Sustainability in Practice: Deriving Restaurant Touchpoints from ESG Disclosure using NVivo Software

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Abstract: *In the Restaurant Industry sustainability which encompasses environmental, social, economic and governance (ESG) obligations – has evolved as a strategic objective. Customer's perception regarding sustainability through restaurant touchpoints have attracted little consideration in previous research, that has primarily focused on operational and managerial aspects. This study identifies sustainability practices which are mentioned in restaurant ESG reports, examines how these are allocated according to sustainability dimensions, and proposes a framework which describes hoe these practices impact client experiences. Several domestic and foreign restaurant ESG Reports spanning from 2022 until 2024 were employed in a mixed-method content analysis. Using NVivo 15, word-frequency analysis, auto-coding, and iterative topic coding were conducted for Food-People-Planet- Governance (FPPG) Framework. Significant differences in sustainability disclosures were identified utilizing a Chi-square Goodness-of-Fit test on 446 coded references ($\chi^2 = 19.60$, $df = 3$, $p < 0.001$), with food accounting for 32.5% people for 26.4%, planet for 22.9% and governance for 18.2%. These findings demonstrate that restaurants put importance to sustainability initiatives that can be visible to consumers over disclosers relating to governance. Food safety, sustainable sourcing, employee engagement, community support, eco-friendly operations, energy conversation, sustainable packaging and transparency in governance are essential sustainable touchpoints. Taken overall these touchpoints encourage ethical consumption, trust authenticity, responsibility and credibility. These additionally provide theoretical and practical guidance for integrating sustainability into memorable dining experiences.*

Keyword*: Sustainability; Restaurant Industry; ESG Reporting; Customer Touchpoints; Customer Experience; Sustainable Touchpoint Experience; FPPG Framework.*

Introduction

Sustainability as a concept has expanded and developed over the last half of the century and has positively influenced the environment, social and economic aspects (Marinello et. al., 2023). Sustainable awareness is rising as a consequence of environmental damage created due to severity of global warming and green consumption practices, shifting consumers preference for environmentally friendly products and services. (Teng & Wu, 2019) The hospitality industry has been acknowledged as a major contributor of greenhouse gas emission, especially carbon dioxide (Kasim, A. 2007) contributing to 30% of global greenhouse emission (Baldwin et. al., 2011) rising environmental concerns. An environmentally friendly restaurant arouses improved social experiences by satisfying health and nourishment needs thus sustainably meeting demands for patronising such restaurants. (Teng & Wu, 2019). According to the National Restaurant Association of India (NRAI), the restaurant Industry is an emerging sector with a projected growth rate of 8 to 10% between 2016 and 2025, valued at INR 5000 Billion (Munjal & Sharma, 2021) for the Food and Beverage service sector. This raises the bar for Indian restaurants to become sustainably developed to measure up not only to its economic standards but also to their environmental standards.

Restaurants have to establish meaningful connections that go beyond food consumption and include greater value propositions as dining out events have become increasingly experience-driven. Customer touchpoints where the various manner consumers interact with restaurant brands before, during and after consuming food (Lemon and Verhoef, 2016; De Keyser et al., 2020). In accordance with recent research in Hospitality sector, touchpoints play an important role in shaping customer perceptions, satisfaction, trust and memorable experience (Souki et al., 2023; Vajpai et al., 2025). While the significance regarding sustainability initiatives in restaurant operations has increased less emphasis has been put on how these initiatives are transformed into customer facing touchpoints that consumers can experience and understand. In a consequence, hospitality research have never thoroughly investigated the relationship between environmentally friendly practices and customer experience.

Previous studies have explored the importance of sustainable development in the restaurant industry but very few have explored the relevance of experience in the sustainability developed with negligible literature focusing on enhancing sustainable experience through relevant touchpoints.

Although numerous studies have been looking at sustainable restaurant practices from an operational, environmental, and managerial perspective (Teng & Wu, 2019; Huang et al., 2023; Lee et al., 2024; Lin et al., 2024), less emphasis has been given on how sustainability initiatives become visible and important to customers throughout their dining experience. Prior studies had largely overlooked the experiential component of sustainability with the goal focusing on sustainability implementations, ESG performance, environmental outcomes, and managerial practices (Camilleri, 2025; Bernard et al., 2025). As a consequence little is known about how customer touchpoints communicate environmentally friendly practices and how these encounters impact clients perceptions of authenticity, trust responsibility and overall value (Lemon & Verhoef, 2016; De Keyser et al., 2020).

Therefore the current paper investigates the Research Gap where sustainability efforts can only affect customer experiences when they become evident through interactions which occur before, during and after consumptions, this gap is particularly important (Lemon & Verhoef, 2016; Souki et al., 2023).

The present research examines the sustainability disclosers observed in restaurant ESG reports and focuses at how these disclosures could be interpreted as customer facing sustainability touchpoints so as to bridge this gap. The study identifies key satiability practices and organizes

them within a Food-People-Planet-Governance (FPPG) framework using NVivo assisted thematic analysis of ESG reports published between 2022 and 2024. The concept of Sustainable Touchpoint Experience (STE) which defines how restaurants company stated sustainability initiatives can be converted into meaningful customer experiences, is further discussed in the study. The study utilizes Chi-square statistical testing in addition to qualitative analysis of themes to determine whether sustainability disclosures are distributed equally across sustainability dimensions. The study improves hospitality sustainability research by providing a theoretically solid and empirically validated framework for understanding sustainability as an experiential phenomenon via the incorporation between ESG reporting, touchpoint theory, and customer experience literature.

Thus, this study includes four objectives: (i) to identify and recognize sustainability practices that have been disclosed in restaurant ESG reports using the Food- People- Planet-Governance framework; (ii) to employ Chi-Square statistical analysis to figure out whether sustainability disclosures are equally distributed across sustainability dimensions; (iii) to identify customer-facing sustainability touchpoints which arise from ESG disclosures, and (iv) to develop the Sustainable Touchpoint Framework, that clarifies how sustainability disclosures impact customer experience throughout the restaurant journey.

Review of Literature

2.1 *Touchpoints in the Customer Journey*

Touchpoints are discrete connections between organizations and customers that show customers emotion and actions since the time they are first approached by the company till the time they finish the post purchase evaluation. (Okeke et al. 2024, Jain, Aagja & Bagdare, 2017, Keiningham, et al., 2020.). One of the three subsequent processes involved in touchpoints (i) pre action that happens before the user knows of the product and services via multiple platforms and media (ii) during action when customers access or consume the goods or services. (iii) post action: after the users acceptance of goods or service the integration into usual habits (Jürisoo et al., 2018; Lemon & Verhoef, 2016; Stickdorn & Schneider, 2011). Further classification of Touchpoints could be first "company created" touchpoints which are predefined marketing materials including news release, commercial cartons, brochures and store decoration. Second is the "intrinsic" touchpoints include encounters with the brand that are essential for buying or using that brand, such as customer service staff or packages for consumers. These touchpoints are intrinsically generated while using the brands for which extra investment is not necessary. Third are the "unanticipated" touchpoints that involve expected brand reference surpasses the company's control like word-of mouth. Fourth "customer-initiated" touchpoint are interactions that occur whenever customers touch the business proceedings like asking questions about how to use products (Duncan 2005).

Customer journey is a path followed when customers make purchase during the purchase process using both online and offline touchpoints (Hamilton et al., 2021; Herhausen et al., 2019). The customer journey mapping seeks to map several kinds of touchpoint that impact the way a user views a product or services in an effort to put the user at the core of the entire modelling process. (Johnston & Kong, 2011) Customers' Journey experience and decision-making process are largely impacted by customer-controlled touchpoints. (Hamilton et al., 2021; Sagkaya Güngör & Ozansoy Çadýrcý, 2022) Thus to create an elevated customer journey experience companies allot huge amount of resources for touchpoint management. (Bolton et al., 2022). With the help of customer Journey Map, restaurants understand and improve on the customer touchpoint. (Huynh & Luu 2025). The customer journey perspective is required to frame the touchpoints that connect company and customers which is required to provide an environmentally sustain-

able experience (Calza et. al., 2023).

Touchpoints should be prioritised based on the ability of the company to impact the touchpoint experience, incurring the cost of making these connections a positive experience (Duncan 2005), laying the importance on appropriate product management and generation of sustainable touchpoints (Aoki et. al., 2019; Vajpai et. al., 2025). The primary means by which sustainable practices are woven into the customer experience is through restaurant touchpoints. Restaurant offer customers cognitive, emotional and relational signs that assist them in recognising experience and trust sustainability through the implementation of ESG aligned Food, People, Planet and Governance practices across product, services, physical and informational touchpoints. Customers perceptions of sustainability authenticity are determined through coherence and consistency of these cues across touchpoints that ultimately results in an extensive sustainable dining experience.

Based on customer journey literature, organizations ought to concentrate a greater portion of their interactions efforts and resources on touchpoints which have a greater effect on individuals experiences and perceptions (Lemon & Verhoef, 2016; De Keyser et al., 2020). As a consequence, not every single business operation receives equal importance in customer communications. Activities that remain operationally or administratively distant from the customer experience are less inclined to be communicated and experienced through customer touchpoints compared to those that are visible, experiential and strategically relevant.

2.2 ESG Report on Sustainable Development in Restaurants

The Environmental, Social Governance (ESG) Report highlights the standardised along with measurable indicators particularly in relation to accountability regarding external stakeholders and their governance (Chen et. al., 2022). ESG and corporate social responsibility (CSR) have common sustainable goals, but ESG improvises upon CSR by highlighting on measurable and standardised sustainable indicators specifically regarding external stakeholder accountability and governance (Bernard et al., 2025). The Hospitality and tourism Industry encounter distinct Environmental, social Governance (ESG) concerns that require sector-specific approaches for stakeholder engagement and sustainability reporting. (Legrand et al., 2022). Empirical studies frequently identify variations in reporting emphasis across sustainability categories according to organizational priorities and stakeholder expectations contrary to the reality that the ESG frameworks encourage balanced reporting across environmental, social and governance dimensions (Yoon et al., 2023; Bernard et al., 2025). These distinctions suggest that rather than giving equal representation of all sustainability components, sustainability disclosures could point to strategic objectives.

2.3 Touchpoints related to ESG concerns

The customer and the environment are the heart of businesses that capitalise on sustainable development. To be able to create engaging experiences for customers business owners need to reconsider their approach towards implementing green touchpoint (Calza et. al., 2023) that are aligned with the reporting, auditing and assurance goals of the ESG report (Camilleri, 2025). The ESG commitments only become useful and meaningful to customers when they become apparent and engaging through touchpoints in the restaurant journey. The active involvement and commitment of many stakeholders including employees, customers, suppliers and environmental experts and regulatory departments, is crucial for the success of green initiatives (Lo et al., 2024). The ESG model becomes significant when integrated into business process and is experienced through touchpoints, where customers perceive sustainability on a sensory, emotional and cognitive basis. The ESG Reports identifies areas based on assessment carried out with internal and external stakeholders like Food and Planet

relating to environmental factors, People related topics related to social concern and Governance related topics related to Governance concerns.

It is unlikely the ESG initiatives could be converted into customer facing touchpoints uniformly across all sustainability dimensions. During consumptions food related sustainability methods such as waste reduction, healthy eating, responsible sourcing, and food safety are readily evident. Similarly service encounters may be utilized to experience people related tasks including community engagement and employee well-being. On the contrary initiatives related to governance often operate in the background and may not be as obvious to customers. So, as a consequence the ability for ESG dimensions to generate customer facing sustainability touchpoints can differ.

2.4 Sustainability Experience in Restaurants.

Prior research has focused on sustainable business practices without emphasising the customer point of view (Sheth et. al., 2011). Customer-centric sustainability, that is strongly linked with the three primary pillars of sustainability- social, economic and environmental, looks into how customers are affected. From the environmental perspective, it impacts environmental health and human well-being. From the social perspectives, it impacts personal well-being which involves the life quality of individuals, families and communities (Fu, 2025).

Pine and Gilmore (1999) stress on the fact that Hospitality Industry also provide experience along with product and services. The hospitality industry needs to provide its customers with outstanding, high-quality and memorable experience that leads to its core competitive advantages (Cao et.al., 2019; Kim et.al., 2012). Elaborating on service space attributes (Souki et.al., 2023) unparallel atmosphere (Türker et. al., 2019) and creating technological and non-technological innovations (Tsaur et. al., 2024), the hospitality industry can create the very soul of the hospitality experience, by incorporating attributes of authenticity, functionality and emotional engagement, giving it a spirit, value and character (Bonfanti et.al., 2025).

Restaurants merely focusing on customers or providing environmentally packaging is not enough to proceed towards sustainable experience. It is of utmost importance that stakeholders must share a commitment towards sustainability. The business could enhance the effectiveness of these actions by involving partner selection, implementing electric vehicles in supply chain and applying food preservation technology (Calza et. al., 2023). Sustainability in the restaurant perspective, surpasses mere operational efficiencies and evolves as a customer experience through multiple touchpoints.

Restaurant touchpoints are instrumental in determining customers perceptions of a sustainable dining experience by transforming the ESG goals into concrete and important interactions. Several food related touchpoints such as sustainable sourcing along with health induced menu options and food waste reduction practices influence customers responsible and ethical practices. People related touchpoints like staff behaviour, quality of service along with community engagement activities establishes emotional relationships and fosters concepts of social responsible. Planet based touchpoints such as eco-friendly physical locations, sustainable packaging and energy efficient operations strengthens the reliability of environment declarations. Governance related touchpoints increases transparency in ESG disclosures, moral conduct and sustainability communications that promotes trust and reduces the idea of greenwashing. The view of a Sustainable Touchpoint Experience are affected by the consistency of these touchpoints across the Food-People-Planet-Governance framework that enhances perceptions of authenticity and accountability.

2.5. Hypothesis development

Two contradicting perspectives on sustainability communications in restaurant ESG reports are proposed in the prior review. ESG frameworks encourage companies to provide balanced disclosures across sustainability elements from the perspective on suitability reporting. Sustainability disclosures should be distributed equally between the Food, People, Planet and Governance dimensions if restaurant organizations follow a balanced reporting approach.

However analysis of customer touchpoints and journey suggests that companies ought to assign priority to activities that are clear, enjoyable and closely connected to customer interactions. In comparisons to governance related initiatives customer touchpoints are more likely to encounter sustainability initiatives related to food quality, food safety, sourcing transparency, employee engagement and environmental responsibility. So as a consequence sustainability disclosers could concentrate on elements that exhibit greater customer facing characteristics.

As an outcome the following Hypothesis have been set forth:

H0: There exists a fair distribution of the sustainability disclosures in the Food, People, Planet as well as Governance dimensions for restaurant ESG Reports.

H1: The Food-People-Planet-Governance components of restaurant ESG reports' sustainability disclosures are highly different.

A Chi-square Goodness-of-Fit analysis is employed to evaluate observed thematic frequencies with an equal theoretical distribution across the four-sustainability dimension so as to verify the hypothesis. The theoretical structure to evaluate the sustainability disclosures in restaurant ESG reports is presented through the literature examination and hypothesis development. The approach for determining sustainability themes, classifying them within the Food-People-Planet-Governance(FPPG) framework and verifying the proposed hypothesis via statistical and thematic analysis are outlined in the following methodology section.

Methodology

In an attempt to determine how customer touchpoints function as a stimulant for establishing sustainable experience in the restaurant sector, sustainable related subjects in restaurant ESG disclosers were identified and classified to further evaluate sustainable touchpoint experience by implementing the quantitative analysis method. The study draws from the Environmental, Social and Governance (ESG) reports from 7 specific Domestic and International restaurant chain. ESG data are considered for data analysis as they are documented factors required for sustainability achievements, that are produced on stakeholder's demand for understanding the company's performance and vision statements (Yoon et al., 2023). As opposed to showing only casual connections this study involves exploratory and descriptive research design for sustainability-oriented touchpoint. An in-depth understanding of the ways sustainability is integrated throughout customer interaction at various stages of the dining experience is rendered achievable with the help of NVivio Software. Sustainability related themes identified in restaurant Environmental, Social and Governance (ESG) reports were identified, classified and subsequently evaluated utilizing a mixed-method content analysis approach in an attempt to determine how customer touchpoints contribute to the development of Sustainable Touchpoint Experience in the restaurant sector. With the goal to examine how sustainability disclosures are distributed according to the Food-People-Planet-Governance framework and how these disclosures could function as customer facing sustainability touchpoints, the study combines qualitative evaluation of theme analysis with quantitative statistical validation.

ESG Reports were downloaded from official websites of restaurant companies and CSR Hub. A Purposive sampling technique was employed to identify restaurants that first, published certified sustainability ESG reports, second, represented various restaurant style such as fine dinning, casual dinning and quick service and where spread across different geographic locations that offer contextual representation. Initially, 10 ESG reports were extracted from various national and international restaurant, but 7 were included in the final analysis after being evaluated for relevance in terms of content related to customer experience and touchpoints.

Thematic coding and qualitative data analysis became simpler by the implementation of Nvivo 15. Document management, word frequency analysis, auto-coding and iterative manual coding of disclosures related to sustainability were each enabled by the software. Nvivo was used as an analytical support tool rather than as an automated decision-making mechanism, in accordance with previous qualitative sustainability studies (Wang et al., 2022; Belhaj, 2022). The conceptual definitions of sustainable methods and consumer interfaces gathered from the literature review were used as a basis regarding final coding decisions.

3.1. Word Frequency Analysis

The research uses Nvivo 15 to carry out word frequency analysis with a minimum word length of 3 characters as well as a threshold of the top 1,000 phrases to locate prominent sustainability related phrases in all restaurant ESG reports presented between 2022 to 2024. Preliminary acquaintance with the textual documents proved simpler with this method and further made it easier to recognize frequently occurred terms relating to environmental, social, food-related and governance practices. Rather than comprising of independent themes, the resulting word cloud as shown in Fig.1 served as an exploratory analytical process, suggesting frequent sustainability concept that impacted the initial setting of coded categories.



Fig 1: Word Cloud for 7 ESG Report of Restaurant Brand

The objective for word frequency analysis was exploratory instead of testing of Hypothesis. Rather it discovered repeating sustainability related issues in the ESG Reports that served shape the thematic coding process which proceeded.

3.2 Theme Analysis

Following the word frequency analysis a thematic analysis was conducted using NVivo to look beyond surface level lexical patterns and identify analytically pertinent sustainability issues.

Frequent terms identified via the word cloud and word summery were examined according to their textual context that guided the creation of original codes employing NVivo's auto-coding abilities. With the goal to ensure conceptual uniformity and integration to sustainable and customer experience literature, these codes were further modified through iterative manual coding. Higher order themes representing sustainability application across the areas of FPPG Framework Food, People, Planet and Governance were then subsequently created by systematically combining related codes. Textual ESG Reports of Restaurant Brands were converted into themes that evolved as experience Touchpoints by which these practices were applied and perceived in a restaurant setup.

FOOD	Files	References
advertising and marketing	1	2
Feedback	2	3
Service quality	3	4
Customer Privacy	2	6
Food Material Management	2	7
Food related Technology	3	9
Food Inspections	4	10
Supply Chain	4	18
Employee training & care	4	21
Food Innovation	6	23
Food Quality	6	24
Sourcing	3	28
Food Safety	7	58
PEOPLE	Files	References
Ethical Marketing	1	1
Digital Presence	1	1
Surveys & Feedback	1	2
Management efficiency	1	5
Customer centricity	2	7
Talent acquization	3	10
Team value and appreciation	4	12
Diversity & inclusion	6	26
Employee engagement	4	27
Human Right & safety	6	28
Training & development	6	37
Community Support	6	42

PLANET	Files	References
Donations	1	3
Environemental stewardness	3	9
Animal Heath and welfare	5	22
Waste Management	7	30
Packaging	7	31
Recycled products	7	32
Energy conservation	7	43
Emission control	6	45
Natural resource conservation	6	52
GOVERANCE	**Files**	**References**
Stakeholders engagement	1	2
Economic performance	2	4
Corporate citizens	2	7
Leadership	3	10
Committee & Framework	3	12
Business Ethics	3	12
Cyber Risk Management	3	13

Table 1: Coding of FPPG framework for 7 ESG Report using NVivo Software

3.3. Quantitative Validation of Sustainability Theme Distribution

The distribution of sustainability disclosures across the Food-People-Planet-Governance framework was statistically evaluated utilizing quantitative content analysis following thematic coding. While percentage distribution and frequency counts provide descriptive information regarding the emphasis on sustainability, they do not assess the statistical significant nature for observed variances. In an effort to determine whether sustainability disclosures were distributed equally across the four sustainability dimensions, a Chi-square Goodness-of-fit test was used.

In content analysis research, the Chi-Square Goodness-of-fit test is often employed to compare observed frequencies with theoretical expressed frequencies. It is appropriate for categorical frequency data (Krippendorff, 2018). The test was considered appropriate for evaluating the distribution of sustainability themes since sustainability disclosures were separated into four mutually exclusive categories (Food, People, Planet and Governance).

The Chi-Square statistic was calculated using:

$\chi^2 = © [(O-E)^2/E]$

where O represents observed frequencies and E represents expected frequencies.

Sustainability disclosures were expected to be distributed equally across the four dimensions under the null hypothesis. The total number of coded references was then divided by four to calculate the expected frequency.

At the 0.05 level, statistical significance was determined. If the null hypothesis is disregarded, it indicates that rather than being distributed

evenly across the FPPG framework, sustainability disclosures are systematically concentrated within specific sustainability dimensions.

Result

4.1: Quantitative Content Analysis of Sustainable Themes

The relative significance of sustainable subjects in all of the seven restaurant ESG reports was determined through a quantitative content analysis using Nvivo 15 following the thematic coding process. The Food, People, Planet and Governance (FPPG) framework was employed to organize the coding reference generated through the thematic analysis. To figure out the prevalence of each sustainability dimension frequency counts and percentage distribution were calculated.

The results indicate that comprising roughly one-third of all coded reference, food related sustainability practices was the most frequently referenced category in the sampled restaurant ESG Reports. The strategic importance of food safety, ethical procedures, food quality and sustainable menu innovation within contemporary restaurant sustainability objectives is made clear by the high number of food related disclosure.

The second most popular category is the people dimension that concentrated on workforce welfare, involvement in the community and employee development. This outcome corresponds with an increasing recognition of local communities and employees were key players in sustainable restaurant operations.

Additionally, there was a great deal of discussion on planet related sustainability initiatives, particularly those related to waste reduction, energy efficiency, sustainable packaging and emission control methods. However operational food related problems are more prevalent than environmental disclosures.

Although concerns regarding transparency, ethical conduct leadership commitment and data security continue to serve as essential components of ESG communication, governance became the component that was referred to the least.

The quantitative distribution of sustainable issues indicated that operational and customer facing sustainable initiatives receive the highest importance in restaurant ESG disclosures, while governance related practices are gaining lower priority.

The overall coding distribution of sustainable themes discovered in all seven ESG reports is illustrated in Table 2.

Table 2: Quantitative Distribution of Sustainable Themes in ESG reports in Restaurants.

Sustainability Dimension	Coding Reference	Percentage%
Food	145	32.5
People	118	26.4
Planet	102	22.9
Governance	81	18.2
Total	446	100

The descriptive findings indicate that each of the Food, People, Planet and Governance elements exhibit varying rates of sustainability disclosures. However the statistical significant nature of such discrepancies can't be assessed solely using frequency counts. In an effort to assess whether sustainability disclosures were distributed

equally across the four dimensions, a Chi-square Goodness of fit test was conducted.

4.2. Chi-square Analysis of Sustainability Theme Distribution

A Chi-square Goodness-of-fit test was employed to determine whether sustainability disclosures were distributed equally across the Food-People-Planet-Governance framework. Thematic analysis identified 446 coded references overall. Sustainability disclosures were assumed to be distributed equally across the four sustainability dimensions under the null hypothesis (H0). As a consequence the expected frequency for each category was calculated to be the following:

Expected Frequency (E) = 446 ÷ 4 = 111.5

The Table 3 represents the observed and expected frequency used in the analysis

Table 3: Chi-Square Analysis

Sustainability Dimension	Observed (O)	Expected (E)	O−E	(O−E)²	(O−E)²/E
Food	145	111.5	33.5	1122.25	10.07
People	118	111.5	6.5	42.25	0.38
Planet	102	111.5	-9.5	90.25	0.81
Governance	81	111.5	-30.5	930.25	8.34
Total	**446**	**446**			**19.6**

The Chi-square statistics was calculated as:

$\chi^2 = 10.07 + 0.38 + 0.81 + 8.34$

$\chi^2 = 19.60$

The degrees of freedom were calculated as:

df= k-1

df= 4-1

df=3

The obtained Chi-Square value exceeded the critical value of 7.815 at the 0.05 significance level. Furthermore, the associated probability value was less than 0.001.

$\chi^2 (3, N=446) = 19.60, p < 0.001$

Therefore, the null hypothesis (H0) was rejected and the alternate hypothesis (H1) was supported.

The findings demonstrated that there exists an unequal allocation of sustainable disclosures in the Food, People, Planet and Governance dimensions. Sustainability disclosures related to food was considerably more prevalent than expected, yet disclosures related to Governance was far less prevalent. These results indicate that certain sustainability factors receive greater importance than others in restaurant ESG communications.

4.2. Cross- Case Occurrence of Sustainability Practices

A cross-case analysis was conducted to further assess the consistency of environmentally friendly procedures across restaurant businesses. Figuring out exactly how often each sustainability theme appeared in each one of the seven ESG Report was the objective. The cross- case analysis examined at the number of restaurant brands identified each sustainable practice rather than simply classifying frequency. This approach provides insight into the degree of industry wide cooperation on sustainability efforts.

All seven-restaurant business reported food safety, food quality, employee training and community support based on the analysis. These findings demonstrate that these practices have evolved into established sustainability standards in the restaurant business.

The prevalence of environmentally friendly procedures across the seven restaurant brands is shown in Table 4.

Table 4: Cross-case Occurrence of Sustainable Practices. (n=7 Restaurants)

Sustainability Theme	Number of Restaurants Reporting	Percentage of Sample (%)
Food Safety	7	100
Food Quality	7	100
Employee Training & Development	7	100
Community Support	7	100
Sustainable Sourcing	6	85.7
Energy Conservation	6	85.7
Sustainable Packaging	6	85.7
Data Security	6	85.7
Emission Control	5	71.4
Sustainability Committee	5	71.4
Leadership Commitment	5	71.4

All seven restaurant categories reported food safety, food quality, employee training and community support based on the cross-case findings. Six companies reported on sustainability sourcing, energy conservation, sustainable packaging and data security; five organizations reported on emission control, sustainability communities and leadership commitment.

4.4. From Sustainability themes to Sustainable Touchpoint Experience

Each sustainability driven Touchpoint that was derived from 5 top Nvivo codes were categorised and was further examined in terms of the observed reactions it produces to explicitly include experience into the analytical framework. The derived Touchpoints were further extended to establish Sustainable Touchpoints Experience that provided customer experience. Table 4 gives a comprehensive view of the specific Touchpoints that are relevant to the Restaurant Industry and create Sustainable Touchpoint Experience. The study views the Sustainable Touchpoint Experience as developing cumulatively through several Touchpoints specific to the restaurant industry encompassing People, Food, Planet and Governance dimensions as compared to treating experience as a distinct outcome.

The Food, People, Planet and Governance (FPPG) framework's sustainable practices were identified via thematic analysis. Customers however experience sustainability through ESG disclosures. As a consequence each sustainability idea was examined to figure out

whether it could be observed in restaurant operations. These phases were identified as Sustainable Touchpoints and correlated to the possible satisfaction outcomes. The resulting frameworks shows how the development of Sustainable Touchpoint experience is impacted with sustainable practices.

Table 5: Development of Sustainable Touchpoint Experience

FPPG	Themes	Sustainable Touchpoints	Sustainable Touchpoint Experience
Food	Food Safety	Visible hygiene practices, open kitchens, food handling protocols	Perceived safety and trust
	Sourcing & Suppliers	Menu cues highlighting local, ethical, or certified suppliers	Perceived authenticity and responsibility
	Food Quality	Consistent taste, freshness, and presentation	Sensory satisfaction and quality perception
	Food Innovation	Introduction of Plant-based or sustainable menu selection	Novelty and experiential value
People	Community Support	Local Hiring and community engagement initiative	Emotional connection and social identification
	Training & Development	Knowledgeable staff communicating sustainable practices	Confidence and service association
	Employee Rights & safety	Fair wages, safe working conditions, compliance practices	Employee well-being and security
	Employee engagement	Employee participation in sustainable initiatives	Meaningful work experience
Planet	Natural Resource Conservation	Water saving practices and responsible use of materials sourced	Environmental conscious perception
	Emission Control	Reduced emissions through efficient logistics and operations	Community environmental reassurance
	Energy conservation	Use of energy- efficient equipment and renewable energy	Perceived environmental responsibility
	Packaging & Recycled products	Use of biodegradable packaging and visible recycling cues	Ethical consumption experience
Governance	Data security	Secure digital payments and data protection mechanism	Perceived security and trust
	Business Ethics	Fair pricing, ethical conduct, transparent operations	Moral Legitimacy and trust
	Committee & Framework	Formal sustainability committee and reporting system	Institutional credibility
	Leadership	Leadership commitment communicated through vision and actions	Confidence and long term task

Sustainability disclosures may be converted into experiential outcomes, demonstrated through the mapping of sustainability themes to customer-facing touchpoints. Sustainability practices generate observable interactions that influence perceptions of trust, authenticity, responsibility, credibility and ethical consumptions across the Food, People, Planet and Governance dimensions. Sustainability Touchpoint Experience (STE), which is proposed as a mechanism through which sustainability initiates become meaningful to customers throughout the restaurant journey, relies upon the cumulative impact of these touchpoints.

Discussions

The present research sought to determine how sustainability disclosures in restaurant ESG reports contribute to the development of Sustainable Touchpoint Experience (STE) and as well as whether these are distributed equally across the Food-People-Planet-Governance framework. The distribution of sustainability disclosures across the four dimensions varied statistically significant, based on the Chi-square Goodness of Fit analysis. As a consequence the alternative hypothesis (H1) was confirmed and the null hypothesis (H0) was rejected. The findings demonstrated that restaurant sustainability communication is deliberately concentrated on particular type of sustainability practices instead of having evenly distributed across sustainability dimensions.

Because it indicates that sustainability reporting is beyond merely a balanced disclosure procedure the rejection of H0 is theoretically significant. Restaurants appear to give priority to disclosures that are immediately connected to customer experiences ignoring the reality that ESG frameworks encourage organizations to address multiple sustainability dimensions. Under an equal-distribution assumption, food - related sustainability efforts are much more prevelant than expected while Governance related initiatives are considerably less frequent. This pattern indicates that the visibility and experiential relevance of sustainability initiates, in addition to the reporting requirements affect sustainability communications.

In accordance with Lemon & Verhoef (2016) and De Keyser et al., (2020) the findings support the customer journey touchpoint theory, which indicates that companies emphasize interactions that may influence consumers perceptions, evaluation and behavioural responses. Because customers can directly observe or participate in sustainable practices related to food quality, food safety, ethical sourcing, employee engagement and community involvement during service encounters, these programs have substantial experiential visibility. Contrary Governance related initiatives including ethical oversight, reporting structures, sustainability committees and compliance systems, generally function in the background and therefore attract less customer attention. As a consequence, the ability of sustainable dimensions to generate customer facing touchpoints differs.

The study additionally demonstrates that sustainable practices only enhance customer experiences when they are transformed into concrete touchpoints. The simple fact of sustainability initiatives where component of business procedures doesn't automatically result in experiential value. Rather specific interactions including menu information's, sourcing transparency, environmentally friendly operations, and visible sustainability statements are ways customers understand regarding sustainability. During the customer's journey, these touchpoints function as mechanisms that provide sustainable importance.

The findings additionally demonstrates that Sustainable Touchpoint Experience develops cumulatively across many customer journey stages. Sustainability related interactions during service encounters impact immediate evaluations, sustainability-related communications which take part before the restaurant visit assist in setting standards, and sustainability related

communications which takes part following the visit enhance perceptions of responsibility and trust. As a consequence, sustainability should be seen as an integrated experiential process which occurs across multiple customer touchpoints instead of separate operational strategy.

Therefore, by demonstrating that sustainability communications includes both operational and experiential dimensions the study contributes significantly to the wealth of information currently available of sustainability and hospitality. The present results indicate that sustainability also functions as a customer experience occurrence, while previous research had mostly examined at sustainability through environmental performance, ESG implementations and managerial practices. The Chi-Square results indicates that sustainability communications are strategically chosen emphasizing on elements that may result in real and significant customer experiences.

The FPPG framework set forth in this study is also practically supported by statistical findings. Restaurant sustainability communications is not standardised as demonstrated through the significant variation observed across the four sustainable elements. Rather sustainable differences in the focus and communication of a sustainability practices are captured through the FPPG Framework. The frameworks usefulness as an analytical lens for understanding sustainability discourses and the way this transfer into customer facing experiences is enforced with these findings.

The findings indicate that ESG practices aren't perceived directly through customers. Rather sustainability gains upon importance when it is translated into concrete touchpoints throughout the customer journey. Sustainability actions associated to food generate perceptions of authenticity and quality, people-related practices foster trust and emotional connection, planet related initiatives reinforce environmental responsibility and governance practices which enhance credibility. These interactions join together to create what this study defines as Sustainable Touchpoint Experience.

Theoretical Implication

Essentially, by considering sustainability as a distinct experiential element as opposed to a managerial or ethical add-on this research builds on the theory of experiential marketing. By exposing how touchpoints function as a trigger that actively impacts sustainable value co-creation instead of merely participating as engaging moments, this study expands the volume of literature on touchpoints.

Additionally, by emphasizing the importance customers play as contributors of creating sustainable experience throughout their involvement with multiple touchpoints, the findings improve service- dominant logic (SDL). In this perspective sustainability isn't the consequence of unilateral firm action rather of reciprocal interactions among the company and its customers.

By proposing a conceptual connection whereby sustainability is incorporated in the customer journey framework, the study also bridges the gap between customer experience research and sustainability marketing. This enables a deeper understanding of the way perceptions of sustainability are dynamically created before, during and after consumption particularly among service intensive industries including restaurants.

The introduction of Sustainable Touchpoint Experience (STE) is the study's major theoretical contribution. The vast majority in the Hospitality Industry's existing sustainable research has been directed at sustainability from an operational, environmental, or managerial perspective. The present research on the other side sees sustainability as an experiential phenomenon that is co-created through customer interactions with touchpoints that concentrate on sustainability. By demonstrating how sustainability practices

incorporated within Food, People, Planet and Governance dimension are transformed into customer experiences, STE builds on the existing literature on customer touchpoints and journeys. As a consequence, sustainability is positioned as a source of experiential value creation instead of just a business approach.

Practical Implications

The outcomes emphasise the value of utilizing a touchpoint oriented sustainable strategy for restaurant managers and practitioners. Restaurant should consider sustainability constantly across the entire customer journey rather than engaging in isolated green experience. This includes post-dining engagement that encourages responsible consumption, visible in-store sustainable initiatives and transparent digital communications.

As staff-customer interactions significantly influences perceived credibility, it is particularly crucial to train frontline employees to clarify sustainability initiatives completely. In an effort to enhance customers experiential understanding of sustainability, managers should also focus on visible sustainability indicators such as menu narratives which highlights regional production, waste reduction and eco-friendly packaging measures.

In addition, practitioners can use digital touchpoints including websites, social media and QR codes to educate users and encourage sustainable procedures such as responsible ordering and fewer food wastes. Since it promotes spontaneous customer engagement and long-term changes in behaviour, the study suggests that promoting sustainability through interactive touchpoints may be more effective than regulatory compliance alone for elected officials and industry stakeholders.

Limitation and Future Research Scope

This study has limitations which offers significant opportunities for additional study within the Indian Restaurant Industry given its conceptual and theoretical contribution. First, the operations of restaurant touchpoint is intrinsically selective and may not accurately reflect the variety of the Indian Foodservice sector, that includes cloud kitchen, aggregator-led platforms, independent shops, organised chains, and structures shaped by street food. Future research should ought to broaden touchpoint frameworks to include platform based and technology enabled interactions, particularly digital payment interface and apps for food delivery, as they are important in shaping perceptions on sustainability in the Indian context. Second the investigations cross sectional dimension results in more challenges to track whether views of sustainability changes over time. Longitudinal studies could investigate how frequently encounters with sustainability focused touchpoints impacts trust, habit growth and long-term loyalty in the context of Indian restaurants since sustainable experience is inherently dynamic. Third the theoretical investigation is restricted to specific components of the Indian restaurant sector. Future studies may involve comparing results among restaurant designs, regional dishes and various price tiers to enhance generalizability given the industry's substantial diversity which spans from street food machines and quick service restaurants to luxury and traditional dining. Fourth, the study does not explicitly investigate the relative strength or interaction effects of human, physical and digital touchpoints although it emphasises touchpoints across the customer's experience. In a way to examine touchpoint interaction, moderating and mediating effects, particularly in regard to customer engagement and sustainability orientation, future research could use more enhanced empirical techniques. Fifth, the social and economic elements pertaining to sustainability do not receive equal consideration as to environmental and experience elements of sustainability. Additional research could broaden the framework to encompass community involvement, employee well-being, fair sourcing

and commercial practices all of which are highly relevant to the socioeconomic context in Inida. Finally future research could also focus on various other developed versus emerging markets or undertake cross-cultural comparison.

Conclusion

This study prioritises touchpoints as a key driver for developing sustainable dining experience. Customers' perception of sustainability, transparency and value creation are impacted by each touchpoint throughout the pre-visit internet contact to the on-site service interactions and post-service engagements. The findings suggest that sustainability grows through seamless implementation of sustainable practices across co-created experience touchpoints rather than isolated green initiatives. Customers trust and long-term loyalty are significantly boosted by elements including responsible purchasing, waste management, energy efficient staff behaviour and transparent communication. In Indian restaurants where cultural variety and price sensitivity coexists, careful management of touchpoints provides an achievable way to maintain a balance amongst social responsibility, environmental stewardship and revenue growth. In conclusion everyday dining may be transformed into significant and lasting Sustainable Touchpoint Experience by incorporating sustainability into every aspect of customer and service interaction.

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