive consumption combined with solid waste causes long-term harm to local communities' social and environmental conditions. Reducing food waste is crucial to cutting expenses in the low profit-margin tourist sector since it accounts for 40% of the total solid waste produced by resorts (Abhilash, 2015). Furthermore, the food waste in the globe is estimated to be approximately one-third, with the hotel sector alone accounting for roughly 18% of it. A significant source of greenhouse gas emissions is all these tons of garbage (Altexsoft, 2022). Cane and Parra (2020) describe food waste as "any alteration in the food's availability, its suitability for consumption, or its hygienic attributes or quality, that prevents it from being consumed by humans." One of the industries that produces the greatest waste is the restaurants and catering sector because of improper storage management and excessive servings that are typically thrown away. Therefore, to improve productivity, save expenses, lessen their impact on the environment, and promote food security, tourist enterprises must handle food waste. Advancement of sustainable practices and reduction of food waste are major responsibilities of tourism enterprises, which are involved in many phases of food management. According to the UNWTO, 80 billion meals were served to tourists in 2019. The food service industry, which includes tourism, accounts for a significant portion of consumption-related food waste (26%); the annual cost of food waste in the food service and hospitality sectors is estimated to be more than USD 100 billion globally. As a climate action approach to lower value chain greenhouse gas emissions, addressing food waste in the tourist industry presents an opportunity for tourism organizations to improve environmental sustainability, save operating costs, and increase business efficiency (Singh and Associates, 2024). Encouragement of industry, companies, and consumers to adopt more sustainable consumption habits is therefore desperately needed. A far more economical use of resources will be required to meet SDG 12. For instance, this calls for a decrease in waste production overall, and a decrease in food waste in particular (Fischer et al., 2023). The

issue is made worse by elements including excessive manufacturing, low customer awareness, and poor planning. Reducing food waste lowers environmental impact and boosts economic efficiency, making it a critical component of tourist sustainability.

Due to its ability to affect local product demand, support economic diversification, and foster the preservation of culinary history, tourism offers a chance to advance sustainable food consumption. Traveling with purpose and leaving a good impact are opportunities that visitors may make use of. This can also have several positive benefits on the "tourism ecosystem" as a whole by changing visitor behavior (Delgado et al., 2023).

Role of Mobile Apps in Reducing Food Waste and promoting Sustainable Consumption: The Case of TGTG

Recently, various mobile applications that promise to help the reduction of food waste in this sector (hereinafter, apps against food waste) have been created and are now accessible for customers to download and use (e.g., Hanson and Ahmadi, 2022). These applications try to spotlight supermarkets, food shops, and restaurants where consumers may obtain extra food that these shops are unlikely to sell until the end of the day - which has a high likelihood of being thrown away - at cheaper costs than marketplace ones (Fraccascia & Nastasi, 2023). Every year, a lot of food, from restaurants and supermarkets to individual households, ends up in the garbage. Several smartphone-level solutions are emerging to assist those who wish to lessen this waste and potentially save money: From applications that let users find retailers who are offering items at a discount near to expiration or that run the danger of going unsold, to online forums that let users share food they don't finish, to websites that provide instructions on how to keep food and use leftovers (Cane & Parra, 2020). It is important to investigate how a mobile application that combats food waste might successfully curtail food waste and

encourage sustainable consumption among tourists, particularly during their travels. Research indicates that the application facilitates the transfer of food that is edible from landfills to users, hence encouraging sustainable consumption practices. Within the wider consumer environment, research has outlined several significant advantages and difficulties related to the application. (Van Der Haar & Zeinstra, 2019) studied "Too Good To Go" and discovered that although the app is good at cutting down on food waste, it has little influence on altering the attitudes and behaviors of its users. This is because the people who now use the app are already very driven and conscious of the problems associated with food waste. The app must engage users who are less conscious of and interested in the fight against food waste if it is to have a greater impact. There is an increase in food waste as a result of tourists' frequent difficulties locating sustainable dining alternatives. Through the "Too Good To Go" app, travelers may obtain excess food, cutting down on waste and assisting neighborhood businesses. This improves the economic viability of tourism while simultaneously promoting environmental sustainability.

In addition to decreasing food waste, TGTG has a social impact by assisting companies in donating their excess food to charity, especially those who assist the homeless, much like existing anti-food waste applications (such as DamaGO in South Korea). One may donate to an organization and take part in a fundraising event with volunteers and TGTG members by using the TGTG app. Charities can provide food, clothes, and other basics to individuals in need because of the contributed funds (Vo-Thanh et al., 2021). Customers may use the mobile app to purchase one or more food boxes by learning about the stores that offer them. After that, consumers have to pick up the box from the associated store within a window of time that the food store specifies. There are similar apps accessible in other nations. These applications are acknowledged by many studies in the literature as a helpful tool for reducing food waste in the

food service industry. Additionally, a recent publication by Apostolidis et al. (2021) calls for greater research on these applications, highlighting how apps against food waste might assist consumers' sustainable value co-creation (Fraccascia & Nastasi, 2023). There are several benefits to this software. Naturally, the first step is to reduce food waste so that businesses may implement a zero-waste program. Along with serving an ecological purpose, the app lets users find things they may not have known about and acquire products at extremely low rates. Therefore, Too Good To Go enables consumers to find a new economical and responsible way for sustainable consumption. The environment has been spared the emission of more than nearly 23 million tons of CO2 mainly due to the purchase of more than 11 million Magic Boxes across Europe to date (Join Our Food Waste Movement, n.d.).

In this study, we will investigate the functions and user engagement tactics of the "Too Good To Go" app to gain a clearer understanding of its role in encouraging sustainable consumption. We will specifically look at the reasons travelers utilize the "Too Good To Go" app and examine how these reasons relate to more general sustainable consumption behaviors. We want to comprehend the psychological and social elements that motivate visitors to adopt such sustainable habits by connecting our study to pertinent theoretical frameworks, such as the Theory of Planned Behavior (TPB) and Value-Belief-Norm (VBN) Theory. TPB supports comprehending how travelers' intentions to use the "Too Good To Go" app are influenced by attitudes, subjective norms, and perceived behavioral control. The VBN Theory sheds light on the relationship between individual values and beliefs and sustainable behavior. Through integrating various theoretical frameworks, the research attempts to identify the driving forces behind visitors' adoption of food waste reduction strategies via the app. In this study, in-depth qualitative interviews with travelers who use the app are part of the data-collecting process. The study will concentrate on finding trends and connections between theoretical ideas and

real-world behavior, offering a thorough comprehension of the driving forces behind and obstacles associated with sustainable tourism activities. The literature study emphasizes the serious problem of food waste as well as the crucial role that theoretical models play in understanding consumer behavior in sustainable tourism consumption. Promising applications such as "Too Good To Go" can help cut down on food waste and encourage environmentally friendly habits. Enhancing the app's effect and promoting a more sustainable tourist business may be achieved by stakeholders via the integration of theoretical frameworks and expansion of its reach.

Methodology

Introduction

In this chapter, several methods are used to investigate the research question. We'll talk about the use of various techniques and the logic for their use in this paper. In addition, this chapter will include the researcher's approach, data collecting procedures and data sampling technique.
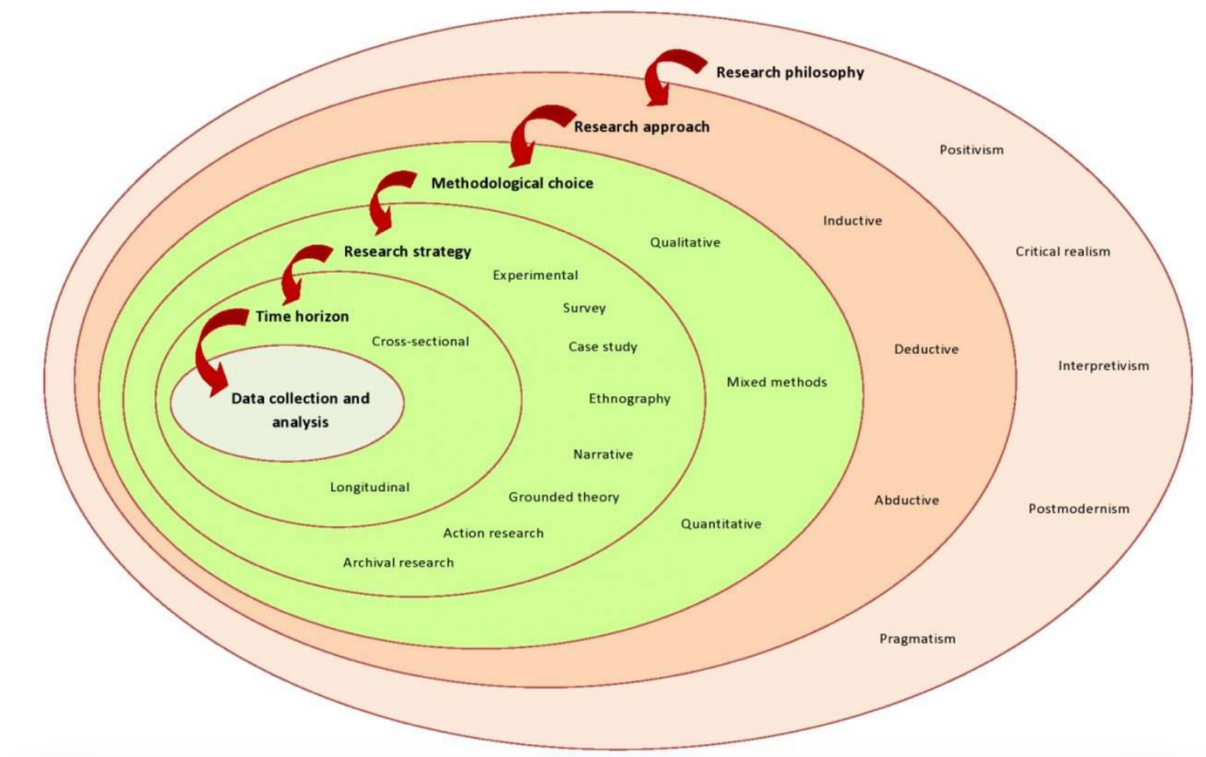
Fig. 4: Steps of Research Process (Taken from AESA Network, 2020; Adapted from Saunders et al., 2009).

Research Philosophy

Research philosophy is the beliefs and assumptions that guide researchers in their understanding of the world and their approach to conduct research (Hair et al., 2007). It influences the selection of research strategies and methods and the analysis of data. For this

study, we are using interpretivism as our research philosophy, which means we are focusing on understanding how people see and interpret their social status based on their own thoughts and feelings. It acknowledges the difficulty of social processes and the diverse perspectives through which reality is viewed.

The interpretivism approach is about researchers understanding and taking time to listen and appreciate the different ideas and experience of people in the context (Saunders et al., 2009). In this approach, the focus is on uncovering the meanings and interpretations that individuals attribute to their actions and interactions. This often involves using various research methods to capture the complexity and variation of the issue being studied. Overall, interpretivism highlights the importance of recognizing and respecting the diversity of human experiences in the research process. Given that the research question(s) of this study focused on exploring individuals' perspectives on sustainable food consumption through a digital app, the interpretivist philosophy was deemed appropriate for understanding the reality of the situation through qualitative research methods (Hair et al., 2007).

Research Approach

Fig. 5: Inductive and Deductive Approach (Taken from VOXCO, 2021)

As stated by Saunders et al. (2009), research can be conducted using either an inductive or deductive approach. In this case study, an inductive approach appears more appropriate for the given research objectives. Inductive reasoning is making a big judgement based on little clue or patterns you notice. It helps you look at information carefully to come up with important and reliable answers. Even though it may not always be the best way to make theories or models, it can help you figure things out when you have a specific problem to solve. As a result, one of the main benefits of utilizing an inductive approach is its flexibility and ability to dig into different perspectives and viewpoints, unlike deductive approach (Hair et al., 2007). Additionally, research conducted through an inductive method is often closely tied to the specific context in which the research is being conducted, making it particularly relevant and applicable. Given that the research in question is focused on a small group of individuals, an inductive approach is a more suitable method to collect data. Also, using an inductive approach

allows the inclusion of qualitative data and various data gathering techniques to capture various perspectives and ideas (Hair et al., 2007). It can be used to examine how individuals are utilizing the app to decrease their environmental footprint and encourage more sustainable consumption practice. By analyzing this relationship, we can better understand the impact of the app on promoting sustainability.

Research Strategy

The primary research strategy utilized in the thesis is a case study. Case study research can be used within positivist and interpretive traditions, for testing or constructing theory, utilizing a single or multiple case study design with qualitative or mixed methods (Yin, 2009). The key factor in determining which research strategy to use is identifying the type of research question being asked.

When we think about the main research question that we want to answer and the kind of information we are looking for, we can see that this research falls into the category of exploratory study. Yin (2009) suggests that case studies are particularly suitable for answering questions related to "how," "why," "what," and "who." In this exploratory case study, the focus is primarily on answering "what" and "how" questions. Exploratory case studies are valuable for obtaining a comprehensive and detailed understanding of a social phenomenon. Thus, we choose to conduct a single exploratory case study. Another reason for selecting this strategy is the desire to gain a thorough understanding of the research context and the processes taking place within it. This is further supported by Morris and Wood, (1991) who suggest that a case study strategy is a good idea when the researchers want to learn more about a specific topic. Therefore, we chose to use a case study because it fits well with the context of the research

question. As, the paper is more inclined towards the evaluation of travelers who aim to help the environment by reducing their ecological impact and a digital app that serves as a bridge to further the cause. Thus, the case study strategy was chosen for this research due to the significance of understanding the context in which individuals' perspectives on sustainable consumption through digital apps were examined.

Data Collection Methods

In this study, information was gathered using the primary source of data. Primary data are those data gathered to answer the research questions, directly from the sampling population whereas secondary data are gathered from other sources or studies (Hair et al., 2007). In this research paper, primary data was collected as qualitative data through conducting open interviews.

As mentioned, qualitative research methods were utilized to gather data in this paper. In contrast to quantitative methods which focus on measuring and analyzing relationships between variables using objective numerical data, qualitative research aims to explore subjective experiences and meanings, providing a deeper understanding of the topic. Researchers can use various data collection methods such as observation, interviews, document analysis, visual materials, and artifacts to conduct a comprehensive study (Saunders et al., 2009).

Qualitative research involves various methods like interviews, focus groups, and observation. Interviews can be conducted in different ways, including unstructured interviews where questions are open-ended and the interviewer adjusts their approach based on the participant's

responses, and structured interviews where all participants are asked the same set of questions (Kvale & Brinkmann, 2009). While one-on-one interviews are typically used for exploring sensitive or complex topics in depth. This research paper has utilized a semi-structured open interview approach with open-ended questions for gathering data.

The use of qualitative data in this research aids in understanding how the digital app TGTG can enhance the travel experience for individuals by promoting sustainable consumption and offering cost-effective options. Also, it helps gain insights into individuals' perspectives on sustainable food consumption in the tourism industry.

Interview

This study used in-depth Online Interviews to collect primary data, which involves gathering information directly from individuals for the first time (Kvale & Brinkmann, 2009). This approach ensures that the data is specifically relevant to the research question or objective, making it directly applicable to the study's goals. In many instances, secondary data is unavailable or unsuitable, researchers may need to look for new ways for data collection, such as collaborating with organizations or conducting surveys. Gathering primary data also enables researchers to obtain demographic and socio-economic details about participants, including age, education, occupation, and social standing. The data obtained through primary methods can be utilized for various purposes, such as market segmentation, repositioning, and cross-classification analysis (Kvale & Brinkmann, 2009).

These interviews are seen as a preliminary step towards questionnaire-based data collection method in a larger research project. Additionally, Saunders et al. (2009) suggest that semi-

structured interviews are commonly used for qualitative data collection, particularly in case study research. One of the key benefits of this approach is that it allows participants to elaborate on their responses, leading to a more detailed and relevant dataset. By asking open-ended and flexible questions, researchers can gain insight into the perspectives, opinions, and experiences of the interviewees, uncovering not just the 'what' and 'how' but also the 'why' behind their responses.

As we know that, one of the primary advantages of utilizing semi-structured interviews is the ability to gain insight into individuals' attitudes, opinions, and perceptions, all of which are central to the focus of the thesis. The questions were carefully sequenced to allow the interviewee to express themselves freely and coherently, while also being rephrased to address relevant issues. Overviewing Kvale & Brinkmann (2009) guidelines for conducting interviews, it was important for researchers to familiarize themselves with the participant's background and have a thorough understanding of the topic prior to engaging in conversation. Furthermore, to prevent any confusion or misinterpretation of questions, the interviewer made sure that the participant fully comprehended the intentions behind each question and guided the conversation back to the central theme of the study on the TGTG app and sustainable consumer behavior.

The interviews were conducted with a series of open-ended questions and basic demographic inquiries. It started with general inquiries about the participants' current living situations and travel experiences, creating a comfortable atmosphere for them to share their thoughts and stories with the interviewer. As the conversation progressed, more detailed questions were posed about the specific topic and case study at hand. To prevent any misunderstandings due to language barriers, the interviews were conducted in English. Each interview was taken online via Zoom and Facebook and recorded using laptops and mobile phones and transcribed

later for analysis. The detailed transcription of the interviews can be found in the Appendix section.

Interview Questions

Orea-Giner & Fusté-Forné (2023) did research to see how young people today think about eating while traveling. They found that it's important to have organized and eco-friendly food trips to help people learn about eating in a sustainable way. By involving customers in food experience and showcasing their impact on sustainable practices, individuals are encouraged to take responsibility and make environmentally conscious choices. Sustainable consumption plays a key role in sustainable food tourism, and it is essential to understand the factors that influence consumers to choose for sustainable options over traditional ones. This study involved questioning participants about their views on sustainability, the measures they take to minimize their environmental impact, and any recent trends in sustainable consumption behaviors. It is vital to understand consumers' perspectives on sustainability issues to address the obstacles preventing them from embracing sustainable practices (Leer, 2020).

Moreover, the second part of the interview investigate about the case study of the TGTG app. This segment aims to gather information on participants' experiences with the app and to gain a deeper understanding of their perspectives on role of digital technology on sustainable food consumption in tourism. By figuring out why people use the app and how they feel about it, we can learn important things about its promotion and adoption (Sestino et al.,2023). By studying how the app affects the way people buy food and think about food waste, we can see if it helps people make more eco-friendly choices. Questioning about the app's role in fostering sustainable practices among travelers can shed light on how it fits with consumers' greater

sustainability values and actions, offering further understanding of its contribution to promoting sustainable consumption behaviors. The detailed list of questions is outlined in the Appendix section of this paper.

Population Sampling

Sampling is a valuable tool in research for determining the necessary number and types of observations needed for the analysis (Veal, 2017). This technique allows researchers to efficiently and cost-effectively gather data from a diverse group of respondents when time and financial resources are limited and examining the entire population is not feasible. In this research paper, non-probability sampling methods were used, as they are better suited for in-depth research focused on understanding the case study. As a result, in this study, the qualitative data collection was conducted using purposive sampling, a method that offers the benefit of being efficient in terms of time and cost, while also yielding a diverse range of responses that are valuable in qualitative research. The potential for error is minimal because the sampling is driven by the researcher's expertise, making the findings highly reliable and accurate (Veal, 2016).

The selection process for participants in the study was a detailed assessment of their knowledge of the app and their grasp of sustainable consumption. In order to reach out to potential participants, a social media strategy was implemented, including posting on various Facebook groups and online forums. Despite contacting many individuals for their input, only 1o participants who fit the requirements were selected for the qualitative interview phase to obtain relevant data.

The list of the individuals that participated in an interview is listed below.

Initials	Name	Age	Gender	Profession	Nationality
LR	Lynn Ramnauth	41	Female	Teacher	USA
DG	Diana Gladden	55	Female	Real Estate	Costa Rica
RB	Rolla Bradford	48	Female	Architecture	USA
TS	Tracy Sweeney	56	Female	Unemployed	UK
BA	Barbara Alpert	70	Female	NGO	USA
LV	Luigi Vorzilo	35	Male	Waiter/Tourist Guide	Italy
PL	Paolo Lagato	56	Male	Cook	Italy
FC	Filomena Cimbron	28	Female	Pastry Chef	Portugal
FL	Frederik Liberti	42	Male	Asset Manager	Denmark
BH	Botond Horvath	32	Male	Cook	Poland

Table 1: List of Participants involved in open interview.

Ethical Consideration

It is essential for every research project to carefully consider ethical implications, with a particular emphasis on maintaining ethical standards throughout the entire research process. Researchers must establish clear boundaries and stick to ethical guidelines, collaborating with a diverse range of individuals who can contribute valuable insights to the study. Interviewees trust researchers with personal and confidential information, highlighting the importance of ethical behavior in all stages of the research process, including showing respect, flexibility, protecting identities, obtaining consent, understanding emotions, and being sensitive to potential ethical issues. Researchers must take the necessary precautions to prevent any mistreatment or violation of individuals sharing their stories or participating in studies.

Maintaining the confidentiality of participants is a key ethical consideration that researchers must uphold throughout the entire research process. Scholars are acutely aware of the importance of respecting the privacy of individuals and avoiding any intrusive inquiries.

A few days prior to the interview, a confirmation text was sent out addressing the important topics that would be discussed. This allowed the interviewee to prepare for the potential questions they might be asked and limit the personal questions being asked during the interview. Most of the participants did not express any concerns about confidentiality, even though they were informed that the interview could be kept private if desired. Additionally, the researchers obtained permission to record the interview session, which was then transcribed in word format for further analysis. After the completion of data collection, the transcripts data is analyzed and categorized according to the participants' answers to individual questions and themes were generated for the entire set of questions. Ultimately, the information gathered was used to thoroughly examine the case and reach a conclusion for the project.

Reliability and Validity

Silverman (2011) states that validity denotes the truthfulness of results, whereas reliability relates to the stability of findings. These two elements are crucial to qualitative research, as researcher's thought and opinions can impact how the information is understood, and the study is planned.

Reliability refers to the consistency and dependability of the results obtained in a study, regardless of any random factors that may have influenced their production. Essentially, reliability questions whether a different researcher would come to the same conclusions if they were to replicate the study. In this paper's context, which utilizes qualitative research methods

in a case study focusing on human subjects, there is a recognition that the findings may not be exactly reproducible if the research were repeated. This is because qualitative research is often connected to the specific context and time in which it is conducted, and these conditions may vary if the study were to be replicated in the future.

Different things happening in the world might make individuals think differently about using technology to help the environment in the future, which could lead to different results. To ensure the reliability of the paper, a certain procedure was followed while conducting the research. Firstly, the study methodology has been made visible by providing a thorough explanation of the approach used and the data analysis techniques employed in this work. Additionally, being transparent about the theoretical frameworks guiding the interpretations of the data helped to ensure clarity and understanding for other researchers analyzing the procedures and findings.

The second thing to think about when deciding how to collect data is how accurate the information is. Validity means ensuring that the data reflects what is happening in the study environment. Ensuring validity in research involves maintaining honesty, truthfulness, and relevance in the methodologies used to gather data, as well as the accuracy of the findings in reflecting reality (Noble & Smith, 2015). In terms of the validity of this research paper, data collected through open interviews with individuals who have experience using the app while traveling provide insight into how the app promotes sustainable food consumption and enhances the travel experience. This helps to confirm the credibility of the findings and conclusions drawn in this paper, as similar research methods can yield comparable results.

Data Analysis

Thematic analysis is a widely used approach for analyzing qualitative data, specifically focusing on identifying recurring themes in a group of texts like transcripts or interviews. Researchers carefully examine the data to uncover topics, concepts, and patterns of meaning. Braun and Clarke (2006) outlined a detailed process for conducting theme analysis, which includes steps such as familiarizing oneself with the data, generating preliminary codes, integrating codes with additional information, identifying themes, evaluating themes, assigning labels to themes, and preparing a report. This process offers a structured way to extract and illustrate themes from textual material in qualitative research. Using thematic networks as analytical tools can help organize and present findings effectively, making the analysis process more efficient and valuable.

Thematic analysis helps researchers to extract new insights and ideas from their data. By categorizing large data sets into narrow themes, researchers can more easily manage and interpret the information in a way that suits their research goals. In this study, thematic analysis was used to uncover and link recurring patterns in the data collected. This method also helps in pinpointing common themes and trends among the perspectives shared by participants during open-ended interviews about their experiences using the TGTG app to promote sustainable eating habits while on the go. To streamline the analysis process, all interviews were recorded and transcribed for further examination. Attride-Stirling (2001) suggests that after all of the data has been analyzed and coded, the themes that are deemed significant, prevalent, or crucial are extracted from each code or group of related codes. By reviewing the text segments within the context of the classified codes, this process is repeated multiple times. These emerging themes must then be further developed and utilized to support both new and existing ideas. Therefore, each theme must be broad enough to encompass various text segments, yet specific enough to be linked to a singular concept.

Analysis and Discussion

This section analyzes the findings collected from different participants concerning the issue of sustainable consumption especially in the context of food waste while travelling and encouraging the tourist to use the "Too Good To Go" app in a sustainable ways of traveling. The complex phrases have been simplified to the meaningful words that can express the respondent's viewpoint and experience, through analyzing the information collected from the interviews, communicates a message that is dependent on the whole statement. The respondents' long phrases with related meanings and their views are coded into word which provide a concept that later generates a theme for the analysis topic. The research is divided into four main parts as per the research question. The first part is about understanding and analyzing the tourist perception on the use of technology for sustainable consumption while travelling which is divided into another different subsection as per the outcomes of the interviews. Another part is about tourist motivation and experience of using digital apps for sustainable travel practices and then the challenges and limitation about implementing sustainable consumption patterns using digital application which is also divided into different subsections. The last part is analysis of suggestion and solution to promote sustainable tourism practices via digital apps among tourists.

Understanding and analyzing the tourist perception on the use of technology for sustainable consumption while travelling

This section analyses the perception on importance of digital tools and sustainability while traveling. To understand this part researcher asked various questions about using the digital platform for planning their vacation, their approach towards sustainability while traveling, and its importance to the interviewees. The subsections are based on the interviewees' responses

and the theme of the answers, which are then matched and arranged according to the theme of each response.

Digital Tools in Travel Plans and is significance in Promoting Sustainability

Usage of various Digital Apps

According to (Kostruba, 2018), technology has emerged as a significant tools for sustainable tourism industry, assisting in minimizing the negative impact of travel on the environment and enhancing the experience quality for tourists by offering tools for real-time information, personalized recommendations, and effortless transaction (for instance, mobile application can offer information about nearby restaurants, attractions, accommodation, and events, and electronic wallets can it simpler for payment of goods and services). The way we live and travel is significantly impacted by platforms, electronic payment methods, and social media and others.

When the researchers asked the participants, "What kind of digital apps they use to make travel plans?" the researchers find that most of the participants heavily relies on the digital platform to plan their vacation and it was seen that they use similar apps and websites to organize their trip. For example, Respondent BA and RB provided a detailed list of the application and websites they use

"I use a variety of apps like The Google what is that called Flight Google, I can't remember we sometimes use Sky scanner. I've used Expedia and sometimes use kayak or Kiwi. And then we frequently travel on miles, so we might use like the United Mileage plus app. we primarily

fly United or Lufthansa. We would use like one of the airline apps or one of those ones I just

listed" **(RB)**

"I mostly check flights on Expedia and then purchase from the airlines. I will normally check

the flight price and date of the flight and then go on the airlines app to buy the ticket. I also

use Airbnb and sometimes some other apps depending on the location where I am traveling"

(BA)

From above two sentences of responses, it shows that innovation and advancement of contemporary communication and information technology have not only made tourism more competitive but also have made people easily access to information. When using modern information and communication technology to organize their trip, travelers' age distribution is similar to that of internet users (Bănescu et al., 2021). It also represents that the diverse range of digital platform that the tourist use to organize different aspect of their vacation, from booking flights to tracking the frequent flyer miles. Tourist might find easier through the smartphone applications, where they can rent eco-friendly transportation (including, buses, bicycles, and electric cars) and smart city technologies may reduce and increase productivity (Kostruba, 2018).

Discussion:

The use of different kind of digital application reflects a prominent trend in which the travelers are depending more inclined towards technology to improve and improve their travel arrangements. Respondent **(RB)** mentioned that not every single app can satisfy one person demands, preferring to use various other platforms for different task. This disparity points out the need for more integrated trip planner system that can combine multiple features into a single platform. But according (Archi et al., 2023), we cannot deny the fact that the use of technological innovations have the potential to improve sustainable tourism practices by boosting operational efficiency, reducing waste and emissions, and improving tourist

experience. Further, another scholar (Mu et al., 2019), supports that the rising digitalization of society has a significant influence on consumer behaviors. The way people use digital tools and technologies such as smartphones, apps, social media etc. to interact with people and manage their daily activity has emerged as a distinct trend, influencing the near future in many deep ways. The Theory of Panned Behavior (TPB) contribute to this trend by highlight how perceived convenience use and attitudes towards technology influence behavioral intention. The TPB model states that perceived behavioral control is the strongest when individual are positive about the tools and approaches that will meet their requirements successfully.

Digital Apps in Promoting Sustainability

Digital applications are becoming an essential part of the travel and tourism industry, giving companies a way to interact with customers and give them a simple, tailored experience. Tourism business must have a strong online presence on mobile platforms as more and more individuals use their smartphones for travel research and booking (Alghizzawi et al., 2023). Mobile applications help in the identification and comprehension of travel-related information, goods, and services for customers, and developers frequently employ them in the creation of marketing plans. There are several advantages that mobile applications provide consumers. According to (Valeriia Khodzhaeva, 2020), the mobile application is becoming more and more important in travel decisions and behavior for tourists at every level of tourism consumption. After understanding the significance of the digital application the researchers asked the participants to share there experience of using any kind of digital apps that specifically promote sustainability. While some of the participants mentioned that they have not used any other digital apps beside "Too Good To Go" who mainly focus on sustainable tourism practices. Most of the Participants answer to this question was;

"Other than 'Too Good To Go'? No. I'm not super high-tech. I'm 41. I can use my computer and things like that for work. I'm also not on the hunt to see what some of the new popular apps are. I don't really download a whole bunch of apps. I just have the minimums that I use. While traveling, I know that what we always do is we always try to bring water bottles and refill water bottles rather than buying water bottles and beverages. I don't follow a lot of apps or services focused on promoting sustainability. I think it would be great to have more apps that make it easier for people to do such while they're traveling. Ride share or food share or something like that would be good" **(LR)**

Another participant added,

"Not really but i really try to buy all up-cycle clothes. And when I when moved to Oregon, I didn't buy bring any of my furniture or anything. I Bought all used and I thrifted it and bought it off of Facebook marketplace and so then I've been selling it and or giving it away". **(DG)**

Other Participants;

"I use Green Mobility and Donkey bike app other than TGTG. They are fully electric and easy to operate." **(LV)**

"No, it's only TGTG. It is one of the apps that I use and other than that I haven't really used any other kinds of apps' **(BA)**

While in the contrast some participants are seen using other digital platforms that promote sustainable consumption practices. For instance one participant responded;

"One app that I frequently use is "Too Good To Go" app obviously. So I started to sue this app during my travels in Europe I think it was around 2021 around june when I was in Paris was the first time I used it during my trip and since then it has been a great way to enjoy the local food sustainably. And for me I feel it is easy to use and also satisfy your soul because you know that you are helping to reduce food in some ways. Other than that I have also tried the app

called "BlaBlaCar" for carpooling. I do not know if you have heard of it but it is really popular in Europe I think. I have used it couple of times when i was travelling alone in Poland. The app is a great way to meet new people and guess what it helps to reduce the carbon footprint by sharing rides" **(BH)**

Other participant added

"Yes, definitely. It's like when you already know that you are creating some amount of carbon footprint or certain amount of environmental impact and there are more chances that you will actto reduce it. Isn't it? So for me it is also important that I also play a part of being responsible towards environment. I have used the Momondo, TripAdvisor and other apps that can calculate how much carbon emission your trip is going to make. Or the car trip where you can see how much gasoline you save by using the electric car for the same trip. If you go and see in the momondo app there you will see a sustainability feature, like the carbon footprint information. Well although the app does not entirely focus on sustainable travel but it still helps to some extend". **(FC)**

"Yes. Particularly while traveling, yeah. I also use an app that's called Flash food which is a different type of anti-food waste app. Most of the incentive for using those is saving money. Well, I think we have come to appreciate the amount of food that is wasted is thrown away by restaurants and stores every day and living in a in a place like New York City, you see it. It's very visible, yeah. And we are not above. You know, putting that food to use. And using it rather than have it just be wasted. So, I think we do care about sustainability. You know, there are other reasons particularly while traveling. I like to use the anti-food waste apps. Because we save money, we can get like restaurant level food inexpensively and for from restaurants that would not choose to pay a price at" **(RB)**

The responses from above quotations highlight a mix of engahement with sustainable travel apps among tourists. Several participants like (LR) (LV), (DG) and (BA), indicated minimal

use of such kind of app, primarily only using "Too Good To Go" app. They do not focus on other sustainability focus apps due to a lack of tech-savviness but still prefer for simple practices like reusing bottles, thirfting clothes and furniture. This shows a basic level of environmental awareness but indicate a gap in adopting digital tools for sustainability. Other respondents, FL and BA, similarly mentioned using "Too Good To Go" but no other apps, which shows a limited engagement with digital sustainability solutions.

In contrary, participants like (BH) and (FC) mentioned higher level of engagement with the digital apps that focus on sustainable travel consumption.

Discussion:

The diverse response reflect varying degree of involvement with digital platforms for encouraging sustainable travel practices when travelling, demonstrating the impact of personal attitude and perceived ease of use, as stated by Theory of Planned Behavior (TPB). Ajzen, I. (1991), in "The Theory of Planned Behavior," examines how perceived behavior control might influence the adoption of new activities for example utilizing sustainable promoting applications for responsible traveling. The concept of planned behavior emphasizes the importance of perceived behavioral control. Perceived behavioral control refers to people's sense of ease or difficulty in engaging in a desired activity, aligning with the focus on elements directly related to behavior (Ajzen, 1991). Intentions are thought to represent the motivating variables that impact an action; they are indicators of how hard someone are willing to strive, or how much effort they intend to put out, in order to do the activity (Brookes, 2023). LR's limited use of sustainability applications can be attributed to a lack of awareness of technology and a preference for simple, non-digital activities. This aligns with the TPB component of perceived behavioral control, which states that the ease or difficulty of using a tool influences behavior. According to (Rashid et al., 2020), one of the disadvantages of using mobile applications in tourism is that not all tourists are technologically proficient, particularly middle-

aged people who often take tours and fall into the tourist demographic. Given that each application is developed utilizing what is known concerning using or surfing the internet. Conversely, (Boti) and (FC) extensively use different sustainable focus apps indicates a higher perceived ease of use and a strong personal norm towards environmental responsibility, aligning with the Value-Belief-Norm Theory (VBN). Boti's using "BlaBlaCar" and FC's use of the app that provide the calculation of the carbon footprint they create shows his commitment towards reducing the negative footprint, influenced by their environmental values. Similarly RB's use of the app "Flashfood" in order to save money and reduce the food waste demonstrates an intersection of economic and environmental motivation driving sustainable behavior. Numerous internet resources provide suggestions on how to travel more sustainably. Some of these initiatives involve promoting low-carbon travel routes and tourism destinations that have sustainability standards in place. Digitization has also enabled the creation of instruments for measuring and analyzing tourism's negative environmental impacts. These tools help businesses working in the industry identify possibilities to reduce their impact and implement sustainability programs. Furthermore, they allow travelers to choose routes of travel that are better coherent with sustainable development goals and less damaging to the environment (Ezus, 2023.). Overall, although some travelers use digital tools to improve their sustainable behaviors, others rely on traditional approaches or have very little digital participation. Addressing these gaps through focused educational and user-friendly app designs may enhance the adoption of sustainable practices across a larger population, resulting in more sustainable tourism.

Sustainable Practices and Trends for Responsible Consumption

Approach towards Sustainable practices

Sustainability has been broadly seen as a promising tool for resolving the negative impact made by tourist while also ensuring the tourism long term existence. It is a constructive strategy seeking to maintain the longevity and quality of people and natural resources by reducing the tension and friction created about by the complex interactions between the tourism sector, tourist, environment and the host communities (Liu, 2003). According to (Santos-Roldán et al.,2020), sustainability principle pertain to the environment economic, and socio-cultural facets of tourist development. To ensure the long-term sustainability of the tourism industry, an appropriate equilibrium between these three dimensions need to be maintained. So regarding the approaches towards sustainability towards minimizing environmental impact, the researchers asked if they have made any specific actions or practices in order to reducing the effects on the environment and make responsible consumption. All the respondents emphasized the importance of sustainable when traveling; each of the respondents expressed a strong awareness of the ecological imprint they leave so they desire to make an effort to leave as little negative impact to environment as possible.

"You mean sustainability for the environment that I'm visiting? Extremely so. I'm very conscientious about my footprint that I leave and the foods that I eat that I buy the trash that I will create. Well, I learned something recently that I really want to try to do is I want to take back whatever I use like if I bring shampoo in a bottle, I want to take that bottle back home. I don't want to leave my trash, you know, and be a burden to the place that I'm at. So, whatever I bring I want to remove and so I'll take a suitcase full of trash home with me." **(PL)**

"Sustainability is something that we recycle here; We compost all of our food scraps. We try to conserve energy by turning off all the lights and closing the blinds and things when it's hot. We try to do what we can. Also when you travel, it's the same. We try to do apartment exchanges. When we went to France, I stayed with mostly family and friends. I also stayed with somebody that we didn't know that we met through Facebook. We did an apartment exchange and they

came and stayed in our apartment in New York and we stayed in their apartment in Paris."

(LR)

The above sentences from the respondents it is very clearly indicated that they are doing their part for the environmental conservation not only while they are in their country of residence but also even while they travel they are equally concerned about their carbon footprint they may leave behind. This supports the author (Nekmahmud et al., 2022), most of the tourist are environment conscious and do want to participate in the activities that might destruct the ecology. In order to maintain a safer and healthier lifestyle for present and future generations individual must make immediate changes to their consumption habits. To put it another way, implementing eco-friendly practices and consumption methods is very important to ensure the development that satisfies the global demand while minimizing excessive strain on the environment (Journal, 2024). The remaining participants mentioned such as, staying in eco-certified hotels, taking part in recycle program and campaigns, using public transportation and just being mindful of the overall consumption.

Discussion:

According to (Testa et al., 2020), consumer habits have shifted dramatically in recent decades: consumers are now less likely to make purchasing decisions based on brand loyalty or price, instead preferring products that correlate with their values, conveying a preference for more sustainable products from an environmental, ethical, and social standpoint. (Guillen-Royo, 2019), stated that sustainable consumption approaches include energy-saving practices and also the use of resources and material-efficient goods with minimal emission and environmental impacts. 'Strong' sustainable consumption perspectives are related to an attitude of simplicity, which entails complete decreases in total consumption rather than increases in material or energy efficiency. According to these two respondents it shows that they are committed to sustainable practices because the quotation highlights the proactive efforts to reduce the

environmental impact especially in the context of food they consume and the garbage they make, swapping apartment which encourage community-based travel choices while they are on vacation. This behavior aligns with the Value-Belief-Norm (VBN) Theory, which claims that a strong environmental values and personal norms are the drivers for sustainable activities. According to the VBN theory of environmentalism, values have an impact on pro-environmental conduct through personal norms and pro-environmental beliefs. According to the theory, individuals are inclined to value sustainable activities, which would impact norms and attitudes and maybe persuade people to engage in eco-friendly behavior (Giovanni Laksmana & Evelyn Hendriana, 2021). By fostering this attitude and sustainable approaches more accessible the tourism industry can encourage responsible traveling behavior among travellers.

Trends in Sustainable Consumption Practices

(Xiang et al., 2021) define responsible tourists as eco-tourists who plan their trips with protecting the environment in their mind. The extensive rise in consumption has put a great deal of stress on the environment in which people live. To promote sustainable tourism, tourists' actions and decisions are extremely crucial. The goal of environmentally responsible consumption is to constantly reduce environmental impact and potential hazards to human health and well-being while consuming goods and services that satisfy individual requirements and improve quality of life. To achieve more sustainable consumption, we must shift our patterns of consumption to replace harmful goods and services with less harmful ones (Fischer et al., 2023).

While the researchers asked another question about the trends and practices towards sustainable consumption they have noticed among the travellers in recent years. Majority of the respondents said that they are not aware about the recent trends or movements in sustainable travel approaches, while some respondents did notice the shifts towards the sustainability in

travel practices, but they have seen both the positive trends and negative behavior especially among younger generation travelers. For instance one responded positively said;

"*Absolutely, as far as I know I have noticed that the newer generation is more into things for sustainability. I think they try to find sustainable accommodation options when it comes to stay and also prefer to use public transport for low carbon emission. As for myself I too prefer to stay at eco-certified hotels although my budget is tight but I try yeah. And also you know if you see the lot of companies today they are targeting the product and service that focus on responsible travellers. For example a lot of booking sites provide options for sustainable accommodations. So I think it is becoming a great deal, and I believe it is definitely pushing more businesses to go green too.*" **(FC)**

Another participant added,

"*I think people use public transport more. It looks like this shift is happening due to the increasing awareness of the impact towards the environment when we travel.And also by using public transport, we as a tourist can significantly reduce carbon footprint*" **(BA)**

This participant emphasized the initiatives taken by millennial tourists in present date is commendable as the business are increasingly concentrating on making sustainable goods and service in the market according to the demands of the consumer. It is necessary to address the preferences for travel and behaviors of visitors in order to promote sustainable tourism. Tourist activities that include energy consumption and contribute to greenhouse gas emissions include lodging, sightseeing, and entertainment (Xiang et al., 2021). Sustainable consumption behavior, as a combined concept, refers to the process of meeting current needs through reduced or more prudent use of natural resources, adoption of eco-friendly lifestyle practices,

adoption of eco-friendly habits, and consumption of eco-friendly products in order to protect the hopes of future generations (Biswas & Roy, 2017). According to (Xiang et al., 2021) finding, hotels, sightseeing, and recreation are examples of tourist activities that demand resources and increase carbon emissions. Visitors' tendency to engage in sustainable tourism consumption may rise if they are aware of the connection between their consumption behavior in an unusual environment and their drive for alternative consumption. Supported by another study poll by (Haitmy, 2020) found that 17% of European consumers research sustainable business and products prior to making a purchase. The poll also revealed differences in attitudes according to age and gender, with younger men expressing a higher curiosity in finding out if the firm promotes sustainability.

On the other hand, another respondent had noted some negative trends among tourist. She said;

"Well especially here in Costa Rica, I have notice that a lot of people who come to visit are mindful of what they do. Because Costa Rica is quite a rural and primitive, I can say that some tourist are making an effort to choose eco-friendly option to reduce their footprint while they seem genuinely interested in protecting nature which is really great to see. But When I go to different places and I see some of the tourist as they're just very garish and very rude to locals. And I'm seeing a change in a negative way. They're just very insensitive to culture. Insensitive to their on impact on the place they are. And I don't know if it's just the new generations that's like the, I don't know, but it's very embarrassing and it's very sad." **(DG)**

From the above quotations it is clear that some noted positive trends while some noted negative ones and the majority, on the other hand, did not appear to share similar ideas and appeared

less conscious of these behavior patterns. Individual customers' unsustainable choices and behaviors are influenced by their personal constraints and wants, but circumstances that promote unsustainable options may be even more accountable. Social norms and cultural relevance also have an impact on an individual's decision-making process by influencing their worldview. Though less evident, these limitations are just as significant (Thøgersen, 2023).

Discussion:

The positive attitude towards environment friendly travel pattern are heartening because they indicate that some of the tourist today are more conscious of their environmental impact and they are actively trying to reduce it. The Value-Belief-Norm (VBN) Theory, states that a tourist with strong biospheric and altruisti values, for instance, would be very driven to practice and participate environmentally friendly habits and are consistent with the behavior. The biospheric value (Vbio) orientation is the first, which is defined theoretically as those life-guiding principles that show a person's commitment to nonhuman species and the biosphere as a whole (Del Carmen Aguilar-Luzón et al., 2012). (De Bruyn et al., 2023) in his paper "Research in tourism sustainability", discussed that positive perceptions of tourism's effects can result in rising tourism demand and encouragement for sustainable tourism practices. Protecting and enhancing biodiversity is one of the most important aims of sustainable tourism. Furthermore, The Theory of Planned Behavior (TPB), further support, which state that travelers intention and behavior are positively influence by the perception of how easy it is to be engaged in environment friendly actions and how positively they feel about sustainability. These theoretical framework are reflected in the increase in sustainable approaches, eco-friendly accommodation options, use of public transportation, which also underscores the growing market demand for sustainable solution for tourist.

However, the negative pattern is also highlighted by one of the respondent's observation of certain visitors callous and inconsiderate behavior points the lack of knowledge for the culture of Nonetheless, negative patterns highlight a significant obstacle in advocating for widespread sustainable behaviors. The respondent's noted of certain visitors' inconsiderate and entitled suggesting a lack of knowledge or disregard for the environmental and cultural impacts of travel among certain tourists. This kind of behavior undermines the efforts of those who are seeking to travel sustainably and can create a tension with local of the destination. Thus, addressing this issue it is required to raise awareness or educational campaigns about the importance of cultural sensitivity and environmental sustainability. Encouraging sustainable travel behavior through the digital platforms, websites, and travel agencies can help to mitigate these negative impacts. (Gössling & Peeters, 2007) says although the challenges posed by insensitive and environmentally determinant behaviors among tourist, there is a need for increased education and awareness in order to encourage responsible tourism. Another scholar (Šimková et al., 2023), also recommended raising awareness and promoting motivation and responsibility of tourism participants. He suggest that responsible visitors gather as much information as possible ahead of time in order to understand about local norms and culture and prevent inappropriate or even unlawful conduct. Information sources may include guidebooks, maps, catalogs, travel websites, operator websites, destination websites, and so on.

Food Waste Reduction While Travelling

Perception reducing Food Waste

Given that both "food" and "tourism" are ideally associated with culture, their interaction is crucial. Because meals that are shared are times of leisurely and social interaction, and because food choices have historically been influenced by emotions, beliefs, and cultural

characteristics, food is considerably more than just a collection of nutrients (Delgado et al., 2023). Conversely, it is generally accepted that eating is a necessary component of traveling, and as such, it follows that travel increases the amount of food wasted worldwide (Gössling et al., 2011). Due to its high resource consumption, the hotel and food service industry sector both contributes significantly to society by supplying food for use outside the home. However, it also presents a risk to environmental sustainability. The environmental impacts of this sector are significant and yet it is understudied according to (L. Wang et al., 2021). In order to understand the tourist perception regarding food waste and if they actually address this issue while travelling researchers asked few questions and most of the respondents answered that they think that food waste is important to address while travelling. They also mention that they are also interested to somehow contribute towards reducing food waste.

Here are some answers;

"I am very active in reducing food waste at home. I lead food rescues weekly and have helped donate 20,000 pound of food to date to food pantries through Rescuing Leftover Cuisine. I also help serve 2 community fridges in the East Village, rescuing food from businesses and making it available to the community. I do this 2-4 times per week usually. I have also done it while traveling. Whenever I travel I try to connect with local food rescue organization. I sometime reach to them from facebook or through internet. I personally feel it helps me feel more connected to the community and environment although I am far away from my home" **(BA)**

"I think especially when you are travelling it is such an important issue so i try to be mindful of it during my trips. Before I really was not so much considerate of how much food get wasted but after I get to know about these kind of app like "Too Good To Go" have really help me realize about the waste I or like anybody make. Now I have become more conscious effort to find ways to reduce waste, so whether it will be using the app or just be mindful when I order

food anywhere. So, I think it feels really good to be part of something like this especially when

I am travelling." **(FL)**

The participant's answers reflect a strong awareness and active commitment to reducing food waste when they are away from home as well. This awareness has led to more consciousness to minimize the food waste during their vacation, such as using app or just being mindful when ordering food etc. These responses also highlight the role of technology in raising awareness and promoting sustainable consumption practices.

Discussion:

The responses from above have shed light on the importance of technology in fostering sustainable tourism practices among tourists. (BA) being indulgent with local food organization while traveling indicates how digital platforms and social media might help people to interact with sustainable initiatives, even in new environment. This behavior correspondent with the Value-Belief-Norm (VBN) Theory, which states that the individual who have strong environmental values and moral need to act (Personal norms) are very likely to take part in environmental actions.

(LR) experience illustrates the transformation power to digital technology on sustainable behavior. The utilization of "Too Good To Go" app shows how digital tools may raise awareness and drive long-term activities. The Theory of Planned Behavior (TPB) offers a valuable framework supports for understanding the shift, in which awareness (attitudes), social influence (subjective norms), and perceived ease of use (behavioral control) contribute to a great possibility of adopting sustainable habits. In this similar context, According to (Bertella, 2020), travel experiences have the power to transform people, inspire them to adopt new behaviors, and ultimately drive social change. Therefore, it stands to reason that travelers who opt to eat sustainably and healthily while on vacation could be motivated to continue

doing so when they get back home. The tourist industry professionals who plan and market "green" culinary options and take part in other sustainable activities may be the source of this motivation. When it comes to food, local or organic products are the only ones that provide guests with additional value. Fishbeil and Ajzen seem to have expected that people would act rationally and weigh the information they receive before acting on it. Travelers' interest in sustainably produced, excellent, and "locally distinctive" cuisine is growing. This suggests that a person has comprehended and is aware of all the consequences that will arise from engaging in or refraining from such thoughtful activity (Dumillah, 2021). The responses show that in order to help tourists conduct sustainable consumption toward the destination, there is a need for greater awareness and digital channels. To address this gap and encourage tourists to travel sustainably, it is possible to promote the use of digital apps and provide information about waste reduction in the area. Traveling with purpose and leaving a positive impact are opportunities that tourists can take using it. This can also have a number of positive benefits on the "tourism ecosystem" as a whole by changing visitor behavior (Delgado et al., 2023).

Overall, the responses highlight that awareness; digital tools and local community engagement are crucial aspect in promoting to reduce food waste while traveling. Thus, encouraging travelers to use apps like "Too Good To Go" and facilitating connection with sustainable initiatives in local area can bridge the gap between home and travel contexts, leading an impactful sustainable practice among tourist.

Tourist motivation and experience of using digital apps for sustainable travel practices

Tourist motivation and Experience

When it comes to the information and familiarity about the "Too Good To Go" app the researcher asked the interviewees 'How did you came to know about the "Too Good To Go" app and what is the motivation of using the app particularly on vacation? Mostly all of the respondents have similar answers in that they came to know about the app either through their friends or through social media platforms.

"The first time I knew about the app was through one of my friend. He actually showed me a post on facebook I suppose I don't really remember but anyways it was some kind of post or ads may be. At that time he told me that using this app he has got a bag full of goodies in a fraction of price and its leftover food from the restaurant. So he told me to try it and after that conversation I did try it to buy a breakfast bag and yeah I had good experience because it felt great to save food that would otherwise go waste and after that I have also used the app several times even when I am travelling. It has honestly become by go-to app for me to enjoy my meal" **(FC)**

"I think somebody told us, like a friend or someone we know told me about the app. And then I tried it here in New York, and I was like, oh, pretty cool. Like I said, I love the money saving aspect of it, and I love the surprise aspect of it, and I think we've got mostly really good experiences." **(LV)**

Like from the above responses, most of the other respondents also discover app through the word of mouth like both (FC) and (LV) mentioned in quotation above. This indicates the significance role of social networks and word-of-mouth in promoting sustainable practices. While (FC) found the app through the facebook post shown by a friend, which later led him to

have positive experience and further he continued to use the app while traveling as well. Additionally (LV) also noted that a friend's recommendation motivated them to try and use the app as she appreciates both the cost saving and the surprise aspect of the app.

The researcher further asked to share the participants their overall experience of using "Too Good To Go" app and all of the respondent had a both negative and positive experience although they lastly conclude that they had overall good experience with the app.

"I first used it when I traveled to Italy, and while I was staying in Bologna for 6 days, I did it 3 times. The challenge was finding locations near where we were staying and whose pickup times were convenient to our plans for each day. We got wonderful bags—far above paid value—sandwiches, pastries, prepared foods we could reuse as part of meals cooked at the apartment. There was a holiday when most cafes were closed, but we had plenty of food! I have also used it in Valencia and San Sebastian Spain—twice in Valencia. I chose places in the same Central Market because the pickup times were almost the same. We got a great selection of salads, sandwiches, and pastries. I have also used it in the US in Santa Barbara, where my family live, and in Philadelphia where I traveled for a museum day. We did it 3 times in Santa Barbara and got fancy donuts twice and grocery items once." So I would say overall good experience." **(BA)**

"My overall experience has been really positive. The app in itself is doing wonders, first it's user-friendly and makes it quite easy to locate the restaurants and cafes near to your location. Bu using the app i must say that I have enjoyed trying a variety of foods that I might have not chosen to eat and yeah it feel good to know that I am helping to reduce food waste also" **(BH)**

The experience shared by the respondents with the "Too Good To Go" app offers a thorough analysis of app advantages and disadvantages. (BH) feedback complemented (BA) by highlighting the role of app in facilitating exploration of different cuisine experience and additionally reducing food waste as well. The user-friendly design of the app is praised by the entire user. However (BA) points out logistical issue that the app might address for instance navigating convenient pickup location and the schedule for the pickup time around their personal schedule but the good value for money and the range of meals alternatives has frequently surpassed the expectations, despite those difficulties. As a result, the application aids in decreasing food waste, enabling companies to adopt a zero-waste strategy. The program not only helps the environment, but it also enables users to access information they would not have known about and purchase goods at deeply discounted prices. Thus, Too Good To Go gives customers the opportunity to discover a new, ethical, and cost-effective method of sustainable consumption (Join Our Food Waste Movement, 2024.).

Discussion

The use of "Too Good To Go" app while traveling highlights the importance of social influence and positive reinforcement in adopting sustainable behavior. The Theory of Planned Behavior (TPB) is useful to understand this phenomenon. Ajzen (1991) explains how the subjective norms and attitude influence and the intention to perform a behavior, such as using app that focuses on sustainability. The approach places significant emphasis on psychological elements, such as financial incentives, moral and ethical considerations, religious convictions, and environmental concerns. Efforts to decrease food waste might be impacted by economic issues (Solis & Krajewska, 2020). In this case, the recommendation from friends (subjective norms) played a significant role in influencing both of the users to try the app. It demonstrates that people are more willing to attempt new behaviors when they observe their peers engaging in

them, particularly when those behaviors are presented favorably and have obvious advantages. In "Influence: The Psychology of Persuasion," published in 2007, R. B. Cialdini explores the theory that social proof has a significant impact on people's behavior. The phenomenon known as social proof, also known as informational social influence is when people try to imitate the behaviors of others in order to reflect acceptable behavior in a particular situation.

The positive experiences and the cost saving (attitudes) reinforce their continuity in using the app, illustrates how initial social influences can lead to sustainable behavioral change in an individual. If the app is used by friends and family who support sustainability, travelers might feel compelled to live a more sustainable lifestyle. Friends who frequently post about their ethical food choices on social media could encourage travelers to use the app to join the conversation and share their own experiences. Yet, research by Stefan et al. (2013) and Graham-Rowe et al. (2014) indicate that food waste is a behavior that is frequently only seen by the generator. The Value-Belief-Norm (VBN) Theory can also be applied here. The theory suggests that the individual with strong environmental values and beliefs about their responsibility to the environment are more likely to get engaged in pro environmental behavior. Any action that can protect a particular ecosystem or the natural environment as a whole from the damaging consequences of human activity is referred to be a PEB. Previous research by Ghazali et al. (2019) has demonstrated that people are more likely to act in specific manners when they think that their friends, neighbors, family, and coworkers would appreciate them. Han et al.'s findings [20], which show that social norms directly promote sustainable behavior, add support to this idea. The fact that both responders have continued to use the app suggests a personal norm towards decreasing food waste, which is reinforced by their own values and positive ideas about sustainable consumption. Moreover, the motivation mentioned by the participants (cost saving, surprise elements) are some important drivers that enhance the appeal

of the application. These aspects of the app not only make the benefit for the environment but also budget friendly and fun. This aligns with the findings that suggest sustainable alternative enjoyable and satisfying that led to increasing their adoption.

In summary, social recommendations have a major role in the adoption of the "Too Good To Go" app while traveling, and pleasant experiences linked to cost savings and the fun element of surprise also enhance this influence. These finding highlights how crucial it is to use social networks and make sure users have a good experience in order to encourage sustainable behaviors. App developers and sustainability supporters can better design and market their applications to encourage wider use and greater environmental impact by recognizing these driving elements.

Impact of Technology on Travel Experience

Several researchers have investigated the impact of digital technology on the travel industry, noting significant changes in recent years (Pencarelli, 2020; Kah & Lee, 2022; Optute et al.,2020; Li, 2019) . These changes encompass a wide range of technological advancements and digital platforms aimed at streamlining processes, improving accessibility, and customizing experiences for travelers. Recent innovations in artificial intelligence, augmented reality, mobile apps, and social media have completely transformed how people plan, undertake, and reminisce about their travels (Cranmer et al., 2020). In the age of the Internet, digital tools have been implemented to encourage public engagement in climate initiatives and promote sustainable practices to minimize environmental impact (Li, 2019). Our research study explores into the effect of technology on individuals travel experience, seeking to gain insight into ways

in which modern digital tools are shaping and transforming their behaviors and habits when it comes to travelling.

So, one of the best parts about using the "Too Good To Go" app was the saving money honestly. You know how expensive traveling can get, right? Well, this app helped really helped me save quite a bit on meals. I had more money to spend on other fun things, like visiting more attractive location or picking up a few good souvenirs. It really made my vacation more fun and less stressful as I knew I was stretching my budget further and make the most out of my resources (DG).

The app had a positive impact on my travel experience. I get to know about new destinations and local dishes. It also gave me a sense of contributing positively to the community. I usually share about the new dishes that I try from the bag I bought. If it's completely a new dish, I might upload a pic of it or share it with my friends. (FL)

Similarly another respondent added that,

It has a really positive impact. And I mean, we've really often planned our day around like a pickup, I would say in a lot of cases like it literally drives like where we're going to go today and what we are going to do and like what our schedule is depending on what a pick-up time is. So, I mean, like when I was just in San Diego, I used it like one restaurant had you got like a bag of side dishes I use that too. Make easy a meal that I made for this whole. (RB)

The overwhelming majority of individuals surveyed express their enthusiasm for the positive impact that modern digital tools have had on enhancing their travel experiences. They discuss the various changes they have observed in the travel environment and detail the proactive steps they are taking to adapt to new technologies in order to promote sustainability and responsibility while travelling.

Travelers use a variety of apps and services to share images, videos, and other content with their friends, family, and social networks in addition to gathering information. By sharing their travel experiences, they turn the tourist experience into a chance to interact in real-time with their whole social network (Pencarelli, 2020). As mentioned by a participant, that he got more excited by the chance to share his experience, particulary the new dishes he got through the app. This can help in enhancing social media engagement and enriching the travel memories. Similarly, through cultural contact, tourists can gain a deeper understanding and appreciation of the local way of life in the places they visit. For instance, travellers may learn about the cultures, traditions, and lifestyles of the area as well as the native foods by interacting with local businesses (Cranmer et al., 2020). It gave them a chance to encounter the warmth and friendliness of the local way of life, which may improve their entire experience. Through engaging in local dining experiences and minimising food waste, tourists perceive that they are making a good impact on the community. This illustrates how technology may help create meaningful and ethical travel experiences by enabling users to interact more fully with regional customs and cultures (Kah & Lee, 2022).

In addition, digital app (such as TGTG) makes meal savings possible, which is especially crucial considering how expensive travel can be. Tourists can use these savings to support other exciting activities, like seeing more places or buying souvenirs. The focus on stretching a budget highlights how technology may ease financial strain, making travel more enjoyable overall by allowing for additional activities and lowering worry about costs. The concept of using less money when it comes to environmental issues has been studied by Vermeir & Verbeke (2006). They find that, despite having posing attitudes, individuals often take a passive

approach when it comes to using their income to advocate for environmental or animal welfare causes. Instead of actively supporting initiatives, individuals tend to simply act as consumers.

Similar to this, the app makes it easy for tourists to locate local restaurants that satisfy their requirements, freeing them more time for other pursuits. This convenience is especially helpful when traveling, since time is frequently of the essence. One of the repondent notes that their daily routine is frequently planned around when their meal is picked up, which might affect their plans and activities. This exemplifies a more flexible and dynamic method of organizing travel, where technology has a direct influence on the daily schedule. The ability to choose where and when to go thanks to the app provides a degree of freedom and spontaneity that lets visitors find new experiences and locations they would not have otherwise thought about. This can be related with preceived behavioural control theory of Ajzen (1991), which state that an individual's belief in their ability to control their behaviour is measured by the perceived ease or diffiulty of performing a specific behaviour. By solving typical issues encountered by passengers, the app serves as an example of how technology solutions may improve travel experiences, making them less stressful and more fun, and plays an important part in modern travel making it more flexible, economical, enjoyable, and efficient.

Challenges for TGTG to Reach Broader Audience

Challenges for TGTG

In this age of digital transformation, the tourism industry has undergone significant changes due to the widespread use of technology. This technological advancement enables travellers to conduct thorough research and planning, receive instant updates on their desired destinations,

and compare various products to secure the best deals (Busulwa et al., 2022). Nevertheless, these advancements also present challenges that must be addressed to foster sustainable and equitable growth in tourism. Though tourists can enhance their travel experiences from TGTG, by exploring new culinary experiences, supporting local businesses, and promoting sustainable practices, various drawbacks in the app's functionality are hindering the app from reaching its full potential to contribute to promoting sustainable consumption (Yang, 2021).

It is crucial to practice environmentally responsible purchasing to prevent harm to the environment caused by unplanned buying of goods (Joshi & Rahman, 2015). TGTG focuses on assisting businesses in selling excess food to reduce food wastage and subsequently decrease greenhouse gas emissions. Despite the user-friendly nature of the app and its simple purchasing process, its impact is hindered by limitations such as geographical restrictions, fluctuating food availability, and operational difficulties faced by participating businesses. In this paper, in order to better understand the operation of the app, we question about any challenges or obstacles our respondents had faced when using it.

It's incredibly competitive to get some bags. So, you can spend a lot of time like stocking a bag and not get it. I have had like gone to places that missed like that forgot to turn it off when they were closed that day. And it's not open when You get there. I have gone to places, and they didn't have a Bag left for me, And I've had disappointing bags, but yeah, in terms of travel? No. I mean, I said we plan our whole day around it. I often just I look for what is near, where we're going to be and if there's something looks interesting. I think it would be nice if you also could have more options like in when you're searching for the bag options. (TS)

Well, it's easy. Because to use the app is very simple, you just scroll through and click what you want and then they remind you. The reminder for the box is ready to pick up is wonderful, because sometimes I'll do it at nighttime and then I'll forget the next day. But the

challenging part is in Portland and Oregon, there are not enough businesses using it, and so you just see the same three businesses and sometimes it's not worth the price. Well, we really don't get to review it like it's not a good value or something. We just get to review the positives.(DG)

The most challenging thing is the selection in some places. There is not a lot of selection. Also, it's challenging when there's really popular bags that you can never get. The competition in New York City is crazy. If you read, there's also a TGTG New York Group. You should just follow it and read some of the conversations. Some people are trying to be like, I got the Italy bag, It's like Focaccia, Focaccia, and more Focaccia. There are some bags that are more lucrative than others that everybody wants them. (LR)

Most of the participants reported positive experiences with the app, praising its straightforward user manual and easy-to-use features. However, the majority of respondents also highlighted two significant issues they encountered. These included the limited selection of products and businesses on the app, as well as the lack of information regarding the availability of bags and their pickup schedule. It is important for companies to ensure that their surplus food is stored correctly and easily accessible for collection, which may require additional effort and coordination. This could result in limited availability of excess food at certain times, which may not be convenient for all customers. Despite consumers showing a favourable attitude towards sustainability and eco-friendly products, the market share of these products remains small due to challenges in distribution and pricing involved. This suggests that consumers often overlook the environmental impact of their purchases and prioritize other factors such as convenience and ease, in their buying decisions (Mohr et al., 2001).

When customers discover that a store is not open or that a particular item is not in stock, the frustration that arises from businesses failing to keep their availability status up to date and limitations on picking time, can be significant. This issue is particularly problematic for travellers whose daily plans rely on these purchases. Additionally, the competitive nature of the market for popular products and limited diversity in certain areas can lead to product overlap and high demand for specific items. This competitive atmosphere can be disheartening, especially for consumers who may not be as technologically proficient or experienced. Individuals who prioritize the well-being of others and the environment may be attracted to TGTG, but if they consistently encounter inaccuracies in updates and unavailable items, their trust in the platform's effectiveness may diminish. This disconnects between their values and the app's performance can result in frustration and decreased involvement. In an individual's life, values serve as a strong framework and are perceived as factors influencing attitude and behaviour (Hong et al., 2024)

The respondent appreciates the app's user-friendly interface and reminder feature but expresses dissatisfaction with the lack of involvement from businesses in several areas such as Portland, Oregon. Users who consistently see the same options on the app feel like it lacks diversity in its offerings, which diminishes its value. Personal and social norms play a crucial role in promoting sustainable behaviour, and the social norm of using the app may be weakened by the limited engagement from companies and the repetitive options available (Brouns, 2019). Additionally, the inability for customers to leave negative reviews about the quality or value of products could hinder transparency and hinder the app's ability to improve its services. This lack of feedback may lead to a decrease in confidence and faithfulness to the standards of sustainable consumption promoted by the app.

The challenges faced by TGTG underscore the importance of enhancing user experience and functionality, especially for travellers who rely on the app to enhance their journeys. By increasing engagement from businesses, improving search features, and implementing a transparent review system, TGTG can address these issues and enhance its reliability and ease of use. This, in turn, will promote wider and more consistent adoption of Too Good to Go's sustainable consumption initiatives.

Efforts to Reach Broader Audience

Different scholars have proposed distinct strategies for a product or service to reach a wider audience. Some researchers (Ng et al., 2015; Mahaputra & Saputra, 2021) suggested that Word of Mouth advertising is an inexpensive and useful method for advertising, whereas others (Hajli, 2014; Williams et al., 2014; Feria, 2023) believes that social media advertising is the most effective platform for advertising at the current technological period.

Social media serves as a versatile tool for individuals, allowing them to engage in various roles such as creators, conversationalists, critics, collectors, joiners, and spectators (Williams et al., 2014). It has emerged as an effective platform for educating the public on sustainability issues and promoting environmental awareness. It has the potential to drive societal change towards a more ethical and sustainable mindset by influencing consumer behavior, purchasing decisions, decision-making processes, and values through its impact on users (Feria, 2023).

Moreover, Word-of-mouth marketing is a classic strategy that harnesses the power of genuine recommendations to drive natural growth and establish strong brand loyalty (Ng et al., 2015). It is often overlooked as a cost-effective marketing avenue, but it can be incredibly effective

when a customer is so impressed with a brand that they share their experience with others. While businesses may not have direct control over these conversations, they can still benefit from the social interactions and recommendations that develop within consumer communities (Mahaputra & Saputra, 2021). Positive feedback, ratings, and comments play a key role in building trust and reducing perceived risks associated with a brand or product.

In order to gain a deeper insights into the app's current standing with customers, we asked our participants to share their thoughts on potential improvements and strategies for expanding its reach to a wider audience. One of the respondent points towards the app's absence of advertisement, mentioning that,

I don't know how you found out, about the app, but it seems the lot to be just word of mouth, or it pops up on your Facebook timeline or something. There are no ads about it. There's nothing in the press about it. You pick up a newspaper and finding the back of page four that adverts are good to go and old people would probably love it as well. The idea of saving food that being wasted and creating things and trying different things that are out of their comfort zone. You know, you can give it a go. (FC)

While some others comment on the app's absence of certain functionality.

Although it is so simple to use the app, sometimes it's hard to figure out, where places are in an unfamiliar city, where you don't have much time to look around. I wish it could use GPS to suggest bags that are near where you are at any given time—and bags that are available at the times you're looking. (BA)

It would be great If they can add more filter options specific to travelers, such as dietary preferences and meal types. Real-time updates and a better notification system for new deals would also be helpful. (LV)

The lack of mentions in prominent media outlets and advertisements may be hindering the reach of the service to a diverse audience. This could be particularly impactful for older individuals who may not be as active on social media and therefore might not be aware of the program. Without intentional media placement, there may be a decrease in positive attitude of the service among potential consumers, especially older individuals who are not regular social media users. The absence of mainstream media coverage could lead older individuals to believe that the service is not meant for them, reducing their confidence in using it. Thus, those who are less familiar with social media platforms may face challenges in accessing and utilizing the service, further limiting the formation of positive attitude with the service. According to the theory of planned behaviour, Sheoran & Kumar (2021) suggested that attitudes are formed based on an individual's positive or negative perceptions of certain behaviors. Nickell & Hinsz (2023) elaborated on this concept by explaining that our actions can cause either positive or negative emotions within us, leading to feelings of favorability or unfavourability, pleasure or displeasure, or goodness or badness. Consequently, if a customer holds a negative attitude towards a particular behavior, they are less likely to engage in it.

Similarly, the challenge of finding businesses in new cities can pose a significant obstacle for travelers. Using GPS features to show nearby stores in real-time could be a practical solution to improve user experience by simplifying the process of locating businesses and organizing pickups efficiently. This improvement has the potential to decrease user frustration and increase the app's usefulness, especially for travelers. Additionally, people should recognize the positive impact of their actions in reducing food waste. However, the difficulty of finding businesses, particularly in unfamiliar cities, may hinder successful pickups and reduce the perceived effectiveness of their efforts. By integrating GPS functionality, this issue can be addressed, leading to a smoother process and increasing the awareness of the positive outcomes of their

actions. By improving usability with real-time location services, users can feel more empowered and responsible for contributing to sustainable consumption.

Role of TGTG in Shaping Sustainable Consumption

The utilization of digital applications is essential in influencing consumer behavior, optimizing resource utilization, and promoting environmental consciousness, all of which contribute to shaping sustainable consumption patterns. The integration of digital technology and sustainability is considered to be two significant trends that are reshaping the economy and society in contemporary times. The digital revolution allows businesses to incorporate sustainable practices into their daily operations, thereby promoting efficiency in resource utilization and reducing their impact on the environment. By utilizing online platforms and electronic commerce, these companies can expand their reach to wider audiences, engage with socially responsible consumers, and effectively communicate their sustainable initiatives.

In recent times, we can see that certain behaviors like buying, comparing, and inspecting products are now primarily done online or through mobile devices. People share and gather information about products and services on social media platforms, blogs, and forums, and are becoming more involved in virtual consumption. These trends indicate significant shifts in power dynamics, ownership, information organization, technology usage, and the influence of technical knowledge and market expertise in shaping consumption.

Although Gossen & Lell (2023) argued that digital technologies present a considerable threat to sustainable consumption, as they play a role in the escalation of energy and material usage in the digital world. But, given the substantial influence that major digital platforms have on

society, consumers, and the environment, it is imperative that they take responsibility for ensuring that their impacts are beneficial. Thus, a digital platform can help empower consumers to make responsible choices in their food consumption, promoting ongoing sustainable practices and shedding light on the potential implications for various stakeholders. When questioned about the impact of digital apps on sustainable consumption, the participants highlighted the significant role these apps play in influencing consumer choices and promoting sustainability efforts.

Digital apps like "Too Good To Go" play a significant role in shaping sustainable behaviors among tourists. They make it easier to make eco-friendly choices and raise awareness about the importance of sustainability, and To change their perspective about leftover foods or to reduce the food waste. I believe that not every food that get left out at the end of day is bad and should be thrown away. (BH)

I think it's a great role TGTG is playing in terms of sustainability and food waste reduction. I was interested in new initiatives about sustainable consumption of food, and the environmental impact TGTG can achieve in the field of sustainability (TS)

I think it's super positive because That's not the only advantage. Like if you decide to pay the extra $5 for your Airplane ticket To be more sustainable, yeah. It's only a greater cost, right? But you don't necessarily experience an advantage. But with TGTG, I think it's just such a positive, such a positive because You you're doing something for the climate, Reducing food waste and, reusing the food supply that would be thrown away, you're getting something cheaper and you're having often an amazing experience. You know, it's fun. (RB)

Digitalization has the ability to aid in sustainable development within the consumption sector by encouraging practices such as reusing, repairing, sharing, and participating in the circular

economy. Through the provision of information, promotion of resource-efficient actions, and offering economic incentives, digital tools play a crucial role in minimizing waste, preserving resources, and encouraging sustainable living.

The application plays a crucial role in promoting environmentally friendly choices and changing attitudes towards excess food. A majority of respondents agree that not all excess food should be discarded, reflecting the app's role in raising awareness about the importance of reducing food waste. The app motivates users to appreciate leftover food, which is often viewed as less desirable, in line with the overall objective of promoting sustainable consumption by highlighting the idea that food nearing its expiration date is still valuable and suitable for consumption. Users are convinced that excess food holds value and should not be wasted, challenging the common belief that leftover food is unfit for consumption. The app encourages users to adopt behaviors that support sustainable consumption practices, such as purchasing and consuming surplus food, which align with their personal beliefs and values. This aligns with the research of Stern et al., (1999) based on the theory of Value-Belief-Norm.

One respondent draws a comparison between the benefits of using TGTG and buying carbon offsets when booking a flight. They point out that while some sustainable options come with added expenses and no direct benefits for the consumer, TGTG offers a tangible and enjoyable experience. By purchasing surplus food at a discounted rate, users not only help reduce food waste but also get to enjoy delicious meals at a lower cost. TGTG not only contributes to sustainability efforts but also provides personal benefits by offering tasty food at affordable prices, making eco-friendly consumption more appealing and fulfilling. The pleasurable experience offered by TGTG helps reinforce the idea that sustainable choices can be enjoyable

and advantageous, ultimately making it easier for individuals to adopt and maintain sustainable behaviors.

The impact of TGTG on decreasing food waste and promoting sustainability is profound. Users are drawn to the app for its positive environmental effects, as it plays a role in larger sustainability efforts by reducing food waste. This highlights how the app's innovative approach to food consumption has the power to make a substantial difference in protecting the environment. Additionally, the app's influence goes beyond its primary purpose, inspiring sustainable practices and mindfulness towards food waste not only during travel but also in everyday life, fostering a lasting awareness and change in daily consumption habits.

Influence of Digital app (TGTG) in Decision Making for Future Travel Plans

The use of digital apps has brought about a major shift in how people plan and decide their upcoming travel arrangements (Archi et al., 2023). These advancements in technology are leading the way towards a future where travel and sustainability are effortlessly integrated, with developments in environmentally friendly modes of transportation and the utilization of digital platforms for better control over tourist numbers. Moreover, the incorporation of technological innovations holds the promise of encouraging sustainable tourism behaviors by enhancing operational effectiveness, reducing waste and carbon emissions, and enhancing overall visitor satisfaction (Cochoy et al., 2020)

Furthermore, the incorporation of digital technology has become a crucial element in promoting sustainable tourism (Gossen & Lell, 2023). Digital tools play a vital role in

enhancing marketing strategies, reducing expenses, and targeting specific consumer segments through personalized campaigns. The utilization of digital technology can greatly impact the sustainability of tourist destinations (Gossen & Lell, 2023). In addition, mobile applications have become essential for modern travel planning, offering various features that simplify the process, improve the overall experience, and facilitate informed decision-making (Gössling, 2021). These technological advancements have made travel more accessible, customizable, and enjoyable for a global audience. By embracing digital technology, sustainable tourism practices can be supported through increased operational efficiency, reduced waste and emissions, and enhanced visitor satisfaction (Lehner et al., 2023). Despite the growing acknowledgment of the significance of digital technology in sustainable tourism, there remains a need for a thorough understanding of its adoption and implementation in sustainable tourism destinations.

This research question looks into the factors that shape individuals' decision-making processes when it comes to making future travel plans, with a specific focus on the impact of cost-saving and sustainable consumption applications such as TGTG. The experiences of users with TGTG have not only shaped their beliefs and actions in terms of sustainable consumption and seeking out deals in their everyday lives but have also had a significant influence on how they approach and plan for their travel experiences.

Yeah, yeah. We always will. And there's always, I mean, my husband, he loves it too. both my husband and I, it's often like we are racing to see who will discover something first. (TS)

I'll definitely check to see if it's in the area where I am visiting. If there's anything in the area, yeah, absolutely. I would definitely look at different apps or you know. I'm always looking for a good bargain and it is a good bargain; I don't mind if things are a day old because I never eat every things in a day. I buy them anyways. (FL)

Yes of course. Knowing that I am saving food that would be otherwise wasted, has changed my behavior about sustainable consumption, and I would definitely look for similar apps or services in the future for the possibility of saving some money and potentially discovering some new restaurants or food store that I might not try otherwise. (PL)

If there are other apps, I would love to explore them and try to make my best effort to contribute for the environmental cause. If there is an app that is working to reduce the environmental negotiation and to provide a cheaper meal options than it's a good idea that at the citizen that you contribute yourself by using those product or services regardless of the cost involved in it. (LV)

Upon reviewing the responses, it becomes evident that there are numerous crucial elements that play a role in shaping individuals' decisions when it comes to making plans for future travel. These factors include a shared passion for exploration, the influence of recommendations from one's community, the value placed on finding deals and saving money, the ability to be flexible in one's plans, a dedication to practicing sustainable tourism, and the positive impact of past travel experiences. Collectively, these components underscore the ways in which advancements in technology and input from community members can significantly impact the choices people make when it comes to traveling, ultimately leading to more cost-efficient and environmentally friendly practices (Pan et al., 2018).

The substantial cost savings provided by utilizing TGTG and other similar applications greatly impact the viewpoints of travelers. Many travelers are on a tight budget, so being able to buy meals at a fraction of the usual price is incredibly appealing. This positive financial influence serves as a strong incentive, instilling a sense of satisfaction in travelers as they save money, ultimately boosting their overall perception of these apps. Those who frequently use TGTG

have become accustomed to buying food nearing its expiration date, fostering a favorable attitude towards similar practices during their travels.

The positive impact of reducing food waste on the environment leads to a favorable perception of TGTG. Individuals who have had a positive experience with TGTG are inclined to look for similar applications while on the go. They have a strong preference for sustainability-promoting apps like TGTG. Those who prioritize environmental conservation will appreciate using the TGTG app as it enables them to be more eco-conscious. This shift in behavior extends to their travel choices, making them more inclined to explore and utilize similar services in new destinations. Individuals seeking to adopt an eco-friendlier lifestyle will find the TGTG app beneficial for making environmentally friendly travel decisions.

Using these applications during travel can result in finding unfamiliar eateries, markets, and supermarkets that may have been overlooked otherwise. When individuals have a positive experience with TGTG, they are likely to recommend it to others, thereby expanding the app's user base. This can generate interest in using the app among more travelers. The aspect of discovery adds an element of excitement to travel, transforming grocery shopping into a thrilling experience and a chance to immerse oneself in the local culture. The increasing emphasis on sustainability in the travel industry may establish a standard where using apps like TGTG is viewed as the ethical choice.

People have had good experiences with TGTG, which has made them want to learn more about how to be eco-friendly and use other similar apps while they are out and about.. These favorable experiences underscore a substantial movement towards eco-friendly and budget-friendly travel. When we make changes in the way we travel, it makes our trips more fun and helps the

environment too. As more people learn about these changes and want to use them, we will see even more ways to travel in a sustainable way. This will make it easier for people to choose eco-friendly options no matter where they go.

Conclusion and Recommendation

The "Too Good To Go" (TGTG) app has proven to have a major positive impact on encouraging tourists to engage in sustainable consumption practices. Additionally, to improve travel, the app's user-friendly interface and capacity to link users with surplus food at very affordable prices have contributed to reducing food waste. In this study, the participants highlighted the significance of sustainability and expressed their satisfaction with the app's multipurpose advantages, which supports the need for ethical consumer behavior and contributes to global concerns about sustainability. The findings of the study also demonstrate how technology, particularly through the "Too Good To Go" app, plays a vital role in shaping tourist behavior and attitudes towards sustainability. The participants indicated a significant preference for utilizing digital platforms to organize their travel, limit food waste, and make decisions that are environmentally friendly. Sustainable behavior is based on an individual's or a group's values, norms, beliefs, and sense of obligation in intentional acts intended to provide for the welfare of every living being, including the generations that come after. An increasing number of ethical customers are shifting from total avoidance of unethical consumption to cutting back on it. There is a connection between mobile technology and changing behavior since TGTG employs a mobile app as its primary user information entry point (Cunningham, 2021).

According to Zhao et al,(2016), changing behavior linked to health was accomplished with the use of applications connected to health. Less time consumption, a user-friendly interface, immediate feedback, and comprehensive information were among the app's qualities that increased the efficacy of behavioral change. In a similar context to our findings, the "Too Good To Go" app has also demonstrated an influence on changing behaviors, involving reduced time consumption, an intuitive user interface, and comprehensive information. According to Gollnhofer (2017), the integration of sustainable behavior into food consumption may be effectively achieved by promoting societal normalization and elevating the acceptance of sustainable consumption practices. However, difficulties were observed, pointing up possibilities for development. These difficulties included restricted geographical availability and logistical issues that needed to be addressed. Moreover, effective advertising and broader involvement strategies can also grow the app's reach and impact, giving sustainable consumption more significance to a wider audience. To implement this behavior, the TGTG app will also be helpful. The user interface incorporates cost-saving benefits while providing clear instructions on how to practice sustainable behavior. This app should incorporate self-monitoring or personalized performance feedback in the future. It is related to the study conducted by Zhao et al. (2016). Marketing should support sustainable food consumption by promoting various types of food waste behaviors that are acceptable in society. The approximately 16.4 million TGTG users indicate that, as a result of these social norms, more people will be influenced to live sustainably and with less food waste. All things considered, the Too Good To Go platform is an excellent case study of how internet platforms may provide chances for the green economy by providing knowledge, products, or services. The platform is contributing to the reduction of food waste and the promotion of more sustainable behaviors by facilitating sustainable connections between businesses and customers (Too Good to Go: An Initiative to Tackle Food Waste | Knowledge Hub | Circle Economy Foundation, 2024.).

In order to increase the influence of the "Too Good to Go" application to promote the broader implementation of environmentally conscious behaviors regarding consumption, the subsequent suggestions is put forth.

Expanding more in geographical context and advertising strategies

According to the research analysis, there are very few options to choose from in terms of location, as it seems like the participation of businesses is low, so there seems to be a need to increase the number of businesses in various regions. The expansion will provide the user with more options to choose from, and the app can also be accessible to a broader audience. Additionally, to raise awareness about the app, especially among tourists, the government as well as social media campaigns can play a crucial role. By reaching a broader audience, the app can also attract new users who might not be familiar with its mission. By doing so, the app can not only fight food waste on a global scale but also promote sustainable consumption of food in diverse geographical locations. Especially in rural places and international markets where the app is not yet available, it can significantly enhance its reach and effectiveness.

Enhancing app functionality

Introducing Real-time GPS-based tools might make it convenient for tourists to find a location for picking up food in a new location, especially when we are traveling. Additionally, a wider range of customer demands will be satisfied by facilitating additional features and choices for kinds of meals and dietary preferences, including options such as vegetarian, vegan, gluten-free, etc. Furthermore, allowing users to make a review of the value and quality of the food they brought can enhance transparency and foster trust among customers. The individual will be able to make better choices with the written review system, which can also provide the

company with insightful data on user satisfaction. The app can also include instructional information about the advantages of sustainable consumption and the food waste has on environment. Articles, fun animation, films, interactive modules can all be a part of this material. User engagement and motivation to adopt eco-friendly behaviors can be maintained through regular updates and notifications regarding new information.

Providing Incentives to enhance user Experience

The app can increase the user engagement and loyalty by implementing a reward program that provides incentives for frequent app users. With every transaction the user may get points that may be exchanged for many deals; such as freebies, exclusive offers etc. This idea can encourage repeat usage of the app both in home and while you are away.

Promoting Cross-sectional Collaboration

In order to further expand not only to use in everyday life but even when you are traveling the app should further collaborate with different sectors such as; hotels, tour operators, educational institution and especially government sector could play a crucial role in introducing the app to be tourist for better sustainable consumption while traveling.

The "Too Good To Go" app may accomplish its goals of lowering food waste, encouraging sustainable consumption, and improving user travel experiences by taking these thorough recommendations into consideration. In addition to improving the app's effectiveness, this all-encompassing strategy will support a larger cultural movement that emphasizes environmental responsibility and sustainability.

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Appendix

Interview Questions

<u>Demographic Profile</u>

Name:

Gender:

Profession:

Nationality:

Section 1. Introduction to Sustainability

1. Can you tell us about yourself and your travel habits?

2. How do you make your travel plans, or do you use any kind of digital apps to plan your trips?

3. How important is sustainability to you when you travel? Like, are there any specific actions or practices you try to make to minimize your environmental impact?

4. Have you noticed any trends or shifts in the way travelers approach sustainability and responsible consumption in recent years?

5. Have you ever used any apps or services focused on promoting sustainability while traveling before, and if so, could you share your experiences?

6. What are your thoughts on the concept of reducing food waste, particularly while traveling? Is it something you have actively considered to address during your trips?

Section 2. Too Good To Go app

7. How did you get to know about the app, or what motivated you to use the "Too Good To Go" app while on vacation?

8. Can you describe your overall experience using the "Too Good To Go" app during your travels?

9. How would you describe the impact of using the "Too Good To Go" app on your travel experience?

10. What aspect of the "Too Good To Go" app do you find most easy or challenging, and why do you think so?

11. How do you think the "Too Good To Go" app could be improved to better serve the needs of travelers?

12. How do you perceive the role of digital apps, specifically like "Too Good To Go", in shaping sustainable behaviors among tourists?

13. Did your experience using the Too Good To Go app influence your decision to use similar apps or services in the future? Why or why not?

Transcribed interviews of the participants

Participant 1

Name: Luigi Vorzilo

Age: 35

Gender: Male

Profession: Waiter (Part time Tourist Guide)

Nationality: Italy

Date: 16 May 2024

Can you tell us about yourself and your travel habits?

My Name is Luigi. I am 35-year-old and I'm from Italy. So normally, I travel around 3 to 4 times in a year, o if there is an emergency in my family so I will travel to visit them. I usually check holiday apps and google flight to compare better rates.

How important is sustainability to you when you travel? Are there any specific actions or practices you try to make to minimize your environmental impact?

I do take care of sustainability most of the time I tried to book sustainable certified hotels and that uses eco friendly products. I Always try to minimize the use of water and plastic products.

Have you noticed any trends or shifts in the way travelers approach sustainability and responsible consumption in recent years?

I think newer generation are more interested to do things for sustainability. So, most of the companies Are launching their product based on that. Younger generations are taking more efforts are paying extra for sustainable goods uh rather than the older generation who just want to spend their time. I can also say that education is one of the factors that is changing the concept about sustainability and the climate change.

Have you ever used any apps or services focused on promoting sustainability while traveling before? If so, could you share your experiences?

I use Green Mobility and Donkey bike app other than TGTG. They are fully electric and easy to operate.

What are your thoughts on the concept of reducing food waste, particularly while traveling? Is it something you've actively considered to address during your trips?

So, whenever I order food from the restaurants or anywhere, I always try to finish everything. And if I could not get to finish it, I always try to bring it with me.

How did you get to know about the app? What motivated you to use the "Too Good To Go" app while on vacation?

I think somebody told us, like a friend or someone we know told me about the app. And then I tried it here in New York, and I was like, oh, pretty cool. Like I said, I love the money saving aspect of it, and I love the surprise aspect of it, and I think we've got mostly really good experiences

Can you describe your overall experience using the "Too Good To Go" app during your travels?

It was great. The bags are always filled and when you are buying. So many stuffs for such a less price, you always feel good. You can save a lot of time and money rather to prepare the food for yourself or buying those stuff in from a store as there are different type of stuff

How would you describe the impact of using the "Too Good To Go" app on your travel experience?

Its good. I think I am saving a lot of time using it. You can check the nearby location and buy the bag as for your need. I normally buy breakfast bags and sometime the dinner bags, and it's really enough for 2 people or even more. So, it helps to save your time so you can plan for other things

What aspect of the "Too Good To Go" app do you find most easy or challenging, and how do you think it could be improved?

It's so simple to use I think it save a lot of time. For traveler who are staying for a short time, they can save a lot of time by buying a takeaway bag and then go around the city. You go in the app check for the bags their locations and buy it. But the time to pick it up is sometime difficult. Sometimes They are little far and if you don't get there by time then sometime, they might sell it to others. It would be great If they can add more filter options specific to travelers, such as dietary preferences and meal types. Real-time updates and a better notification system for new deals would also be helpful.

How do you think app like "Too Good To Go" help in shaping sustainable behaviors among tourists?

I think the app is really helping to change the concept of leftover food and to reduce the food waste. Tt is important to see that not all the leftovers are bad and that need to be discarded. in some cases, many foods that remain at the end of the day can be stored or be sold in an app like TGTG.

Do you consider using it in your next travel?

Yes definitely. I would love to.

Did your experience using the Too Good To Go app influence your decision to use similar apps or services in the future? Why or why not?

If there are other apps, I would love to explore them and try to make my best effort to contribute for the environmental cause. If there is an app that is working to reduce the environmental negotiation and to provide a cheaper meal options than it's a good idea that at the citizen that you contribute yourself by using those product or services regardless of the cost involved in it.

Participant 2

Name: Filomena Cimbron

Age: 28

Gender: Female

Profession: Pastry Chef

Nationality: Portugal

Date: 16 May 2024

Can you tell us about yourself and your travel habits.

So, my name is Filomena Cimbron, and I'm 28-year-old, and I'm from Portugal. And I'm working in a restaurant as a pastry chef.

I usually travel twice or three times in a year like out of the country, but even in within the Denmark like once in a month we try to go on a car trip or night stay In Zealand or outside of Copenhagen.

How do you make your travel plans, or do you use any kind of digital apps to plan your trips?

Uh yes. Most of the time I would say I use booking.com or hotel stay and also online bookings like Momondo and Cheap flights on Google Flights to book our flights. But whenever we decide to go locals, uh just outside the Copenhagen, if our friend suggest us that there is a cool place that we can visit or in the surrounding we see in Instagram or Facebook.

How important is sustainability to you when you travel? Like, are there any specific actions or practices you try to make to minimize your environmental impact?

Uh, definitely. Most of the time when I'm going Outside of Copenhagen, I always try to take the train electric car because they are cheap. Also, We always look for the direct flight, even though you know that the connecting transit flights are somehow cheaper most of the time. So, in that ways we always try to check how much impact we can make while trying.

Have you noticed any trends or shifts in the way travelers approach sustainability and responsible consumption in recent years?

"Absolutely, as far as I know I have noticed that the newer generation is more into things for sustainability. I think they try to find sustainable accommodation options when it comes to stay and also prefer to use public transport for low carbon emission. As for myself I too prefer to

stay at eco-certified hotels although my budget is tight but I try yeah. And also you know if you see the lot of companies today they are targeting the product and service that focus on responsible travellers. For example a lot of booking sites provide options for sustainable accommodations. So I think it is becoming a great deal, and I believe it is definitely pushing more businesses to go green too.”

Have you ever used any apps or services focused on promoting sustainability while traveling before, and if so, could you share your experiences?

“Yes, definitely. It's like when you already know that you are creating some amount of carbon footprint or certain amount of environmental impact and there are more chances that you will actto reduce it. Isn't it? So, for me it is also important that I also play a part of being responsible towards environment. I have used the Momondo, TripAdvisor and other apps that can calculate how much carbon emission your trip is going to make. Or the car trip where you can see how much gasoline you save by using the electric car for the same trip. If you go and see in the momondo app there you will see a sustainability feature, like the carbon footprint information. Well although the app does not entirely focus on sustainable travel but it still helps to some extend”.

What are your thoughts on the concept of reducing food waste, particularly while traveling? Is it something you have actively considered to address during your trips?

I have become more aware of food waste globally and its impact on the environment. The use of the app like TGTG has helped to make shopping for food at home in order to avoid the waste while making the meal.

How did you get to know about the app, or what motivated you to use the "Too Good To Go" app while on vacation?

"The first time I knew about the app was through one of my friend. He actually showed me a post on facebook I suppose I don't really remember but anyways it was some kind of post or ads may be. At that time he told me that using this app he has got a bag full of goodies in a fraction of price and its leftover food from the restaurant. So he told me to try it and after that conversation I did try it to buy a breakfast bag and yeah I had good experience because it felt great to save food that would otherwise go waste and after that I have also used the app several times even when I am travelling. It has honestly become by go-to app for me to enjoy my meal"

Can you describe your overall experience using the "Too Good To Go" app during your travels?

I always had a nice experience because whenever I bought a bag. you feel like there is a lot of stuff in the bag like cookies, fruits, bacon, sausages. It is well enough for 2 people to eat at a time. And they are not like if, they are selling expired food or bad leftovers, but the food is really good to eat and Super cheap although being not really the best shape. So, whenever we are traveling or whenever we are staying overnight in in different places or during the car trips. We look for the apps where you can go buy the bag and then go for a walk around the city and when the bag is ready to be picked up, we go and pick the bag and have the breakfast in the

park or even in the car. And that helps you to save the time and to have a feeling that you are saving it from being dumped.

How would you describe the impact of using the "Too Good To Go" app on your travel experience?

Yes, definitely. It has impacted especially in big cities where the number of companies offering TGTG deal is quite high. when you can see in your surroundings that there are places that offers breakfast bags, so you go for a walk around the city. And when it is time to pick the bag and you had to wait like 10 minutes for the bag and when we get the bag, it full of snacks and various items. It is good for two people, and we really save some time and money.

What aspect of the "Too Good To Go" app do you find most easy or challenging, and How do you think the "Too Good To Go" app could be improved to better serve the needs of travelers?

I don't know how you found out, about the app, but it seems the lot to be just word of mouth, or it pops up on your Facebook timeline or something. There are no ads about it. There's nothing in the press about it. You pick up a newspaper and finding the back of page four that adverts are good to go and old people would probably love it as well. The idea of saving food that being wasted and creating things and trying different things that are out of their comfort zone. You know, you can give it a go

How do you perceive the role of digital apps, specifically like "Too Good To Go", in shaping sustainable behaviors among tourists?

I think it's a great role TGTG is playing in terms of sustainability and food waste reduction. I was interested in new initiatives about sustainable consumption of food, and the environmental impact TGTG can achieve in the field of sustainability.

Did your experience using the Too Good To Go app influence your decision to use similar apps or services in the future? Why or why not?

Yes definitely. I am using it. When you Have a feeling That you are Doing something good for the Environment at that price, I don't know what else people need to have in order to act to do something for the sustainability. Most of the time we have seen that the sustainable product or the green product costs are higher price than the regular product, but here in this case we can see that, you can do something for the sustainability. At a lower price. So, I will definitely use it. This app or something similar will provide me with a similar service in the future.

Participant 3

Name: Paolo Legeto

Age: 52

Gender: Male

Profession: Cook

Nationality: Italy

Date: 16 May 2024

Can you tell us about yourself and your travel habits.

So, my name is Paulo, I am 52-year-old And I'm a cook in a restaurant. And talking about my travel habits and I usually travel like Once or twice in a year

How do you make your travel plans, or do you use any kind of digital apps to plan your trips?

I use a variety of apps. When I'm looking for vacation. For normally use Momondo and Google Flight when I'm checking for the flights and. I have used the kayak. And Expedia. In the past. I'm also a club member of an airline company. So normally when I buy a flight ticket, I get it. Points and I can use that pointer to buy some other stuff during my flight time.

How important is sustainability to you when you travel? Like, are there any specific actions or practices you try to make to minimize your environmental impact?

You mean sustainability for the environment that I'm visiting? Extremely so. I'm very conscientious about my footprint that I leave and the foods that I eat that I buy the trash that I will create. Well, I learned something recently that I really want to try to do is I want to take back whatever I use like if I bring shampoo in a bottle, I want to take that bottle back home. I don't want to leave my trash, you know, and be a burden to the place that I'm at. So, whatever I bring I want to remove and so I'll take a suitcase full of trash home with me

Have you noticed any trends or shifts in the way travelers approach sustainability and responsible consumption in recent years?

I think the biggest trend I have seen in terms of sustainability is electrification. I don't know if the term electrification is correct, but I've seen the trend that everything is being converted into electric products nowadays the cars, train, bus, bikes and many more. And I think that's very important. Change that has been happening in terms of sustainability.

Have you ever used any apps or services focused on promoting sustainability while traveling before, and if so, could you share your experiences?

I think it is too good to go and the donkey bike app. Are the apps that I currently use that promote sustainability. Into good to go, you can buy the leftover foods and help to reduce the food waste promoting sustainability whereas in the donkey bike app You can rent electric bikes.

What are your thoughts on the concept of reducing food waste, particularly while traveling? Is it something you have actively considered to address during your trips?

As I said earlier, that being a cook. I have great value. To reduce food waste. So, whenever there is an opportunity where I can make an impact. I always try to make my best effort to reduce waste. In addition, using the app like Too Good to Go Has helped me further to make an impact on the environmental cause. I like to use the app when I'm traveling. as I'm not only saving money but also helping to reduce the waste being generated.

How did you get to know about the app, or what motivated you to use the "Too Good To Go" app while on vacation?

Well, my wife told me about the app. I don't know where she knew about that, maybe in some Facebook post or somewhere, because she's really into those things. And when I began to use it, I find it really amazing on how it works and how it helps to make something of the leftover foods. I really liked the idea and I have been using it since then.

Can you describe your overall experience using the "Too Good To Go" app during your travels?

Well, my experience with death has been amazing. I don't know how other people find that. Or how kind of experience they have had with the app. But to be honest, I have never had any bad issues with the app. I'd like to try different kinds of foods and I'm always open to trying new dishes and to see how they make it so. Whenever I visit a new place and I get to buy a bag of local foods, I feel amazing. I'm not going to say I always finish everything that I buy. From the back, but most of the disses that we get from the back. We always finish them.

How would you describe the impact of using the "Too Good To Go" app on your travel experience?

That's been positive. As I said I am Overwhelmed to try new food and new local cuisines whenever I'm travelling to new places. I can say like because of the app I get the chance to try some of local foods. Because when you are travelling, you don't try every piece of different food. But when you buy a bag and there are small pieces of different types then it's not bad to try them.

What aspect of the "Too Good To Go" app do you find most easy or challenging, and how do you think it could be improved?

Well, for me that is very easy to use. My wife is really into social media, so navigating through the app is easy for her. But. The tricky part? That they have faced with the app is how some of the businesses operate within the app. I mean, there are Some places that only Cell one or two bags and, and you need to constantly look. Check on the phones, uh, when the bags are up for sale. They get sold very fast. But other than that, well, I'm aware about the surprise by concept, so I cannot complain that you don't know already what you are going to get in the bag because that's the meaning of a surprise. So I don't think It's really hard to use that.

How do you perceive the role of digital apps, specifically like "Too Good To Go", in shaping sustainable behaviors among tourists?

I think the app is doing a really good job to help to reduce food waste and promote sustainable consumption. When you have a feeling. Whether you are doing something for the environment or doing something to reuse the Surplus product, it's creating a great experience and changing your behavior to buy the leftover food.

Did your experience using the Too Good To Go app influence your decision to use similar apps or services in the future? Why or why not?

Yes of course. Knowing that I am saving food that would be otherwise wasted, has changed my behavior about sustainable consumption, and I would definitely look for similar apps or services in the future for the possibility of saving some money and potentially discovering some new restaurants or food store that I might not try otherwise.

Participant 4

Name: Tracy Sweeney

Age: 56

Gender: Female

Profession: Unemployed (Medical Condition)

Nationality: UK

Date: 16 May 2024

Can you tell us about yourself and about your travel habits.

OK, so my name is Tracy Sweeney, and I am female. My age is 56, and I'm from Hampshire, United Kingdom. At the moment I'm not working because I'm awaiting surgery. So, at the moment it's housework I suppose. We tend to travel. 6 times a year Eight times, yeah so six times a year, usually within the UK.

How do you make your travel plans, or do you use any kind of digital apps to plan your trips?

We look at hotels, bed and breakfast things on booking.com or Check out TripAdvisor reviews for the places that we're going. And we tend to go in not for a long time, but like two or three nights stay several times rather than one long holiday in the year. As it happens, we're going away on Thursday for a few days, and again, my husband looks on booking.com if there's an event that we're going to and like this time there's a small-town beer festival on the Sunday and Saturday, so he'll look at where it's near to stay near that. If there's no events on, we just try and pick up a place that's central to where we want to be to have a good look round.

How important is sustainability to you when you travel? Like, are there any specific actions or practices you try to make to minimize your environmental impact?

Because we sort of live an average life, I suppose, and we don't eat out lots every week. We get a takeaway once every fortnight. Maybe when we go away, we tend to kind of enjoy ourselves. So, we usually go to a pub or restaurant for lunch or dinner. If there's special markets somewhere, street food or whatever, we'll have that for lunch instead. Um, and we sometimes do breakfast, not always do breakfast. It depends on what's happening, where we would go. I think while you're away to get sort of treats and try things that are different that perhaps you wouldn't do. And also, in the area that we live, unfortunately there's not a lot of options for TV to go, though when we do go away, it tends to be to cities or places that have quite like you have more options.

Have you noticed any trends or shifts in the way travelers approach sustainability and responsible consumption in recent years? Have you ever used any apps or services focused on promoting sustainability?

To be honest with you, when we're travelling, we tend to just go to local pubs, restaurants, chill out, have a wander around town. It's all about relaxing and. Yeah, not having to do cooking and housework and all that sort of thing. I sort of feel like an extra bit because I know some people just waste so much food at home as well, which I think is a crime show that. They complain that ohm we can't afford to feed ourselves and then you open the fridge and take out six things and put them in the bin. That would cost £8, and you think OK. I always have a look at the too

Good to Go app and see if there's anywhere nearby doing anything special. And I was given a lemon Danish thing in one of my last sweet bags which I didn't recognize at first. I thought it was a croissant and it was got a weird feeling. That surprise, and to another point of the OH, that's nice. And close fitting and crystal, you know. But that that also has inspired me because I like making my own lemon curd. So now once I'd had that as well as we're thinking well, I could make lemon curd tarts and things as well that probably quite nice because I went really well with the pastry. Yeah. So, as well as the sustainability of stopping it going in the bin. It's also a bit of creativity and in future if I get pastry that I need using up, I think now and again we all look at the fridge and go what can I do with that Got used by tomorrow. OH, then the inspiration from having that. Pastry in the to go bag. It will make you think, right? I've got a few lemons.

What are your thoughts on the concept of reducing food waste, particularly while traveling? Is it something you have actively considered to address during your trips?

I think it's a great idea. It saddens me to see when some people in the in the too good to go group on Facebook and pop posts on about. But I think we've got so used to being a throwaway society and not putting up with things that necessarily we don't like. Yeah, but just eating things that we sort of look at something going Another prime example The bananas. People like it different stages. I quite like bananas when they're starting to go motley brown because they're soft, but they still taste good. But then you see a banana that's quite mostly brown and you think, ohm, it's going to be soggy. Mash it up, stick it on toast or stick it out with some nuts and chocolate sauce ice cream. You know, there's other ways of using things and I think because people don't. Think like that. Because especially they're paying full price. Yeah, Why would I

pay full price for mushy banana when I can get the one that I want to eat the way I want to eat it for that price? So, when you get too good to go and there are items in the bags like, you know, fruit that's pretty close to what you're going to do this, it's a good way of making sure that. But also, that the fact that you feel good because it's a bit like doing a good deed for the day, you know, you save something being wasted. So that's good.

So, about the food waste, is it something you actively considered to address during your vacation.

I mean, it's much as having look on the app, seeing what's nearby, obviously not going out of our way to go and get anything. But if we're going to the town sort of after lunch and we're going past the cover shops, they're doing bags, having looked and getting them. It's not a mission as such, but it would be nice if there's something there to pick up while we're there. But if there's nothing in the area, then so be it. And then we haven't used the app for the town that we're going to before, so it'll be interesting to see what's actually available.

How did you get to know about the app, or what motivated you to use the "Too Good To Go" app while on vacation?

I saw something on Facebook. It cropped up on my timeline And I thought, I thought at first it sounded like some kind of holiday thing. I don't know. So, I googled it. Just put to good to go into Google. And then read what it was all about. So, what a bloody brilliant idea. Yeah, because it doesn't cost shots much to do it. They're saving their waste and they're getting a little bit back

for it, which they would normally not get. And it saves so much different stuff being put in the bin. And I wanted to try something different. And I thought as we were in a city that might be more options, more places, which there were obviously. So, I was kind of like looking forward to that sort of part of the holiday, really. Like, what am I going to get my little surprise, you know? Yeah. And. And yeah, the sustainability is the same. It doesn't matter if you're in the middle of nowhere or in the middle of the city. Or whatever. It's just stopping things being wasted for no reason due to overstocking. And I mean years ago we didn't, well, maybe I wasn't aware of it at the time, but we didn't have so much wastage and I think people used to be a bit more mindful of what they got and when they got it and making sure they use it. And being creative with things too. And I do a lot of cooking from scratch, and I see a lot of people in the group saying, ohm, you know, I've got 2 packs of lines, what am I going to do with that? And I just think, well, OK, for a start, you can use that. You know, I use a couple of lines every time I make a Saturday sauce.

Can you describe your overall experience using the "Too Good To Go" app during your travels?

Like, right. Yeah, it was it was pretty good. I think when you're traveling and going away, the opportunity to try new places and find out new things as well and also be able to mention to other people. I've never heard of Wenzel as a bakery but then when I was in the group I people say ohm lovely bag. OK the rating was quite good as well and then I've learned you can't always go by a rating. So, I thought like if it goes, and I was pleasantly surprised and the fact that then just by spending my 3-4 pound. Let's save that going in the bin. I felt quite pleased with I like the I like the lucky dip aspect of it. I make some lemon curd and I can use that pastry up. So, it not only saves the waste at the time of the item you're buying, but it can reflect on your ideas

and thoughts for the future to save your own waste. Even in the fridge. Yeah, that's a plus point, yeah.

What aspect of the "Too Good To Go" app do you find most easy or challenging, and why do you think so?

Well, I booked three things, two were from bakeries and one was from the hotel and the hotel gave me a 5-minute slot to pick up. I think it was like 10:00, I thought, that's a bit tight. I picked up at 10:05 because as I said, it's on the way from the hotels of the cars. Yeah, she got in there and I think it would be a good idea if they had sort of a 15-minute minimum pickup collection. Because quite often if you stand there and you say I'm here to pick up a ticket to go bag and they'll say, oh I have to go and get some you have to get and that can take 5 minutes and itself while you're there. So, I think it should be a minimum of 15 minutes collection time, no less, because that doesn't usually work very well. Yeah, the two bakery bags that I had, one cancel, one didn't. I think again, the timing should be changed, especially for people travelling because you can't always rely on queues and traffic and things. Going somewhere and you think we should be there by 1 the bags he picked up a 1:30. That's good. And then suddenly you get caught in the traffic jam. I think there should be a cancellation time of an hour for the businesses and for those collecting at the moment is 2 hours. And I think a lot can happen in life where you suddenly find, ohm, I've got an hour and a half to I can't pick it up.

How do you think the "Too Good To Go" app could be improved to better serve the needs of travelers?

It's incredibly competitive to get some bags. So, you can spend a lot of time like stocking a bag and not get it. I have had like gone to places that missed like that forgot to turn it off when they were closed that day. And it's not open when You get there. I have gone to places, and they didn't have a Bag left for me, And I've had disappointing bags, but yeah, in terms of travel? No. I mean, I said we plan our whole day around it. I often just I look for what is near, where we're going to be and if there's something looks interesting. I think it would be nice if you also could have more options like in when you're searching for the bag options. (TS)

How do you perceive the role of digital apps, specifically like "Too Good To Go", in shaping sustainable behaviors among tourists?

I think it's good, but I think it needs a lot of work. As I said with regards to the maps and promoting it. The idea of saving food that being wasted and creating things and trying different things that, you know, are out of their comfort zone. You can give it a go. I think it's a great role TGTG is playing in terms of sustainability and food waste reduction. I was interested in new initiatives about sustainable consumption of food, and the environmental impact TGTG can achieve in the field of sustainability

Would you like? Would you use because you have already? Like when you use the other apps, they're too similar to this like.

This apart from the audio one which is the free food, and I don't use that. Um, I returned to buy our shopping online and get it delivered once a week, and then we popped to a local shop and top up with bits and pieces. So, I think the app itself is great for the reduction of waste, but I

don't think having more apps doing a similar thing would be such a great idea. Having to go to go expand and cover more businesses would be a good idea.

Do you consider using it in your next travel?

Yeah, yeah. We always will. And there's always, I mean, my husband, he loves it too. both my husband and I, it's often like we are racing to see who will discover something first.

Did your experience using the Too Good To Go app influence your decision to use similar apps or services in the future? Why or why not?

I don't know a hectic life, but it's pretty much planned out so you're good to go. It's just a bit of a bonus because of where we live and not having money available. It's a case of probably get on average one bag every week or two, depending on what's happening. And I think it would be it would be more peaceful if more places did it It would be more advantageous. Well, I wonder if hotels nearby breakfast does bags, I can get on the way back because where we're staying didn't do breakfast and I thought it's only half an hour away from home, so I can bring home from breakfast. But I thought, well, actually like the other places too. Apart from that, anything else because we're coming home on Sunday, I'm looking at picking up Saturday. So yeah, it's just a case of having a quick tap online on the Thursday and Friday and seeing what's around. But it would be interesting to see if we have different businesses in that area that do it as well. So yeah, that I'm looking forward to seeing.

Participant 5

Name: Lynn Ramnauth

Age: 41

Gender: Female

Profession: Teacher

Nationality: USA

Date: 13 May 2024

Can you tell us about yourself and about your travel habits.

My name is Lynn Ramnauth, I'm going to be 41 in a few weeks. I'm female; I live in the United States. I'm a teacher. I think we travel about two or three times. Sometimes it's domestic, you know, sometimes like this year we went to Texas, we were going to California in the summertime, and then in the springtime last year we went to Berlin, and then last summer we went to France, and then this summer we are going to Stockholm in July.

How do you make your travel plans, or do you use any kind of digital apps to plan your trips?

No, I mean, traveling domestically, we plan and pick a place on our own. Sometimes we have family there, sometimes we have friends. There are many states in the United States that I've never been to. I don't really use any digital apps to plan my trips. So, don't use any digital apps to plan our trips.

How important is sustainability to you when you travel? Like, are there any specific actions or practices you try to make to minimize your environmental impact?

Sustainability is something that we recycle here; We compost all of our food scraps. We try to conserve energy by turning off all the lights and closing the blinds and things when it's hot. We try to do what we can. Also, when you travel, it's the same. We try to do apartment exchanges. When we went to France, I stayed with mostly family and friends. I also stayed with somebody that we didn't know that we met through Facebook. We did an apartment exchange, and they came and stayed in our apartment in New York and we stayed in their apartment in Paris."

Have you noticed any trends or shifts in the way travelers approach sustainability and responsible consumption in recent years?

I think this question should be multiple folds. Consumers and travelers have their own individual choice. Governments and businesses such as airlines should also have rules and regulations that promote or encourage the kind of sustainability and responsible consumption. Unfortunately, capitalism is what drives and it's a big motivation for people. It's because it's for the better of the planet. People don't do that because it's better for the planet. They have some type of incentive. With two kids, we honestly don't have time to notice what other people do. But in New York City, there are lots of places on TGTG that get sold out very quickly. New York City is also very socio-economically diverse. You have super wealthy and then you have people who are living paycheck to paycheck who are on government subsidies and things like that. I think in order to have access to the app, have a credit card, you already are telling a lot of people that they can't use it. Because not everybody's got an iPhone that has a credit card. In some ways, it's not super equitable. It's a certain type of person. Sometimes we go to places,

and you just get so much food, like pizza or whatever. We store them and we package it and put it in our freezer to conserve it. Sometimes you get so little, and it barely meets the minimum that it's worth. I think that some businesses instead of saying, you know what, we only have enough to give away one bag today, they will try to sell two or three bags and give the bare minimum amount.

Have you ever used any apps or services focused on promoting sustainability while traveling before, and if so, could you share your experiences?

Other than 'Too Good To Go'? No. I'm not super high-tech. I'm 41. I can use my computer and things like that for work. I'm also not on the hunt to see what some of the new popular apps are. I don't really download a whole bunch of apps. I just have the minimums that I use. While traveling, I know that what we always do is we always try to bring water bottles and refill water bottles rather than buying water bottles and beverages. I don't follow a lot of apps or services focused on promoting sustainability. I think it would be great to have more apps that make it easier for people to do such while they're traveling. Ride share or food share or something like that would be good

What are your thoughts on the concept of reducing food waste, particularly while traveling? Is it something you have actively considered to address during your trips?

I love the concept of reducing food waste, period. I know that every country in the United States, every state or every district or every neighborhood or every small area has their own laws. Here, I think people are always afraid that people are going to sue them for something by the legalities of things. Americans sue people left and right. I think that some businesses either

they don't know about Too Good To Go or they have a lot of food waste, which is totally not true. I literally see bags of bread on the streets sometimes. I think that there could be more, if the government and the app and these non-profit or businesses work together in a more collaborative way, I think it would be better. I always carry a bag and I always say no to bags. So, I think if there was more government participation or partnership. But I think, it's like what is in it for the businesses, other than getting rid of their old things. Like they're still selling it, so they are making a profit, right? But I don't know, I have no idea on that aspect of things. They don't have their own market, like they have not marketed the other digital apps, they're just there on their own page, their own website. Other than that, yeah, they don't have any, you know, a big market on the digital context. I have no idea, because it seems like they are better known in Europe than they are here in the States. Yes. Like sometimes when I travel to other cities, some places, there's nothing. So they're expanding, I think they're starting in New York, San Francisco, California, and then bigger places in Calais. Yeah, but I mean, America is really big. So it's different than the European cities, you know? Yeah, I get that. Other sustainability, I try to buy from when we travel, I try to buy from local farmers markets or things like that. But in regard to actively considering addressing reducing food waste, I mean, we try to buy what we can eat and not waste too much.

How did you get to know about the app, or what motivated you to use the "Too Good To Go" app while on vacation?

One of my friend told me, and then I tried it here in New York, and I was like, oh, pretty cool. Like I said, I love the money saving aspect of it, and I love the surprise aspect of it, and I think we've got mostly really good experiences, and if we didn't have a good experience where things

were undervalued, or like sometimes things would be moldy or not edible, we would contact the app and they would have a pretty quick response, and they would acknowledge, they would apologize, they would give us either a refund or now it's credit. So sometimes I'll just go pick up a whole bunch that night, and then I will freeze them.

Can you describe your overall experience using the "Too Good To Go" app during your travels?

Excellent. Yeah, excellent. I don't think there was one bad experience with TGTG. Everything was good, yeah. Better than Don't compare. I really think it's the surprise aspect that is amazing. I just kind of wanted to try and see what it's like in other places. So, we used it in Berlin a few times, I used it in France. I mean, France, oh my god, in Paris, it was insane how many things you got. Like it was so insane. Like I bought one, two of them, because sometimes I just buy two because I don't know how much you get, right? And one time, I went to a G2000 supermarket in Paris. I went with my son, and oh my god, we got so many things. I had to give things away to friends because number one, we don't really eat goat cheese. There are certain things that we don't really eat. So, I shared it with people, or I invite friends over to our house to eat or give them to my neighbors. We get bread here in New York and there's just way too much bread. I would share with my neighbors and tell my neighbors about the app. It's really great.

Do you guys have any ideological reason to use the app? Yeah, you said the budget and surprise bag is the aspect of using the app. Do you have any beside those, do you have any ideological reason to use the app?

I think not wasting food is always good. That's probably my primary reason rather than to save money. Money would be the second reason. Just because there are so many options, and the price difference is more than nothing but it's sometimes not significant compared to how much food would is being wasted.

How would you describe the impact of using the "Too Good To Go" app on your travel experience?

I think it's forced us to go to places that we wouldn't really go to. Hotels have food that they give away. When we were in France, the same trip last summer, when we first arrived in France, we went to Toulouse. We were in Toulouse for about 10 days and one of them was this hotel. They have breakfast and they would put everything that they had left over for breakfast in the Too Good to Go bag. I bought two of them and it was just so much stuff. Mini croissants, chocolate, and so many things. The kids were in heaven because they like this is so amazing. But at the end, after a few days, it's no longer fresh. It does go stale. We didn't think to freeze it. In the hotel, we did have a kitchen but there was no toaster. It was difficult to reheat. Especially in France, who reheats and freezes their pastries? There's so much available everywhere. I wish there was some way. Maybe that's strange. Maybe that takes away the surprise aspect. In a small bag, you get enough food for 2-3 people. In a medium bag, I get it. The app could have focused on that aspect.

What aspect of the "Too Good To Go" app do you find most easy or challenging, and how do you think it could be improved?

The most challenging thing is the selection in some places. There is not a lot of selection. Also, it's challenging when there's really popular bags that you can never get. The competition in New York City is crazy. If you read, there's also a TGTG New York Group. You should just follow it and read some of the conversations. Some people are trying to be like, I got the Italy bag, It's like Focaccia, Focaccia, and more Focaccia. There are some bags that are more lucrative than others that everybody wants them. (LR)

How do you perceive the role of digital apps, specifically like "Too Good To Go", in shaping sustainable behaviors among tourists?

As I said that most of most the time when I bought the bag, I feel great that I am doing something to prevent the food from being dumped. No matter where I am traveling, I think the food process is same all over the world. Restaurants, cafes, and hotels made tons of food every day, and at the end of the day there is always some leftovers which isn't bad, but you cannot keep it for the next day. So, in this case I think that app like TGTG is really playing an important role to save that food from being thrown away.

Did your experience using the Too Good To Go app influence your decision to use similar apps or services in the future? Why or why not?

Yes, definitely. I think the surprising aspect of the app is really amazing and I would love to explore new cities and see if they are selling the bag or not. But I think when there are similar apps that might create a sense of competition and probably it might not be good in context of reducing food waste or making something good for the environment, but I don't know how it might workout. But at the current situation I think the app is working really great.

Participant 6

Name: Rolla Bradford

Age: 48

Gender: Female

Profession: Architecture

Nationality: USA

Date: 9 May 2024

Can you tell us about yourself and your travel habits.

So, my name is Rolla Bradford. I am 48-year-old and I live in USA. So usually, I go around three or four different places every year, both in the US and in Europe usually.

How do you make your travel plans, or do you use any kind of digital apps to plan your trips?

I use a variety of apps like The Google what is that called Flight Google, I can't remember we sometimes use Sky scanner. I've used Expedia and sometimes use kayak or Kiwi. And then we frequently travel on miles, so we might use like the United Mileage plus app. we primarily fly United or Lufthansa. We would use like one of the airline apps or one of those ones I just listed

How important is sustainability to you when you travel? Like, are there any specific actions or practices you try to make to minimize your environmental impact?

Well, I don't choose to pay a premium and to lessen impact. Normally our first concern is always on budget and price. Yeah, I would say, I mean, we consider ourselves environmentally conscious, but we just don't really have the means to pay more because it's more sustainable. So, we live in an artist community in New York City, and I am the conservation chair for our community. so, in New York, yeah, there are a lot of initiatives. A lot of people compost in New York and New York City has a citywide composting program with art bins all around that are solar operated. And so, I encourage people to use those. New York has sometimes questionable but widespread recycling program.

Have you noticed any trends or shifts in the way travelers approach sustainability and responsible consumption in recent years?

so. You know, I encourage sustainability in a lot of ways within our community, I just started a repair café where you have fixers, and you can break things. That you might otherwise throw away like a lamb or CD player. Like people bring little like appliances and Devices that they might otherwise replace, and we fix them and return them to service so that Reduces the amount of junk that goes into the landfill. And uh, what else we do? We have textile recycling in our building, and we also do composting. We have a widespread city bike network in New York City

Have you ever used any apps or services focused on promoting sustainability while traveling before, and if so, could you share your experiences?

So, like Airbnb has largely been like, outlawed in New York City and now. But I do think I mean people more and more do like. You know, trades like house swaps. And things like that. So, I mean, they're saving money. I think first and foremost, they're also reducing the use of like what these big hotel buildings and things. That, use so many resources and they're not using those. But I usually Try to go around Airbnb like I First try to Just communicate one to one with someone you know, rather than going through Airbnb because they charge these huge fees. And I do think it is a commodification of, you know, that But I do use the app, I just booked a property in France through Airbnb.

What are your thoughts on the concept of reducing food waste, particularly while traveling? Is it something you have actively considered to address during your trips?

Yes. Particularly while traveling, yeah. I also use an app that's called Flash food which is a different type of anti-food waste app. Most of the incentive for using those is saving money. Well, I think we have come to appreciate the amount of food that is wasted is thrown away by restaurants and stores every day and living in a in a place like New York City, you see it. It's very visible, yeah. And we are not above. You know, putting that food to use. And using it rather than have it just be wasted. So, I think we do care about sustainability. You know, there are other reasons particularly while traveling. I like to use the anti-food waste apps. Because we save money, we can get like restaurant level food inexpensively and for from restaurants that would not choose to pay a price at"

How did you get to know about the app, or what motivated you to use the "Too Good To Go" app while on vacation?

I discovered it when I was in Munich. Yeah, and I'm in a group like, it's just like an expat group in Munich. So, I believe that's where I first saw it. And this woman just posted, she said. Has anyone used it, and I was like, what is she talking about? So, I researched it, and I immediately downloaded it because well, we have a child and. Good to go is not always child friendly because you just don't know what you're going to get. But my husband and I are very adventurous, and you know we are open to trying things and so I thought to try it. So, I think the first time I remember using it on vacation was in Paris. Yeah. And. We are in a very expensive city, and we found that there were this was actually pretty early, like when it first started, but there were a fair number of places in Paris on there. And so like, I would be willing to travel further. You know, to eat, to try something, to go to a business that was on TGTG. we got really excited about it. And then, We've used it in Venice, in Italy. We've used it in. Trieste. When we were actually staying in Slovenia, but we were like. Going to the shore in Italy. And I think we've also used it in Berlin. And some other cities in Germany, like Ingolstadt and. Then. I've used it in other areas of New York, like outside of the city.

Can you describe your overall experience using the "Too Good To Go" app during your travels?

I mean, I see a lot of people are not compatible with it because they're very picky about what. They get, yeah. But we are not. I always love when I'm given something that I might not choose normally, and to try it. I like to try different kinds of foods, lots of different ethnic foods. You know, of course we have Chinatown in New York City and there are some foods that people get that like chicken feet or something that for me, as an American, is very exotic, that I don't know I would try it. You know, we often get, dishes that we just might not choose in the store, but we try them when we get them from the app. So, I have some dietary restrictions which

make it a little harder for me because I'm allergic to milk. I'm allergic to dairy so, you can't choose. It's just like you get what you get, and you don't get upset. But my husband eats everything. So, I think we managed to consume, I don't know 85 or 90% of what we Purchased.

How would you describe the impact of using the "Too Good To Go" app on your travel experience?

It has a really positive impact. And I mean, we've really often planned our day around like a pickup, I would say in a lot of cases like it literally drives like where we're going to go today and what we are going to do and like what our schedule is depending on what a pick-up time is. So, I mean, like when I was just in San Diego, I used it like one restaurant had you got like a bag of side dishes I use that too. Make easy a meal that I made for this whole.

What aspect of the "Too Good To Go" app do you find most easy or challenging, and why do you think so?

I think it would be useful if there was a map, because when you go somewhere new, maybe you haven't been there before, maybe you know like the back of your hand. But I think quite often I had to go to Google, and I went to Google Maps to pick up the places that I was getting bags from, see how close they were to the hotel. I've booked the two bags I did. So, I think it'd be very useful on the app if they came up with the actual store. And then like just a little bit like if you look at TripAdvisor little map, you can expand to see where they are. If they have the little map to go with it, with each store doing, that's good to go. I think that makes it a lot easier for people that were travelling to know if they're going to be near it or not. Because a lot of people aren't going to be a bit of a bit of a good time in and go to Google and look it up and

see how far they are and everything else. I wouldn't ever order a bag for somewhere on the journey because if I got stuck in traffic or it was really easy with the other half an hour early, think about sit in the car for half an hour and it's. It's more of a concern about getting your timing right. So, I think when you're traveling, it's a case of doing it where you're going to be rather than on the way they are back.

How do you think the "Too Good To Go" app could be improved to better serve the needs of travelers?

So. I would like to see actual reviews. You know how they ask you to say, like, what was The bag Like. I would really like it if you had like Google Reviews of the place, rather than just a number. Because I would really read those, and you know and see what other people commented. I think you know different people rate things for different reasons, so. Like I care about quality and some other people might just give sometime 5 star because they got a lot. I would really like to see specific comments on places. And I would like it if the. I know it's a surprise bag, so that's fine, but I think it would be really nice like. If you could see if you could easily see the Menu, like a lot of times, if I look at a place, Then I will go to Google and look up their menu. Just especially because I have a dairy allergy, so I always will look and see if they have vegan options or dairy free options, but so I can see if there's a chance that I will get something that I can eat. So, if they have. Link to the restaurant's menu, I think that also would be an advantage for the businesses because then you might actually go there with the idea of buying something you know of ordering, something that looks really good on their menu. So, I think that would be helpful. And also, I know some of the businesses Have like they supply their own photos, but others use stock photos. Or graphics. And I would really like it if the photos had like real images of the real food.

How do you perceive the role of digital apps, specifically like "Too Good To Go", in shaping sustainable behaviors among tourists?

I think it's super positive because That's not the only advantage. Like if you decide to pay the extra $5 for your Airplane ticket To be more sustainable, yeah. It's only a greater cost, right? But you don't necessarily experience an advantage. But with TGTG, I think it's just such a positive, such a positive because You you're doing something for the climate, Reducing food waste and, reusing the food supply that would be thrown away, you're getting something cheaper and you're having often an amazing experience. You know, it's fun

Do you consider using it in your next travel?

Yeah, yeah. We always will. And there's always, I mean, my husband is very he loves it too.

Did your experience using the Too Good To Go app influence your decision to use similar apps or services in the future? Why or why not?

Yeah. Well, it was because of TGTG. On like one of the TGTG forums that I discovered this app called Flash Food. So, flash food is like For markets. And they are selling things that are about to reach their sell by date. So. And they're usually like 1/2 or 1/3 of the normal cost. And so, we do buy, we do buy groceries through that app, which I wouldn't have.

Participant 7

Name: Diana Gladden

Age: 55

Gender: Female

Profession: Real Estate

Nationality: Costa Rica

Date: 12 May 2024

Can you tell us about yourself and your travel habits.

Hi, my name is Diana Gladden. I'm 55-year-old. And I live in Costa Rica. So, I own apartment houses and give it for rent to other people. And about travelling umm I normally trouble with my family I would say Once or twice in a month within the country and few times outside of the country.

How do you make your travel plans, or do you use any kind of digital apps to plan your trips?

No, not usually. I'm usually going somewhere for a reason. Going to visit somebody, yeah. Like. The next, like next month, I'll be traveling back to Texas for a wedding August. In between, I'll be traveling all over this country, going to different places and then. And then in. August, we're doing a big trip to Alaska. And my sister put that together and it's almost three weeks. And so, she plans the whole thing so.

How important is sustainability to you when you travel? Like, are there any specific actions or practices you try to make to minimize your environmental impact?

Sustainability for the for the environment that I'm visiting. Extremely so. I'm very conscientious about my footprint that I leave and the foods that I eat that I buy the trash that I will create. Well, I learned something recently that I really want to want to try to do is I want to. Take out. Whatever I use like if I bring shampoo in a bottle, I want to take that bottle back home. And put it in the trash. I don't want to leave. My trash, you know, and be a burden. To the place that I'm at. So, I want to whatever I bring, I want to remove and so I'll take a suitcase full of trash home with me.

Have you noticed any trends or shifts in the way travelers approach sustainability and responsible consumption in recent years?

Well especially here in Costa Rica, I have notice that a lot of people who come to visit are mindful of what they do. Because Costa Rica is quite a rural and primitive, I can say that some tourist are making an effort to choose eco-friendly option to reduce their footprint while they seem genuinely interested in protecting nature which is really great to see. But When I go to different places and I see some of the tourist as they're just very garish and very rude to locals. And I'm seeing a change in a negative way. They're just very insensitive to culture. Insensitive to their on impact on the place they are. And I don't know if it's just the new generations that's like the, I don't know, but it's very embarrassing and it's very sad.

Have you ever used any apps or services focused on promoting sustainability while traveling before, and if so, could you share your experiences?

Not really but i really try to buy all up-cycle clothes. And when I when moved to Oregon, I didn't buy bring any of my furniture or anything. I Bought all used and I thrifted it and bought it off of Facebook marketplace and so then I've been selling it and or giving it away

What are your thoughts on the concept of reducing food waste, particularly while traveling? Is it something you have actively considered to address during your trips?

I think especially when you are travelling it is such an important issue so i try to be mindful of it during my trips. Before I really was not so much considerate of how much food get wasted but after I get to know about these kind of app like "Too Good To Go" have really help me realize about the waste I or like anybody make. Now I have become more conscious effort to find ways to reduce waste, so whether it will be using the app or just be mindful when I order food anywhere. So, I think it feels really good to be part of something like this especially when I am travelling.

How did you get to know about the app, or what motivated you to use the "Too Good To Go" app while on vacation?

A friend of mine found it and told me about it, OK. I've never seen it anywhere else. I've not seen it advertised. I've not seen it talked about. Not usually what it's meant for, but. I liked it because when you decide to try a new place, you're committing, for that meal and what not, and it was a good way for me to actually try new places that I haven't been to. Mostly because if you're not familiar with the places it directs you to, it's like oh I have an excuse. I have a

reason to go and try this place out. And try this restaurant out or try this bakery out and so it just kind of makes your mind up for you instead of having to research a place. Let's just go do this. We're going to go get rice and beans. We're going to get some pastries or whatever. So, it's kind of just takes the guesswork out of where you're going to go, especially if you're in an unknown place.

Can you describe your overall experience using the "Too Good To Go" app during your travels? It's easy. I wish there were more selections, more options. You know more restaurants should use it.

How would you describe the impact of using the "Too Good To Go" app on your travel experience?

So, one of the best parts about using the "Too Good To Go" app was the saving money honestly. You know how expensive traveling can get, right? Well, this app helped really helped me save quite a bit on meals. I had more money to spend on other fun things, like visiting more attractive location or picking up a few good souvenirs. It really made my vacation more fun and less stressful as I knew I was stretching my budget further and make the most out of my resources.

What aspect of the "Too Good To Go" app do you find most easy or challenging, and why do you think so?

Well, it's easy. Because to use the app is very simple, you just scroll through and click what you want and then they remind you. The reminder for the box is ready to pick up is wonderful, because sometimes I'll do it at nighttime and then I'll forget the next day. But the challenging

part is in Portland and Oregon, there are not enough businesses using it, and so you just see the same three businesses and sometimes it's not worth the price. Well, we really don't get to review it like it's not a good value or something. We just get to review the positives.

How do you think the "Too Good To Go" app could be improved to better serve the needs of travelers?

For the tourists, I think they need to be able to have a valid review system. So, like the pizza, there needs to be, you know was this was, was it a good value? No. But there's not. There's not a negative. Review it's all you select what was the. Good value of it, you know? Yeah. I think an honest review option would be. I think they need a little bit more marketing. Even on the app, even the ones who like you and I talking, you told me that it's in all these different countries. I wouldn't have looked at it because I thought the I thought it was just local. On their app, they should. They should have a banner and it speaks. You know, we are in 25 countries.

How do you perceive the role of digital apps, specifically like "Too Good To Go", in shaping sustainable behaviors among tourists?

Firstly, I found the app incredibly user-friendly and straightforward to use, which is crucial for someone like me who might not be as tech-savvy as younger generations. While visiting my mother in California, I used to "Too Good To Go" to discover local eateries that were offering surplus food at a reduced price. This not only helped me save money on meals, which is always a bonus for travelers, but it also gave me a sense of contributing to a larger cause by reducing food waste. And also using the app made me more conscious of my consumption on food. It really encouraged me to plan my meals better and appreciate the value of food. I became more

aware of how much food goes to waste and the impact it has on the environment. This awareness didn't just stay with me during my trip but followed me back home to Costa Rica, influencing my daily habits.

Do you consider using it in your next travel?

I'll definitely check to see if it's in the area where I am visiting. If there's anything in the area, yeah, absolutely.

Did your experience using the Too Good To Go app influence your decision to use similar apps or services in the future? Why or why not?

Yeah, I would definitely look at different apps or you know. I'm always looking for a good deal. So if there are other services that provide similar services, I would love to use them.

Participant 8

Name: Fredrick Liberti

Age: 45

Gender: Male

Profession: Asset Manager at Ocean Outdoor

Nationality: Denmark

Date: 13 May 2024

Can you tell us about yourself and your travel habits.

My name is Fredrick Liberti and I'm 45-year-old male. I live in Denmark, and I'm currently working at Ocean Outdoor, as an Asset manager at the company. So talking about traveling, uh, I normally travel with my family for five times in a year. Uh, we normally go to Southern European countries.

How do you make your travel plans, or do you use any kind of digital apps to plan your trips?

So, I usually plan my trip using Online apps. I would first search the price and the travel package in different websites and apps like booking.com or Airbnb or Kayak And buy the travel package for the family.

How important is sustainability to you when you travel? Like, are there any specific actions or practices you try to make to minimize your environmental impact?

When sustainability is the most important aspect at the current period, I think most of the people and companies are trying their best effort to so that they are sustainable. Personally, I try to choose Eco friendly accommodations, And reduce the use of plastic when we are travelling, and by being a responsible tourism.

Have you noticed any trends or shifts in the way travelers approach sustainability and responsible consumption in recent years?

Yes, a lot. I think there is a shift now on how people feel the sustainability. Uh. There is a growing trend towards green tourism and. Like Volunteer tourism that sometimes people go to work. In some places to make sustainable efforts and. I've noticed that people are more Concerned about their carbon emission or waste production on their vacation, like how much Carbon they produce During their trip.

Have you ever used any apps or services focused on promoting sustainability while traveling before, and if so, could you share your experiences

I think TGTG is one of the apps that I use, that promotes sustainability. Other than that, I Don't use any particular app that is Made for a specific purpose of sustainability or Something like that.

What are your thoughts on the concept of reducing food waste, particularly while traveling? Is it something you have actively considered to address during your trips?

I think especially when you are travelling it is such an important issue so i try to be mindful of it during my trips. Before I really was not so much considerate of how much food get wasted but after I get to know about these kind of app like "Too Good To Go" have really help me realize about the waste I or like anybody make. Now I have become more conscious effort to find ways to reduce waste, so whether it will be using the app or just be mindful when I order food anywhere. So, I think it feels really good to be part of something like this especially when I am travelling

How did you get to know about the app, or what motivated you to use the "Too Good To Go" app while on vacation?

I learned about TGTG app through friends who work at the hotel where they sell the bags. I think the concept of reducing food waste and to make a small effort for sustainability is really a great idea. And when you get to buy a good meal at such a low price, you don't have any complaints.

Can you describe your overall experience using the "Too Good To Go" app during your travels?

It was a great experience. when you know that you are doing something good for the environment you always have a great feeling.

How would you describe the impact of using the "Too Good To Go" app on your travel experience?

The app had a positive impact on my travel experience. I get to know about new destinations and local dishes. It also gave me a sense of contributing positively to the community. I usually share about the new dishes that I try from the bag I bought. If it's completely a new dish, I might upload a pic of it or share it with my friends.

What aspect of the "Too Good To Go" app do you find most easy or challenging, and why do you think so?

I think the good part of the app is that it is so friendly. Umm, it is simple and easy to find nearby places. But. The challenges might be. The variety of options that they have in the app. Sometimes the best places and the best bags are sold quickly and not many options are left over.

How do you think the "Too Good To Go" app could be improved to better serve the needs of travelers?

I think, it would be great that if they can add more filter options, Such as dietary preferences. It would also be helpful. If they can have real-time updates and a good notification system when the pickups are ready. Or when there are new deals available. It would really help users to better use the app.

How do you perceive the role of digital apps, specifically like "Too Good To Go", in shaping sustainable behaviors among tourists?

I think apps like Too Good to Go are really making a small effort in shaping sustainable behaviour among peoples. It makes it easier to make eco-friendly choices and to raise awareness about the importance of sustainability.

Do you consider using it in your next travel?

Yes, I would definitely use it.

Did your experience using the Too Good To Go app influence your decision to use similar apps or services in the future? Why or why not?

I'll definitely check to see if it's in the area where I am visiting. If there's anything in the area, yeah, absolutely. I would definitely look at different apps or you know. I'm always looking for a good bargain and it is a good bargain; I don't mind if things are a day old because I never eat every things in a day. I buy them anyways.

Participant 9

Name: Botond Horvath

Age: 32

Gender: Male

Profession: Cook

Nationality: Poland

Date: 10 May 2024

Can you tell us about yourself and your travel habits?

My name is Botond Horvath, and I'm 32-year-old cook living in Poland. I love to travel whenever I get the chance. I love to explore new cities and try local food as food is a huge part of my life. Both professionally and personally. I tend to travel several times a year.

How do you make your travel plans, or do you use any kind of digital apps to plan your trips?

I usually use. Digital apps As well as traditional methods To plan my trips. I normally use Skyscanner's and booking dot coms to find. The flights and the hotels. I also use Google Maps and social media to discover new places and local food hub

How important is sustainability to you when you travel? Like, are there any specific actions or practices you try to make to minimize your environmental impact?

Well, Sustainability is very important to me since. Have become more aware. About the environmental impact. Because of troubling. I always Try to choose public transportation and stay in eco-friendly hotels and even home stay accommodations.

Have you noticed any trends or shifts in the way travelers approach sustainability and responsible consumption in recent years?

Yes, I have definitely noticed a shift. I think more traveller. Seems to be aware of the environmental impact that they are making during their travel. And there is a growing trend of choosing sustainable accommodations. And engaging in ecotourism activities. I think this is. Also happening because there are a lot of sustainable travel options that are available In recent times. .

Have you ever used any apps or services focused on promoting sustainability while traveling before, and if so, could you share your experiences?

One app that I frequently use is "Too Good To Go" app obviously. So I started to sue this app during my travels in Europe I think it was around 2021 around june when I was in Paris was the first time I used it during my trip and since then it has been a great way to enjoy the local food sustainably. And for me I feel it is easy to use and also satisfy your soul because you know that you are helping to reduce food in some ways. Other than that I have also tried the app called "BlaBlaCar" for carpooling. I do not know if you have heard of it but it is really popular in Europe I think. I have used it couple of times when i was travelling alone in Poland. The app is a great way to meet new people and guess what it helps to reduce the carbon footprint by sharing rides

What are your thoughts on the concept of reducing food waste, particularly while traveling? Is it something you have actively considered to address during your trips?

Personally, being a cook, reducing food waste is. A top priority for me. I always try to order only what I can eat and avoid wasting the food. And I think apps like TGTG have been great in helping to reduce food waste.

How did you get to know about the app, or what motivated you to use the "Too Good To Go" app while on vacation?

I first heard about the app. From my friend who Who was using the app. I was really inspired to use it because being a cook and having the values of reducing the food waste. It allows me to discover local food At a reduced price making it a win-win situation for me.

Can you describe your overall experience using the "Too Good To Go" app during your travels?

My overall experience has been really positive. The app in itself is doing wonders, first it's user-friendly and makes it quite easy to locate the restaurants and cafes near to your location. Bu using the app i must say that I have enjoyed trying a variety of foods that I might have not chosen to eat and yeah it feel good to know that I am helping to reduce food waste also

How would you describe the impact of using the "Too Good To Go" app on your travel experience?

Using the "Too Good To Go" app has enhanced my travel experience by allowing me to connect with local food culture in a sustainable way. It's also saved me money, which is always a bonus. The app has made me more mindful of food waste and more appreciative of the efforts being made to combat it.

What aspect of the "Too Good To Go" app do you find most easy or challenging, and how it could be improved?

The easiest aspect. Of the app is that it's so simple and easy to use. I think you can just go in the app, find a deal and make a purchase. But the most challenging part is that You never know what you are going to get in the bag as It worked on the surprise concept. So, if they can improve something, then it would be to add more detail description of the food that's available there. And I think if the app is expanded or it gets reached in more cities, even in the smaller towns and remote places, then it would be really amazing.

How do you perceive the role of digital apps, specifically like "Too Good To Go", in shaping sustainable behaviors among tourists?

Digital apps like "Too Good To Go" play a significant role in shaping sustainable behaviors among tourists. They make it easier to make eco-friendly choices and raise awareness about the importance of sustainability, and To change their perspective about leftover foods or to reduce the food waste. I believe that not every food that get left out at the end of day is bad and should be thrown away.

Did your experience using the Too Good To Go app influence your decision to use similar apps or services in the future? Why or why not?

Yes. My experience with the app has Influenced my decision to look for other similar apps That are working in the similar way. It has shown me the value of these service in promoting sustainability and having an amazing travel experience. I'm more motivated to look for other apps and support them by using their service or promoting them. basically, those apps that are helping to reduce food waste or that are working for sustainability issues.

Participant 10

Name: Barbara Alpert

Age: 70

Gender: Female

Profession: NGOs

Nationality: USA

Date: 13 May 2024

Can you tell us about yourself and your travel habits?

So, my name is Barbara Alpert. I'm from the United States. I'm 70-year-old, close to my retirement. So, at the moment we usually travel 2 to 4 times in a year, but when I retire in June I hope to travel much more.

How do you make your travel plans, or do you use any kind of digital apps to plan your trips?

I mostly check flights on Expedia and then purchase from the airlines. I will normally check the flight price and date of the flight and then go on the airlines app to buy the ticket. I also use Airbnb and sometimes some other apps depending on the location where I am traveling.

How important is sustainability to you when you travel? Like, are there any specific actions or practices you try to make to minimize your environmental impact?

I recycle what I can, reuse water bottles. I mostly use public transportation while traveling and always at home in New York City.

Have you noticed any trends or shifts in the way travelers approach sustainability and responsible consumption in recent years?

"I think people use public transport more. It looks like this shift is happening due to the increasing awareness of the impact towards the environment when we travel.And also by using public transport, we as a tourist can significantly reduce carbon footprint"

Have you ever used any apps or services focused on promoting sustainability while traveling before, and if so, could you share your experiences?

No, it's only TGTG. It is one of the apps that I use and other than that I haven't really used any other kinds of apps

What are your thoughts on the concept of reducing food waste? Is it something you have actively considered to address during your trips?

I am very active in reducing food waste at home. I lead food rescues weekly and have helped donate 20,000 pound of food to date to food pantries through Rescuing Leftover Cuisine. I also help serve 2 community fridges in the East Village, rescuing food from businesses and making it available to the community. I do this 2-4 times per week usually. I have also done it while traveling. Whenever I travel I try to connect with local food rescue organization. I sometime reach to them from facebook or through internet. I personally feel it helps me feel more connected to the community and environment although I am far away from my home

How did you get to know about the app, or what motivated you to use the "Too Good To Go" app while on vacation?

I began using Too Good To Go in my home city at the recommendation of friends. I liked it and then sought ways to do it while I traveled.

Can you describe your overall experience using the "Too Good To Go" app during your travels?

I first used it when I traveled to Italy, and while I was staying in Bologna for 6 days, I did it 3 times. The challenge was finding locations near where we were staying and whose pickup times were convenient to our plans for each day. We got wonderful bags—far above paid value—sandwiches, pastries, prepared foods we could reuse as part of meals cooked at the apartment. There was a holiday when most cafes were closed, but we had plenty of food! I have also used it in Valencia and San Sebastian Spain—twice in Valencia. I chose places in the same Central Market because the pickup times were almost the same. We got a great selection of salads, sandwiches, and pastries. I have also used it in the US in Santa Barbara, where my family live, and in Philadelphia where I traveled for a museum day. We did it 3 times in Santa Barbara and got fancy donuts twice and grocery items once. So I would say overall good experience.

How would you describe the impact of using the "Too Good To Go" app on your travel experience?

It was fun, you know it helps to prevent waste and also helps me to save money. And there Are always chances that you get to connect with local people and local food.

What aspect of the "Too Good To Go" app do you find most easy or challenging, and why do you think so?

I do find the app very easy to use overall. The purchasing process is straightforward, and the notifications about available bags are quite timely. Sometimes it's hard to figure out where places are in an unfamiliar city where you don't have much time to look around It can be quite frustrating when you are in a hurry or when is getting dark. Also, if there is more information about the places with bags, it would always be welcome. Sometimes, the descriptions are a bit vague. I'd love to know more about what types of food they usually have or if they cater to any dietary restrictions. I

How do you think the "Too Good To Go" app could be improved to better serve the needs of travelers?

Although it is so simple to use the app, sometimes it's hard to figure out, where places are in an unfamiliar city, where you don't have much time to look around. I wish it could use GPS to suggest bags that are near where you are at any given time—and bags that are available at the times you're looking.

How do you perceive the role of digital apps, specifically like "Too Good To Go", in shaping sustainable behaviors among tourists?

I think people find it a fun way to do some good. The app makes it easy and enjoyable to participate in sustainability efforts, which is really important because it feels like little adventure every time you pick up a surprise bag of food. It turns a simple act of reducing waste into something exciting.

Do you consider using it in your next travel?

Yes, but I'm going to Iceland, and there are no bags there yet. And Greenland, where there are no bags either. But in the fall, I'm going to London, Paris and Scotland, and will definitely try to use TGTG while I'm in these places.

Did your experience using the Too Good To Go app influence your decision to use similar apps or services in the future? Why or why not?

Not familiar with any others. So far, a couple of apps have been confusing and I've deleted them. Don't remember the names, sorry. They were about saving food, but they were not clear. I think one of them might have been Olio. It just wasn't as straightforward as "Too Good To Go" app as it is simple and user- friendly, which makes a big difference for me. If I came across another app that's easy to understand I'd definitely give it a try. I think the app should not be complicated to use so for now I will stick to what works.