

**PAPER TITLE**

**Behavioural Economics and B2B Adoption of Compostable Packaging**

**-Explaining the Intention–Behaviour Gap in the Green Economy**

**AUTHORS:**

Ankita Varma Namburi

Niharika Singh

Sree Ramya Kondapalli

# Abstract

This study examines the intention–behaviour gap in the adoption of compostable packaging within the hospitality sector. While restaurants increasingly express pro-environmental commitments, the transition from conventional plastic to compostable alternatives remains uneven. Drawing on insights from both restaurant decision-makers and sustainable packaging suppliers, this study addresses this gap by examining how procurement decisions are shaped within real-world supply chain interactions.

Based on a few principles from behavioural economics, this study uses a qualitative exploratory design based on semi-structured interviews with sustainable packaging suppliers and restaurant decision-makers in metropolitan India. Thematic analysis reveals that procurement decisions are primarily driven by immediate cost considerations and operational reliability, with environmental benefits remaining secondary.

The findings indicate that procurement decisions are anchored in how costs and risks are interpreted in practice rather than evaluated objectively. Decision-makers do not simply assess price differences; they actively translate small unit cost variations into large perceived financial impacts at scale, which makes compostable packaging appear disproportionately expensive. At the same time, operational uncertainties—particularly around durability, leakage, and customer experience—are not treated as technical considerations but as potential threats to service reliability, leading to an overemphasis on worst-case outcomes.

Switching decisions are further constrained by existing supplier relationships and established procurement routines, which reduce the willingness to experiment with unfamiliar alternatives. In this context, sustainable packaging is often treated as a discretionary or branding-related expense rather than an operational necessity. As a result, adoption tends to occur selectively, often in response to external triggers such as regulatory pressure or customer visibility, rather than as part of standard procurement practice. Additionally, the continued use of plastic packaging as a baseline for comparison shapes how value is perceived, reinforcing resistance to change.

Existing research has largely focused on individual consumers, with limited attention to organisational decision-making in business-to-business (B2B) procurement contexts. By extending behavioural economics into B2B sustainability contexts, this study provides insight into the mechanisms underlying the intention–behaviour gap and highlights the need to address behavioural and organisational frictions to support sustainable adoption.

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# 1. Introduction

Sustainability has become an increasingly important priority for businesses across industries, particularly in sectors that generate significant environmental waste. The hospitality and food service sector is one such industry, where the widespread use of single-use packaging contributes substantially to environmental pollution. As concerns about plastic waste continue to grow, compostable packaging has emerged as a potential alternative that can help reduce the environmental impact of takeaway and delivery services.

Despite growing awareness of sustainability issues, the adoption of compostable packaging among restaurants and hotels remains uneven. Many businesses publicly express support for environmentally responsible practices, yet these intentions do not always translate into consistent operational decisions. This gap between sustainability intentions and actual behaviour reflects a broader challenge within sustainable consumption research and has been widely discussed as the intention–behaviour gap (Ajzen, 1991; Kollmuss & Agyeman, 2002).

Sustainable packaging has increasingly attracted attention within hospitality and food service research because takeaway and delivery operations rely heavily on single-use materials. Studies have highlighted that restaurants and food service providers are significant contributors to packaging waste, particularly plastic containers and disposable cutlery associated with takeaway consumption (He et al., 2019; Zhang et al., 2020). Compostable and biodegradable packaging materials have therefore been proposed as viable alternatives that can reduce the environmental impact of food service operations while supporting broader sustainability goals. However, empirical research suggests that the adoption of sustainable packaging solutions in the hospitality sector remains inconsistent, with many businesses continuing to rely on conventional plastic materials despite growing environmental awareness (Filimonau & Krivcova, 2017).

Traditional economic perspectives often assume that firms make rational decisions based primarily on cost–benefit calculations or regulatory incentives. However, insights from behavioural economics suggest that decision-making is often influenced by cognitive biases, heuristics, and contextual factors that shape how individuals and organisations evaluate alternatives (Kahneman, 2011; Thaler & Sunstein, 2008). In organisational contexts, procurement decisions are rarely purely rational processes; they are shaped by routines, risk perceptions, stakeholder dynamics, and established market expectations.

Within the hospitality sector, packaging procurement requires balancing operational efficiency, cost management, service reliability, and customer expectations. Although compostable packaging offers environmental benefits, decision-makers may perceive these alternatives as financially risky, operationally uncertain, or inconsistent with established procurement practices. Behavioural tendencies such as status quo bias, loss aversion, and reference dependence may therefore influence how businesses interpret trade-offs between sustainability benefits and operational costs (Kahneman & Tversky, 1979; Samuelson & Zeckhauser, 1988).

Understanding how these behavioural dynamics influence procurement decisions is particularly important in sectors where sustainability adoption depends on routine operational choices. To explore these dynamics, this study examines the behavioural and organisational factors influencing the adoption of compostable packaging in the hospitality sector. Drawing on behavioural economics, the research investigates how cognitive biases, procurement structures, and social influences shape decision-making among restaurants and hotels.

Using semi-structured interviews with suppliers and hospitality businesses, the study seeks to identify recurring patterns in how sustainable packaging alternatives are evaluated and adopted in practice. By analysing these decision processes, the research aims to provide insights into the mechanisms that contribute to the persistence of the intention–behaviour gap in organisational sustainability practices.

These insights provide the foundation for the research propositions presented in the following section, which outline the behavioural mechanisms that may influence the adoption of compostable packaging within the hospitality sector.

## **2. Literature Review**

### **2.1 Sustainable Packaging and the Circular Economy Transition**

The transition toward a circular economy has placed increasing emphasis on sustainable packaging as a critical mechanism for reducing environmental waste and improving resource efficiency. Packaging systems, particularly in the food service and hospitality sectors, contribute significantly to global plastic waste due to the widespread reliance on single-use materials. In response, policymakers and industry stakeholders have introduced regulatory initiatives and sustainability commitments aimed at accelerating the adoption of environmentally responsible packaging solutions. Within the European policy landscape, for example, the Packaging and Packaging Waste Regulation (PPWR) and broader circular economy strategies prioritise waste prevention, recyclability, reusable systems, and compostable materials as key mechanisms for reducing environmental impact (Li et al., 2024).

Despite these regulatory developments and growing corporate sustainability commitments, the transition toward sustainable packaging has progressed unevenly. Many organisations publicly support environmental responsibility and express intentions to adopt environmentally friendly practices, yet the actual implementation of sustainable materials remains limited. This discrepancy between stated intentions and observed behaviour is widely recognised in the literature as the intention–behaviour gap, a phenomenon frequently observed in sustainability research where positive environmental attitudes fail to translate into corresponding behavioural outcomes (Borges-Tiago et al., 2024; Chi et al., 2022). While this gap has been extensively examined in the context of individual consumers, comparatively less attention has been given to organisational decision-making processes that shape sustainability adoption in business environments.

### **2.2 The Intention–Behaviour Gap in Organisational Sustainability Decisions**

Existing research on sustainable consumption and environmental behaviour demonstrates that positive attitudes toward sustainability do not necessarily lead to behavioural change. Studies across marketing, tourism, and environmental psychology consistently report that individuals who express strong environmental concern often fail to adopt environmentally responsible practices in their daily decisions (Akram et al., 2024; Ezeh & Dube, 2025). Similar dynamics appear within organisational contexts, where firms publicly commit to sustainability initiatives yet continue to rely on conventional materials and operational practices.

In business environments, this discrepancy is particularly visible in procurement decisions involving packaging materials. For industries such as hospitality and food service, packaging serves multiple operational functions, including product protection, hygiene assurance, and customer experience management. Consequently, decisions regarding packaging materials are not solely driven by environmental considerations but are influenced by operational efficiency, cost constraints, and supply chain reliability. Research on sustainable packaging orientation suggests that although managers often demonstrate strong awareness of environmental challenges, their strategic decisions are shaped by perceived market readiness, competitive pressures, and operational feasibility (Duarte et al., 2025).

These findings suggest that organisational sustainability commitments alone are insufficient to drive behavioural change. Instead, the intention–behaviour gap in business contexts emerges from complex interactions between managerial decision processes, organisational priorities, and broader institutional environments.

## **2.3 Behavioural Economics and B2B Procurement Decisions**

Traditional economic models assume that firms behave as rational actors who adopt innovations when they provide clear financial or operational advantages. However, insights from behavioural economics challenge this assumption by demonstrating that decision-makers frequently rely on cognitive shortcuts, heuristics, and social cues when making complex decisions. Rather than optimising outcomes through fully rational evaluation, individuals often adopt satisficing strategies that reduce cognitive effort under conditions of uncertainty.

In procurement environments, these behavioural dynamics are particularly significant. Managers responsible for sourcing materials must evaluate multiple suppliers, price structures, regulatory requirements, and operational risks within limited time frames. Under such conditions, decision-makers frequently rely on existing routines and established supplier relationships, which can reinforce organisational inertia and discourage experimentation with new materials.

Empirical studies on procurement behaviour highlight several cognitive biases that influence sustainability adoption. Status quo bias encourages decision-makers to maintain existing procurement practices rather than adopt unfamiliar alternatives (Godefroid et al., 2024). Similarly, loss aversion increases sensitivity to potential operational risks associated with new materials, leading managers to prioritise short-term stability over long-term environmental benefits (Kamara & Dunbar, 2025). These behavioural mechanisms can prevent organisations from adopting sustainable innovations even when they recognise their environmental advantages.

In addition to cognitive biases, organisational decision-making is also influenced by social norms and signalling mechanisms within industry networks. Sustainability certifications, green marketing communication, and regulatory expectations create reputational pressures that encourage firms to demonstrate environmental responsibility (Seyfi et al., 2025). However, these external pressures may not always be sufficient to overcome internal behavioural barriers, particularly when sustainability initiatives involve perceived costs or operational uncertainties.

## **2.4 Research Gap and Study Focus**

Although the literature provides valuable insights into sustainability behaviour, much of the existing research focuses on individual consumer decisions rather than organisational procurement processes. As a result, limited empirical attention has been given to how behavioural biases influence sustainability adoption within B2B decision-making environments.

This gap is particularly evident in the context of compostable packaging adoption within the hospitality and food service sector. Restaurants and hotels frequently express strong

sustainability intentions and recognise the environmental importance of reducing plastic waste. However, the adoption of compostable packaging solutions remains inconsistent despite increasing regulatory pressure and consumer awareness.

Understanding this discrepancy requires examining how behavioural mechanisms interact with organisational constraints and industry structures to shape procurement decisions. By applying a behavioural economics perspective to B2B packaging adoption, this study seeks to explain why organisations with pro-environmental intentions often delay or resist transitioning to compostable packaging systems.

### 3. Research Propositions

The literature on sustainable consumption has consistently highlighted the persistence of a gap between pro-environmental attitudes and actual behaviour. While businesses increasingly articulate sustainability commitments and environmental responsibility, these intentions do not always translate into operational decisions that support environmentally sustainable practices. In the food service sector, compostable packaging represents an important alternative to plastic waste, yet its adoption among restaurants and hotels remains uneven and limited.

Existing research identifies barriers to sustainable product adoption such as cost concerns, information asymmetry, and supply constraints. However, much of this literature assumes that business decision-makers behave as rational actors responding primarily to price signals or regulatory incentives. Behavioural economics challenges this assumption by demonstrating that decision-making is often shaped by cognitive biases, heuristics, and contextual factors that influence how alternatives are evaluated.

In organisational settings, procurement decisions typically involve multiple stakeholders, operational constraints, and risk considerations. Sustainability benefits are often indirect and long-term, while financial and operational costs are immediate and highly visible. As a result, behavioural biases may significantly influence how decision-makers interpret sustainability-related trade-offs. Drawing on behavioural economics and prior research on green consumption, this study proposes several mechanisms that may explain why businesses delay or resist switching to compostable packaging despite expressing pro-environmental intentions.

First, organisations may exhibit **status quo bias**, a tendency to favour existing suppliers and established routines even when alternative options are available. In procurement environments where long-standing vendor relationships and operational processes are in place, switching to new packaging solutions may involve additional evaluation, testing, and perceived uncertainty.

**Proposition 1:** Status quo bias and organisational inertia reduce the likelihood that restaurants and hotels will switch from conventional to compostable packaging.

Second, behavioural research suggests that decision-makers often weigh potential losses more heavily than equivalent gains. In packaging procurement, buyers may focus on perceived operational risks associated with compostable materials, such as durability concerns, leakage, customer complaints, or cost variability. These perceived risks may outweigh the long-term environmental benefits associated with sustainable alternatives.

**Proposition 2:** Loss aversion related to perceived operational risks outweighs long-term environmental benefits in procurement decisions regarding compostable packaging.

Third, the concept of **mental accounting** suggests that individuals and organisations categorize expenditures into separate cognitive “accounts.” Sustainable packaging costs may therefore be treated as discretionary sustainability expenses rather than as essential operational inputs, limiting their integration into routine procurement decisions.

**Proposition 3:** Mental accounting leads businesses to categorize sustainable packaging as a discretionary or avoidable cost rather than as an operational necessity.

Finally, social influence and visibility can shape pro-environmental behaviour. Businesses may experience pressure from customers, competitors, or industry norms to adopt sustainable practices. However, while such social norms may increase awareness and positive attitudes toward compostable packaging, they may not be sufficient to overcome behavioural and organisational frictions at the point of procurement.

**Proposition 4:** Social norms and customer-facing visibility increase intentions to adopt compostable packaging but are insufficient on their own to overcome behavioural frictions in procurement decisions.

Together, these propositions provide a behavioural explanation for the persistence of the intention–behaviour gap in the adoption of compostable packaging within the hospitality sector. By examining how cognitive biases and social influences shape procurement decisions, this study aims to better understand the mechanisms that hinder the transition toward more sustainable consumption practices in business contexts.

# 4. Methodology

## 4.1 Research Design

This study adopts a **qualitative exploratory research design** to investigate the behavioural and organisational factors influencing the adoption of compostable packaging within the hospitality sector. Qualitative approaches are particularly appropriate for examining complex decision-making processes and uncovering behavioural frictions that shape organisational sustainability practices.

Semi-structured interviews were employed to generate rich, contextual insights into procurement decisions, operational constraints, and sustainability considerations influencing packaging choices. This approach allows for flexibility in exploring emerging themes while maintaining consistency across interviews.

## 4.2 Research Context: Compostable Packaging in the Hospitality Sector

The hospitality sector, particularly restaurants and food service establishments, is a major contributor to single-use packaging consumption. Growing regulatory pressure, customer awareness, and sustainability commitments have encouraged businesses to explore alternatives such as compostable and biodegradable packaging.

Despite increasing environmental awareness, adoption of compostable packaging remains uneven. Restaurants often face operational concerns related to durability, leakage, storage constraints, and cost implications. Understanding how these practical considerations interact with behavioural decision-making processes is essential for explaining the gap between sustainability intentions and actual procurement behaviour.

The study focuses on restaurants operating in **urban metropolitan contexts in India**, where food delivery ecosystems, takeaway consumption, and packaging waste generation are particularly prominent.

## 4.3 Sampling Strategy

The study employed **purposive maximum-variation sampling** to capture diverse perspectives across the sustainable packaging ecosystem. The sampling strategy aimed to include participants representing different organisational roles, operational models, and levels of engagement with sustainability practices.

Two categories of participants were included:

1. **Restaurants and hospitality businesses**, representing decision-makers responsible for procurement and operational management.
2. **Suppliers of sustainable packaging products**, who interact with multiple hospitality businesses and observe recurring patterns in buyer behaviour.

This dual perspective enabled **triangulation of insights**, allowing behavioural patterns identified by restaurants to be contextualised through supplier experiences across multiple clients.

#### 4.3.1 Supplier Sample

Supplier participants included businesses providing **sustainable packaging products such as compostable cutlery, takeaway containers, tissues, and biodegradable packaging materials**. Suppliers were selected based on their active engagement with hospitality businesses and their experience supplying sustainable alternatives to conventional plastic packaging.

Supplier interviews provided industry-level insight into:

- recurring buyer concerns and objections
- switching behaviour between conventional and compostable packaging
- negotiation dynamics and pricing sensitivities
- perceived barriers to adoption observed across multiple restaurant clients

These perspectives helped contextualise restaurant decision-making within broader supply chain dynamics.

#### 4.3.2 Restaurant Sample

The primary dataset consists of **12 restaurants operating in metropolitan cities in India**. Participants included restaurant owners, managers, or procurement decision-makers responsible for operational purchasing decisions.

Restaurants were selected to represent variation in:

- sustainability orientation
- business scale and format
- reliance on delivery and takeaway models

This variation enabled cross-case comparison between establishments demonstrating differing levels of engagement with sustainable packaging practices.

### 4.4 Data Collection

Data were collected through **semi-structured interviews** conducted with restaurant decision-makers and sustainable packaging suppliers. Semi-structured interviews allowed participants to discuss their experiences and perceptions in detail while ensuring that key themes relevant to the research questions were consistently explored.

The interview guide included questions relating to:

- procurement structures and decision-making authority
- perceived cost-benefit trade-offs associated with compostable packaging
- operational concerns such as leakage, durability, and storage constraints
- customer demand and visibility of sustainability practices

- differences between sustainability communication and actual purchasing behaviour

Interviews were conducted with the consent of participants and were subsequently transcribed for analysis. To ensure confidentiality, all participants were anonymised and assigned coded identifiers.

## **4.5 Data Analysis Method**

Interview transcripts were analysed using **thematic analysis following Braun and Clarke (2006)**. Thematic analysis allows researchers to identify recurring patterns across qualitative data while retaining flexibility to interpret themes in relation to theoretical frameworks.

In this study, thematic analysis was conducted iteratively, allowing patterns in the data to emerge while also interpreting findings through behavioural economics concepts related to decision-making biases and organisational routines.

### **4.5.1 Data Familiarization**

The first stage involved repeated reading of interview transcripts to develop familiarity with the data. Notes were taken during this stage to identify preliminary patterns, recurring concerns, and initial behavioural explanations expressed by participants.

### **4.5.2 Initial Coding**

During the second stage, transcripts were systematically coded to identify meaningful units of information relevant to sustainable packaging adoption. Codes captured recurring operational concerns, decision-making considerations, and behavioural patterns expressed by interview participants.

Examples of initial codes included cost sensitivity, operational risk perceptions, delivery dependency, supplier reliability concerns, and customer environmental awareness.

### **4.5.3 Theme Development**

Related codes were subsequently grouped into broader thematic categories representing recurring behavioural and operational patterns across interviews. This process involved examining relationships between codes and identifying higher-level themes that captured the underlying dynamics influencing adoption decisions.

Themes reflected both practical operational considerations and behavioural decision-making processes affecting procurement behaviour.

### **4.5.4 Theme Refinement**

Themes were iteratively refined through comparison across interview cases to ensure internal coherence and conceptual clarity. This stage involved reviewing coded data extracts and verifying that themes accurately reflected patterns observed across the dataset.

The refined themes were subsequently interpreted through a behavioural economics lens to explain the gap between sustainability intentions and operational purchasing behaviour.

## 4.6 Validity and Reliability Measures

Several strategies were employed to enhance the credibility and robustness of the analysis.

First, **data triangulation** was achieved by incorporating both restaurant and supplier perspectives, enabling behavioural patterns identified by one group to be validated through insights from the other.

Second, **cross-case comparison** across multiple restaurants allowed recurring themes to be identified beyond individual organisational contexts.

Finally, **sampling diversity** ensured that insights were drawn from restaurants with varying operational models and sustainability orientations, improving the robustness and transferability of the findings.

# 5. Findings: Supplier Perspectives

## 5.1 Overview of Supplier Interview Insights

To examine the behavioural and organisational dynamics influencing the adoption of compostable packaging in the hospitality sector, semi-structured interviews were conducted with fifteen suppliers of biodegradable and compostable disposables. These suppliers serve a wide range of clients, including restaurants, hotel chains, catering businesses, and institutional food service providers. Because suppliers interact with multiple buyers across different operational contexts, they provide a valuable perspective on recurring patterns in procurement behaviour and adoption decisions.

Across the interviews, suppliers consistently reported a noticeable discrepancy between the sustainability intentions expressed by businesses and their actual purchasing behaviour. While restaurants and hotels increasingly demonstrate awareness of environmental concerns and often express interest in compostable alternatives, this interest does not always translate into consistent adoption of sustainable packaging solutions. Analysis of the interview transcripts revealed several recurring patterns that help explain this gap between intention and behaviour.

Several broad insights emerged from the supplier interviews:

### **1. Widespread interest in sustainable packaging but inconsistent adoption.**

Suppliers frequently reported that restaurants and hospitality businesses show growing curiosity about compostable packaging options. Many buyers request information about sustainable materials or ask suppliers to provide quotations for compostable alternatives. However, despite this initial interest, suppliers noted that final purchasing decisions often revert to conventional packaging options, particularly when cost or operational considerations become salient.

### **2. Procurement decisions are strongly influenced by operational and financial constraints.**

Across different market segments, suppliers observed that restaurants and hotels evaluate compostable packaging primarily through the lens of operational practicality and cost management. Packaging choices are often treated as routine operational decisions, and buyers typically prioritise solutions that minimise financial risk and ensure service reliability. Environmental considerations are acknowledged, but they rarely override immediate business constraints during procurement decisions.

### **3. Sustainability initiatives are frequently triggered by external pressures.**

Another recurring observation among suppliers was that adoption of compostable packaging is often influenced by external triggers such as regulatory inspections, sustainability certifications, brand positioning strategies, or customer expectations. In several cases, businesses introduced compostable packaging during periods of heightened regulatory scrutiny or sustainability campaigns, but suppliers noted that such adoption was sometimes temporary or limited to specific operational contexts.

### **4. Established market benchmarks shape perceptions of value.**

Suppliers also highlighted that buyers frequently evaluate compostable packaging relative to

the price and performance of conventional plastic products that have historically dominated the market. Because plastic packaging has long served as the industry standard, it functions as a reference point against which alternative materials are judged. This comparison often influences how buyers perceive the cost and practicality of switching to compostable alternatives.

Taken together, these observations suggest that the limited adoption of compostable packaging in the hospitality sector cannot be explained solely by lack of awareness or supply availability. Instead, supplier insights indicate that procurement decisions are shaped by a combination of behavioural tendencies, organisational routines, and market expectations that reinforce existing packaging practices. The following sections present the major themes identified through thematic analysis of the supplier interviews.

## **5.2 Thematic Findings**

### **5.2.1 Cost Salience and Immediate Financial Framing**

One of the most prominent themes emerging from the supplier interviews is the central role of cost considerations in procurement decisions related to compostable packaging. Suppliers consistently reported that restaurants and hospitality businesses evaluate packaging alternatives primarily through immediate financial implications rather than long-term environmental benefits. This emphasis on cost often shapes how compostable packaging is perceived and ultimately determines whether adoption occurs.

Several key patterns illustrate how cost framing influences adoption decisions:

#### **1. Unit price comparisons dominate procurement discussions.**

Suppliers frequently indicated that buyers focus heavily on the per-unit price of packaging materials when evaluating alternatives. Even when the price difference between compostable and conventional packaging is relatively small, buyers tend to compare the products directly and prioritise the cheaper option. Because packaging purchases typically involve large volumes, even modest cost differences are perceived as significant when aggregated across daily operations.

#### **2. Compostable packaging is often perceived as a premium alternative.**

Many suppliers reported that buyers associate compostable packaging with higher operational costs and therefore categorize it as a premium or optional product rather than a standard operational input. This perception is particularly strong among quick-service restaurants and smaller establishments operating under tight margins. In such contexts, environmental benefits are acknowledged but rarely considered sufficient justification for absorbing additional costs.

#### **3. Immediate financial impacts outweigh long-term environmental benefits.**

Suppliers also observed that buyers tend to prioritise short-term financial considerations over long-term environmental outcomes. While sustainability is often discussed in principle, procurement decisions ultimately prioritise operational budgets and immediate cost management. As a result, compostable packaging is frequently evaluated within narrow financial parameters that limit the weight given to broader environmental benefits.

These patterns suggest that cost salience plays a critical role in shaping procurement behaviour, reinforcing existing packaging choices even among businesses that express interest in sustainable alternatives.

### **5.2.2 Perceived Operational Risk and Performance Uncertainty**

In addition to cost considerations, suppliers frequently highlighted concerns about the operational reliability of compostable packaging materials. Restaurants and hotels operate in environments where service consistency and customer satisfaction are critical, and any perceived risk associated with packaging performance can influence purchasing decisions.

The interviews revealed several dimensions of perceived operational risk:

#### **1. Concerns about durability and product performance.**

Suppliers reported that buyers often question whether compostable packaging can match the durability of conventional plastic alternatives. Concerns related to heat resistance, moisture tolerance, and structural strength were commonly mentioned. These doubts sometimes arise even when suppliers provide technical specifications demonstrating that compostable materials meet industry standards.

#### **2. Fear of service disruptions and customer complaints.**

Another recurring concern relates to the potential reputational consequences of packaging failure. Suppliers indicated that restaurants and hotels worry about scenarios in which containers leak, deform, or fail during use, potentially leading to negative customer experiences. In sectors where brand reputation and service quality are central, even low-probability risks can influence decision-making.

#### **3. Limited familiarity with new materials.**

Suppliers also suggested that uncertainty about compostable materials contributes to cautious adoption. Because plastic packaging has been widely used for decades, buyers are familiar with its performance characteristics. Compostable alternatives, by contrast, are often perceived as relatively new and less tested, which can create hesitation among decision-makers responsible for operational reliability.

These concerns indicate that perceived operational risks can significantly influence procurement behaviour, particularly in environments where service quality and consistency are closely linked to customer satisfaction.

### **5.2.3 Procurement Inertia and Organisational Structures**

A third theme identified in the supplier interviews relates to the influence of organisational procurement structures on adoption decisions. Suppliers frequently noted that internal decision-making processes within hospitality businesses can slow the transition toward compostable packaging, even when interest in sustainable alternatives exists.

Several structural factors contribute to this inertia:

#### **1. Established supplier relationships and procurement routines.**

Many restaurants and hospitality businesses maintain long-term relationships with packaging suppliers. These established partnerships often involve negotiated pricing arrangements and

familiar ordering systems. Suppliers reported that such relationships create a tendency to maintain existing purchasing patterns rather than explore alternative suppliers or products.

### **2. Formal procurement procedures in larger organisations.**

In larger hotel chains and institutional food service operations, packaging procurement often follows formal procedures involving vendor approval processes, product testing, and periodic tender cycles. These institutional structures can make switching to new packaging solutions more complex and time-consuming, reducing the likelihood of rapid adoption.

### **3. Multiple stakeholders involved in procurement decisions.**

Suppliers also observed that packaging decisions are rarely made by a single individual in larger organisations. Instead, procurement decisions may involve coordination between procurement managers, finance departments, operations teams, and sustainability officers. The involvement of multiple stakeholders can lengthen decision timelines and create additional barriers to adopting new packaging materials.

Together, these structural dynamics illustrate how organisational routines and procurement processes can reinforce existing packaging practices, even when businesses express interest in adopting more sustainable alternatives.

## **5.3 Conditional Sustainability Adoption**

Another important theme emerging from the supplier interviews is the conditional nature of sustainability adoption in the hospitality sector. While many restaurants and hotels express interest in environmentally sustainable practices, suppliers observed that the adoption of compostable packaging often occurs in response to specific external triggers rather than as a permanent operational change.

Several patterns illustrate this conditional approach to sustainability:

### **1. Adoption driven by regulatory or compliance pressures.**

Suppliers frequently noted that businesses are more likely to adopt compostable packaging during periods of regulatory scrutiny or inspection. In jurisdictions where single-use plastics face restrictions or where environmental compliance is closely monitored, restaurants and hotels often switch to compostable alternatives to meet regulatory expectations. However, suppliers indicated that such shifts may be motivated primarily by compliance requirements rather than by intrinsic sustainability commitments.

### **2. Sustainability linked to branding and public visibility.**

In several cases, suppliers reported that compostable packaging is introduced as part of broader brand positioning strategies. Restaurants and hospitality businesses seeking to project an environmentally responsible image may adopt compostable packaging in customer-facing contexts such as takeaway packaging or promotional campaigns. This suggests that sustainability initiatives may be selectively implemented where they are most visible to customers.

### **3. Temporary or partial implementation of sustainable practices.**

Suppliers also observed that some businesses experiment with compostable packaging on a limited basis before committing to full adoption. For example, compostable disposables may be used for specific product lines, events, or outlets while conventional packaging continues

to be used in other operational contexts. This partial adoption reflects a cautious approach in which businesses test sustainable alternatives before making broader procurement changes.

These patterns indicate that sustainability adoption in the hospitality sector is often influenced by situational factors rather than being fully embedded within routine procurement practices.

## **5.4 Reference Dependence and Price Anchoring**

Suppliers also highlighted the influence of established price benchmarks on how buyers evaluate compostable packaging alternatives. Because conventional plastic packaging has historically dominated the market, it often serves as the reference point against which new materials are assessed.

The interviews revealed several ways in which reference dependence shapes decision-making:

### **1. Plastic packaging as the dominant market benchmark.**

Suppliers consistently reported that buyers compare compostable packaging prices directly with those of traditional plastic alternatives. Since plastic packaging has long been inexpensive and widely available, it functions as a baseline against which compostable options are judged. This comparison can make even modest price differences appear substantial.

### **2. Price anchoring reinforcing perceptions of higher cost.**

In many cases, buyers anchor their expectations to the historical cost of plastic packaging. As a result, compostable alternatives may be perceived as disproportionately expensive even when the price premium is relatively small in absolute terms. Suppliers suggested that this anchoring effect shapes how buyers interpret the financial implications of switching to sustainable packaging.

### **3. Side-by-side product comparisons influencing choices.**

Some suppliers provide both plastic and compostable packaging options to their clients. In such situations, buyers often evaluate the two alternatives simultaneously, reinforcing direct price comparisons. This side-by-side evaluation can further strengthen the tendency to choose the familiar and cheaper option, particularly in cost-sensitive segments.

These observations suggest that reference dependence plays a significant role in shaping perceptions of value, making it more difficult for compostable packaging to compete with established packaging materials.

## **5.5 Segment-Specific Market Dynamics**

Although several common themes emerged across supplier interviews, suppliers also noted important differences in how various segments of the hospitality market approach sustainable packaging adoption. These variations reflect differences in operational priorities, customer expectations, and business models.

Three segment-specific patterns were particularly evident:

### **1. Premium hospitality emphasises service reliability and brand reputation.**

Suppliers reported that high-end hotels and premium dining establishments often place greater emphasis on service quality and brand reputation when evaluating packaging materials. In these contexts, decision-makers tend to prioritise reliability and customer experience, which can make them cautious about adopting materials perceived as less familiar or potentially risky.

### **2. Quick-service and high-volume operations prioritise cost scalability.**

For quick-service restaurants and delivery-focused businesses, suppliers indicated that packaging decisions are strongly influenced by cost scalability across multiple outlets. Because these businesses operate at large volumes and relatively thin margins, even small cost increases associated with compostable packaging can significantly influence procurement decisions.

### **3. Independent restaurants face tighter financial constraints.**

Suppliers also observed that smaller independent restaurants often operate under tighter financial constraints compared to larger chains. As a result, these businesses may be particularly sensitive to short-term cost differences when evaluating packaging alternatives. While owners may express interest in sustainable practices, financial limitations can restrict the ability to adopt compostable packaging consistently.

Overall, these segment-specific dynamics suggest that adoption patterns are shaped not only by behavioural factors but also by structural differences in business models and operational priorities across the hospitality sector.

# 6. Findings: Restaurant Perspectives

## 6.1 Overview of Restaurant Interview Insights

Interviews with restaurant decision-makers revealed that adoption of compostable packaging is shaped by a combination of **economic considerations, operational constraints, customer-facing brand concerns, and industry dynamics**. While most participants expressed general support for environmentally sustainable practices, actual procurement decisions were primarily influenced by immediate operational practicality and cost implications.

Thematic analysis of the interview transcripts identified several recurring themes explaining the gap between **stated sustainability intentions and packaging procurement behaviour**. These themes highlight the practical and behavioural frictions that restaurants face when considering a transition from conventional packaging to compostable alternatives.

Across the dataset, respondents frequently emphasised **cost sensitivity, reliability of packaging materials, and delivery-related performance risks** as key decision factors. At the same time, sustainability considerations were often framed in relation to **brand positioning and customer perception**, rather than purely environmental motivations.

The findings suggest that compostable packaging adoption is rarely driven by a single factor; rather, it emerges from the interaction of **economic pressures, operational feasibility, and external expectations** within the restaurant business environment.

## 6.2 Cost Perceptions and Profit Margin Considerations

Cost considerations emerged as one of the most frequently cited factors influencing packaging decisions. Restaurant participants consistently described their businesses as operating within **tight profit margins**, making incremental cost increases in packaging a significant concern.

Many respondents perceived compostable packaging as **substantially more expensive than conventional alternatives**, particularly when used at scale in takeaway or delivery-heavy operations. Even when restaurant owners expressed support for sustainable practices, they often framed packaging costs as an operational expense that must remain tightly controlled.

Several interviewees described sustainability-related expenditures as **secondary to core operational costs**, reflecting a tendency to prioritise short-term financial stability over longer-term environmental considerations. In many cases, compostable packaging was categorised as an optional or discretionary upgrade rather than an essential operational input.

These perceptions highlight the role of **cost framing and budgeting structures** in shaping adoption decisions, where sustainability initiatives compete with other operational expenditures within constrained budgets.

## 6.3 Operational Concerns and Service Reliability

Operational reliability was another central factor influencing restaurant decisions regarding packaging materials. Participants frequently raised concerns about the **performance of compostable packaging in real service conditions**, particularly in relation to delivery operations.

Key operational risks mentioned included:

- leakage or structural weakness in containers
- heat and moisture resistance
- durability during transportation
- storage requirements and shelf life

Restaurants that relied heavily on food delivery expressed particular concern about maintaining **consistent service quality and customer satisfaction**. Packaging failures, such as leakage or damaged containers during delivery, were viewed as potential threats to customer experience and brand reputation.

As a result, many participants prioritised packaging options that had **proven operational reliability**, even if they were less environmentally sustainable. The perceived uncertainty associated with new packaging materials often created hesitation in switching suppliers or experimenting with alternative products.

These findings suggest that operational risk perceptions can act as a significant barrier to sustainability adoption in high-volume food service environments.

## 6.4 Customer Expectations and Brand Positioning

Customer expectations were frequently mentioned as a motivating factor for considering sustainable packaging alternatives. Several participants noted that environmentally conscious customers increasingly expect restaurants to demonstrate visible sustainability commitments.

However, the influence of customer demand varied significantly across restaurants. Some establishments viewed compostable packaging as an opportunity to **strengthen brand identity and differentiate themselves within competitive urban markets**. In these cases, sustainability initiatives were integrated into broader branding strategies and communication efforts.

Other participants suggested that while customers express general support for sustainability, **actual purchasing behaviour is rarely driven solely by packaging materials**. As a result, restaurants often balanced sustainability considerations against cost and operational constraints.

In many cases, sustainability practices were perceived as **symbolic signals of environmental responsibility**, particularly when they were visible to customers through packaging design, messaging, or branding.

## 6.5 Competitive Pressures and Industry Norms

Industry dynamics also influenced adoption decisions. Several participants indicated that packaging choices are shaped not only by internal considerations but also by **competitive pressures and prevailing industry norms**.

Restaurants often observe the practices of competing establishments when evaluating operational changes. In contexts where sustainable packaging is widely adopted by peers, businesses may feel increased pressure to follow similar practices in order to remain aligned with market expectations.

However, where compostable packaging adoption remains limited, restaurants may be reluctant to become early adopters due to concerns about cost disadvantages or operational uncertainties. This dynamic can reinforce existing practices and slow the diffusion of sustainable alternatives within the industry.

## 6.6 Regulatory Influence and Compliance Behaviour

Regulatory policies related to plastic usage and waste management were also mentioned as factors influencing packaging decisions. Some participants noted that evolving regulations and local restrictions on single-use plastics have encouraged businesses to explore alternative packaging solutions.

However, regulatory influence was often interpreted through a **compliance-oriented lens**, where businesses sought to meet minimum legal requirements rather than proactively adopting sustainability practices.

In several cases, restaurants indicated that clearer policy frameworks, incentives, or enforcement mechanisms could play an important role in accelerating adoption of environmentally sustainable packaging options.

## 6.7 Decision-Making Structures in Restaurants

Interview findings also highlighted the organisational structures through which packaging decisions are made within restaurants. In smaller establishments, procurement decisions were typically made directly by **owners or senior managers**, often based on a combination of cost considerations, supplier relationships, and operational experience.

In larger restaurant operations or chains, packaging decisions were sometimes influenced by **centralised procurement processes**, where suppliers and packaging standards are determined at an organisational level.

Across both contexts, decision-making processes were shaped by **practical operational priorities**, with sustainability considerations entering the discussion primarily when they aligned with cost efficiency, regulatory compliance, or brand positioning objectives.

These findings illustrate how procurement structures and organisational routines influence the extent to which sustainability considerations are incorporated into operational decision-making.

# 7. Discussion

## 7.1 Integrating Supplier and Restaurant Perspectives

The integration of restaurant and supplier perspectives provides a more comprehensive understanding of the dynamics shaping compostable packaging adoption in the hospitality sector. While restaurant interviews reveal internal decision-making processes and operational concerns, supplier insights highlight recurring behavioural patterns observed across multiple buyer organisations.

Restaurants primarily framed packaging decisions through the lens of **cost management, operational reliability, and service quality**, reflecting the everyday pressures of running food service operations. Suppliers, however, reported encountering similar objections repeatedly across clients, including concerns related to price differentials, packaging durability, and uncertainty regarding performance in delivery contexts.

This convergence of perspectives suggests that the barriers to adoption are not isolated to individual businesses but represent **systematic behavioural and operational frictions within the broader industry**. Supplier observations further indicate that even restaurants expressing strong sustainability intentions often hesitate to switch packaging systems due to perceived short-term risks or operational disruption.

By combining these perspectives, the study reveals how adoption decisions emerge from the interaction between **internal organisational priorities and external supply-chain dynamics**, rather than from purely individual managerial preferences.

## 7.2 Behavioural Economics Interpretation of Findings

Interpreting the findings through a behavioural economics lens helps explain why environmentally sustainable alternatives struggle to diffuse despite growing awareness and positive attitudes toward sustainability.

Several behavioural mechanisms appear to shape restaurant procurement behaviour.

First, **status quo bias** contributes to reluctance in changing existing suppliers or packaging systems. Restaurants often prefer to continue with familiar packaging solutions that have demonstrated operational reliability, even when alternative options may offer environmental benefits.

Second, **loss aversion** appears to influence decision-making. Interview participants frequently emphasised the potential risks associated with packaging failure, such as leakage, customer complaints, or delivery disruptions. These potential losses were often weighted more heavily than the potential reputational or environmental benefits of adopting compostable packaging.

Third, evidence of **mental accounting** emerged in how restaurants categorised sustainability-related expenditures. Compostable packaging was often framed as an additional cost rather

than being integrated into core operational budgeting. As a result, sustainability initiatives were sometimes treated as discretionary spending rather than essential business inputs.

Finally, **social norm influences** were visible in the way restaurants considered competitor behaviour and customer expectations. However, while sustainability visibility can influence brand positioning, social pressure alone did not appear sufficient to overcome cost and operational concerns.

Together, these behavioural mechanisms help explain why restaurants may simultaneously express environmental commitment while continuing to rely on conventional packaging solutions.

### 7.3 Explaining the Persistence of the Intention–Behaviour Gap

The findings provide insight into the persistence of the **intention–behaviour gap in organisational sustainability practices**, a phenomenon widely documented in pro-environmental behaviour research.

In the context of restaurant procurement decisions, sustainability intentions are often mediated by practical constraints related to operational efficiency, financial viability, and service reliability. Even when restaurant managers acknowledge the environmental benefits of compostable packaging, these intentions may not translate into purchasing decisions when perceived risks or costs appear too high.

This gap is further reinforced by organisational routines and decision-making structures. Procurement practices often rely on established supplier relationships and familiar operational systems, creating inertia that slows the adoption of alternative solutions.

Moreover, sustainability commitments are frequently communicated at the **brand or marketing level**, while procurement decisions are made within operational or financial frameworks. This separation between sustainability messaging and operational decision-making can contribute to inconsistencies between stated values and actual purchasing behaviour.

Consequently, the persistence of the intention–behaviour gap reflects not only individual attitudes but also **organisational structures and behavioural decision-making patterns** embedded within business operations.

### 7.4 Micro-Level Behavioural Frictions and Macro-Level Sustainability Outcomes

The behavioural frictions identified in this study have broader implications for sustainability transitions within the hospitality sector. While individual restaurants make procurement decisions based on immediate operational considerations, the aggregate effect of these decisions influences the pace at which environmentally sustainable alternatives diffuse across the industry.

Micro-level factors such as cost perceptions, risk aversion, supplier inertia, and operational constraints can collectively slow the adoption of compostable packaging solutions. When

these behavioural frictions are repeated across numerous businesses, they create structural barriers to large-scale sustainability transitions.

This finding suggests that achieving meaningful progress in reducing packaging waste requires interventions that address not only technological feasibility and regulatory frameworks but also the behavioural dynamics influencing organisational decision-making.

Policies and industry initiatives designed to encourage sustainable packaging adoption may therefore need to incorporate behavioural insights, such as reducing perceived operational risks, reframing cost structures, or leveraging social norms within industry networks.

Understanding how behavioural frictions operate within everyday business decisions can help policymakers, suppliers, and industry stakeholders design more effective strategies to accelerate the transition toward environmentally sustainable packaging systems.

# 8. Implications

## 8.1 Managerial Implications

The findings offer several implications for both **sustainable packaging suppliers and hospitality businesses** seeking to accelerate the adoption of environmentally sustainable packaging solutions.

For suppliers, the results suggest that adoption barriers are not limited to price differentials but are strongly influenced by **perceived operational risks and uncertainty regarding product performance**. Suppliers may therefore benefit from focusing not only on cost competitiveness but also on **reducing perceived risk through product testing, demonstrations, and performance guarantees**. Providing trial periods, sample packaging, or pilot collaborations with restaurants may help decision-makers gain confidence in compostable alternatives.

Suppliers can also incorporate **behaviourally informed marketing strategies**, such as framing compostable packaging in terms of operational reliability and long-term cost efficiency rather than purely environmental benefits. Since restaurant decision-makers often prioritise immediate operational outcomes, sustainability communication that emphasises **practical benefits and risk mitigation** may be more effective.

For hospitality businesses, the findings highlight the importance of integrating sustainability considerations into **core operational decision-making processes rather than treating them as discretionary expenditures**. Restaurants seeking to align sustainability commitments with operational practices may benefit from adopting structured procurement frameworks that evaluate environmental impacts alongside cost and service performance.

Additionally, restaurants can leverage sustainable packaging as part of their **brand differentiation strategies**, particularly in urban markets where environmentally conscious consumers are increasingly attentive to visible sustainability practices. By aligning sustainability initiatives with brand positioning and customer communication, restaurants may strengthen both environmental impact and market competitiveness.

## 8.2 Policy Implications

The findings also highlight important implications for policymakers and regulators seeking to encourage sustainable packaging adoption in the hospitality sector.

Traditional policy approaches often assume that businesses will adopt environmentally sustainable alternatives when they become economically competitive. However, the behavioural frictions identified in this study suggest that **cost incentives alone may be insufficient to drive widespread adoption**.

Policymakers may therefore consider incorporating **behaviourally informed policy instruments**, such as nudges and choice architecture interventions, into regulatory frameworks. For example, policies could encourage suppliers to make compostable

packaging the **default option in procurement catalogues**, thereby reducing the cognitive effort required for restaurants to switch from conventional alternatives.

Regulatory frameworks that gradually phase out certain forms of single-use plastics can also shift industry norms, making sustainable alternatives the expected standard rather than an optional upgrade. Complementary measures such as **subsidies for sustainable packaging suppliers, certification systems, or public procurement standards** may further accelerate adoption.

Importantly, policy design should recognise the **operational realities of small and medium-sized hospitality businesses**, ensuring that sustainability regulations are accompanied by practical guidance and accessible alternatives.

### 8.3 Implications for Green Economy Transitions

Beyond the hospitality sector, the findings contribute to broader discussions on the challenges associated with **green economy transitions**. Sustainability transitions require not only technological innovations and regulatory frameworks but also widespread behavioural change across organisations and supply chains.

The study demonstrates how **micro-level behavioural frictions within everyday business decisions can influence macro-level sustainability outcomes**. When many businesses independently prioritise short-term operational stability over environmental considerations, the collective result can be slow diffusion of sustainable technologies and practices.

Understanding these behavioural dynamics is therefore essential for designing effective sustainability interventions. Efforts to accelerate green economy transitions must address not only economic and technological barriers but also the **decision-making processes and organisational routines that shape business behaviour**.

By integrating insights from behavioural economics with empirical evidence from industry actors, this research highlights the importance of developing sustainability strategies that account for how organisations actually make decisions in practice.

Such approaches can help bridge the gap between **environmental intention and real-world implementation**, ultimately supporting more effective transitions toward environmentally sustainable production and consumption systems.

# 9. Limitations and Future Research

## 9.1 Methodological Limitations

While this study provides valuable insights into the behavioural and organisational dynamics shaping the adoption of compostable packaging in the hospitality sector, several methodological limitations should be acknowledged. First, the research relies on a qualitative exploratory design based on semi-structured interviews with suppliers and restaurants. Although qualitative methods are well suited for exploring complex decision-making processes and identifying behavioural patterns, the findings are not intended to provide statistically generalisable conclusions. Instead, they offer analytical insights into the mechanisms influencing sustainable procurement decisions within the contexts studied.

Second, a portion of the insights regarding buyer behaviour is derived from supplier perspectives. Suppliers interact with a wide range of restaurant clients and therefore provide a useful observational vantage point; however, their accounts may reflect interpretations of buyer motivations rather than the buyers' own articulated reasoning. While the inclusion of restaurant interviews helps triangulate these perspectives, the findings should still be interpreted as exploratory representations of observed patterns rather than definitive explanations of all procurement decisions.

Third, qualitative thematic analysis involves interpretive judgement in the coding and development of themes. Although the analysis followed a systematic thematic approach and was grounded in behavioural economics concepts, alternative interpretations of the data may be possible. As with most qualitative research, the findings should therefore be understood as analytically informed interpretations rather than objective measurements of behavioural phenomena.

## 9.2 Contextual Limitations

The study is also subject to contextual limitations related to the specific industry and market environment examined. The research focuses on the adoption of compostable packaging within the hospitality and food service sector. While this sector represents an important source of single-use packaging waste and provides a relevant setting for examining sustainable procurement decisions, the findings may not be directly transferable to other industries where sustainability adoption dynamics differ.

In addition, the study examines adoption behaviour within a particular regulatory and market context. Factors such as government regulations, waste management infrastructure, availability of composting facilities, and consumer awareness can vary significantly across regions. These contextual differences may influence how businesses evaluate compostable packaging alternatives and therefore limit the generalisability of the findings to other geographic or institutional settings.

Finally, the research focuses specifically on packaging procurement decisions. Sustainability transitions within businesses often involve multiple operational domains, including energy use, supply chain management, and waste reduction strategies. Consequently, the behavioural

mechanisms identified in this study may represent only one dimension of broader organisational sustainability decision-making processes.

### **9.3 Directions for Future Research**

The findings of this study suggest several avenues for future research. First, future studies could build on the qualitative insights presented here by employing quantitative methods to test the behavioural mechanisms identified in this research. Large-scale surveys or experimental studies could examine how behavioural biases such as loss aversion, status quo bias, and price anchoring influence sustainable procurement decisions across different organisational contexts.

Second, future research could explore the role of policy interventions and choice architecture in encouraging the adoption of sustainable packaging. Behaviourally informed policy tools such as default options, financial incentives, or simplified certification systems may help reduce the behavioural and organisational frictions identified in this study.

Third, additional research could examine how organisational culture and leadership influence sustainability adoption within hospitality businesses. Understanding how sustainability values are integrated into operational decision-making processes may provide further insight into how the intention–behaviour gap can be reduced at the organisational level.

Finally, comparative studies across different industries or geographic contexts could help determine whether the behavioural dynamics observed in this research are unique to the hospitality sector or represent broader patterns in sustainable procurement behaviour. Such studies would contribute to a more comprehensive understanding of how behavioural factors influence the transition toward a green economy.

## 10. Conclusion

This study examined the behavioural and organisational factors influencing the adoption of compostable packaging within the hospitality sector. Although restaurants and hotels increasingly express support for environmentally responsible practices, the findings highlight a persistent gap between sustainability intentions and actual procurement behaviour.

Insights from supplier interviews indicate that packaging decisions are primarily shaped by immediate operational considerations rather than long-term environmental benefits. Cost comparisons, concerns about product performance, and established procurement routines strongly influence how businesses evaluate compostable packaging alternatives. Even when decision-makers recognise the environmental advantages of sustainable materials, these practical constraints often lead them to continue using conventional packaging solutions.

The analysis also demonstrates that behavioural factors play a significant role in shaping procurement decisions. Status quo bias encourages organisations to maintain existing supplier relationships and familiar purchasing routines, while loss aversion increases sensitivity to potential operational risks associated with new materials. In addition, reference dependence and price anchoring reinforce perceptions that compostable packaging is comparatively expensive when evaluated against the long-standing benchmark of plastic packaging.

Organisational structures further contribute to the persistence of conventional practices. Procurement procedures, the involvement of multiple stakeholders, and long-term supplier relationships can slow the evaluation and adoption of alternative packaging solutions. As a result, sustainability initiatives are often implemented selectively or in response to external triggers such as regulatory pressures, brand positioning strategies, or customer expectations.

Overall, the findings suggest that the limited adoption of compostable packaging cannot be explained solely by lack of awareness or supply availability. Instead, adoption behaviour reflects the interaction of behavioural biases, organisational routines, and market expectations that collectively reinforce existing packaging practices. By highlighting these dynamics, the study contributes to a deeper understanding of the mechanisms underlying the intention–behaviour gap in sustainable procurement decisions within the hospitality sector.

# References

- Acquaye, A. (2025). Operational research for sustainability: a synthesis of methods, applications and challenges. *Journal of the Operational Research Society*, 77, 1–35. <https://doi.org/10.1080/01605682.2025.2523362>
- Akram, U., Rambabu Lavuri, Bilal, M., Hameed, I., & Byun, J. (2024). Exploring the roles of green marketing tools and green motives on green purchase intention in sustainable tourism destinations: a cross-cultural study. *Journal of Travel & Tourism Marketing*, 41, 453–471. <https://doi.org/10.1080/10548408.2023.2293022>
- Borges-Tiago, M. T., Almeida, A., Gomes, F., & Moreira, M. (2024). Bridging the innovative Attitude–Behavior gap: A dual-level analysis. *Journal of Innovation & Knowledge*, 9, 100561–100561. <https://doi.org/10.1016/j.jik.2024.100561>
- Chen, K., Mei, J., & Sun, W. (2025). The impact of egoistic motivations on green purchasing behavior: The mediating roles of symbolic and functional benefits in china. *Sustainability*, 17, 5180–5180. <https://doi.org/10.3390/su17115180>
- Chi, C. G., Chi, O. H., Xu, X., & Kennedy, I. (2022). Narrowing the intention-behavior gap: The impact of hotel green certification. *International Journal of Hospitality Management*, 107, 103305. <https://doi.org/10.1016/j.ijhm.2022.103305>
- Cinti, A., Amadei, A., Polinori, P., & Bigerna, S. (2025). Sustainability compliance in business networks: Behavioural economics and policy design insights. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.5331518>
- Daria, M., MCL, B., Bläsing TM, Sandro, & Helfers, A. (2024). Effectiveness and context dependency of social norm interventions: five field experiments on nudging pro-environmental and pro-social behavior. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1392296>
- Duarte, P., Ribeiro, M. I., Silva, S. C., Pinhal, R., & Estima, A. (2025). A company-based view on sustainable packaging orientation. *Sustainability*, 17, 6890. <https://doi.org/10.3390/su17156890>
- Ezeh, P. C., & Dube, K. (2025). Trends and development in green and sustainability marketing: a bibliometrics analysis using VOSviewer. *Discover Sustainability*, 6. <https://doi.org/10.1007/s43621-025-01159-z>
- Fasolo, B., Heard, C., & Scopelliti, I. (2024). Mitigating cognitive bias to improve organizational decisions: An integrative review, framework, and research agenda. *Journal of Management*, 51. <https://doi.org/10.1177/01492063241287188>
- Fernanda, P., Emanuel, Alves, A., & Luís Marangoni Júnior. (2025). Perspectives on eco-friendly food packaging: Challenges, solutions, and trends. *Foods*, 14, 3062–3062. <https://doi.org/10.3390/foods14173062>
- Godefroid, M., Gan, Y., Gerrit Hüls, Ralf Plattfaut, & Björn Niehaves. (2024). Addressing status quo bias to turn a failing decision system introduction around: the case of DB Schenker. *Journal of Decision System*, 1–30. <https://doi.org/10.1080/12460125.2024.2410515>
- Hans), Paradies, G. L., & Josephine. (2023). Cognitive bias and how to improve sustainable decision making. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1129835>
- Herbes, C., Mielsing, E., Krauter, V., Arranz, E., María, R., Marcos, B., Poças, F., Ruiz, S., & Weinrich, R. (2024). Company views of consumers regarding sustainable packaging. *Sustainable Production and Consumption*, 52. <https://doi.org/10.1016/j.spc.2024.10.018>

- Johnsen,. (2016). Inertia processes and status quo bias in promoting green change. *Human Affairs*, 26. <https://doi.org/10.1515/humaff-2016-0034>
- Kamara, T., & Dunbar, S. E. (2025). Personality traits as predictors of loss aversion and status quo bias in public procurement professionals. *International Journal of Public Policy and Administration*, 7, 42–67. <https://doi.org/10.47941/ijppa.2616>
- Khalufi, A. M. (2025). Digital nudges and environmental concern in shaping sustainable consumer behavior aligned with SDGs 12 and 13. *Sustainability*, 17, 11292–11292. <https://doi.org/10.3390/su172411292>
- Khan, O. (2023). The uptake of recycled plastic in manufacturing companies: A moral responsibility or worthwhile business strategy? *Recycling*, 8, 9. <https://doi.org/10.3390/recycling8010009>
- Li, B., Lazell, J., Beltran, M., Grażyna Kędzia, Lima, L. R., Soma, T., Cruz, S. A., Gutierrez, R. F., Turek, J., Raźniewska, M., Aneta Pluta-Zaremba, & Tjahjono, B. (2024). Competing narratives inhibit a circular economy for bio-based plastic packaging: Insights from a social innovation lab study in Brazil, Canada, Poland and the UK. *Business Strategy and the Environment*, 34-1. <https://doi.org/10.1002/bse.3997>
- Mertens, S., Herberz, M., Hahnel, & Brosch, T. (2021). The effectiveness of nudging: A meta-analysis of choice architecture interventions across behavioral domains. *Proceedings of the National Academy of Sciences*, 119. <https://doi.org/10.1073/pnas.2107346118>
- Modgil, S., Singh, R. K., Mathiyazhagan, K., & Żywiołek, J. (2025). Role of generative AI towards sustainable procurement. *The International Journal of Logistics Management*, 37, 1–24. <https://doi.org/10.1108/ijlm-01-2025-0062>
- Nath, V., & Agrawal, R. (2022). Barriers to consumer adoption of sustainable products – an empirical analysis. *Social Responsibility Journal*, 19.
- Pålsson, H., & Sandberg, E. (2022). Adoption barriers for sustainable packaging practices: a comparative study of food supply chains in south africa and sweden. *Journal of Cleaner Production*, 374, 133811. <https://doi.org/10.1016/j.jclepro.2022.133811>
- Shiva. (2025). *Individual-level consumption reduction for the benefit of the environment: Typology, cognitive biases, and individual differences - ProQuest*. Proquest.com. <https://www.proquest.com/openview/c78adc8fdb086f56b93ee68c62e0115f/1?pq-origsite=gscholar&cbl=2026366&diss=y>
- Siamak Seyfi, Sayed Elhoushy, Salar Kuhzady, Tan Vo-Thanh, & Zaman, M. (2025). Bridging the green marketing communication gap: Assessing image coherence in green hotels. *International Journal of Tourism Research*, 27. <https://doi.org/10.1002/jtr.70027>
- Tenhunen-Lunkka, A., Lekkas, A. B., Erwan Mouazan, Sarianna Palola, Ngo, T., Salo, M., Eveliina Hylkilä, Henna Sundqvist, Harri Luomala, Kyösti Pennanen, Sorvari, K., Päivi Petänen, & Lahtinen, J. H. (2024). Implementing a circular business model for reusable packaging: Multidisciplinary learnings from a reusable pizza packaging. *Sustainable Production and Consumption*, 48, 62–83. <https://doi.org/10.1016/j.spc.2024.05.006>
- Thaler, R. H. (1999). Mental accounting matters. *Journal of Behavioral Decision Making*, 12, 183–206. [https://doi.org/10.1002/\(SICI\)1099-0771\(199909\)12:3%3C183::AID-BDM318%3E3.0.CO;2-F](https://doi.org/10.1002/(SICI)1099-0771(199909)12:3%3C183::AID-BDM318%3E3.0.CO;2-F)
- Weinrich, R., Mielinger, E., Krauter, V., Arranz, E., Maria, R., Marcos, B., Maria, Ruíz, S., & Herbes, C. (2024). Decision-making processes on sustainable packaging options in the European food sector. *Journal of Cleaner Production*, 434, 139918–139918. <https://doi.org/10.1016/j.jclepro.2023.139918>

- Yiwei, Z. C., & Sussman, A. B. (2018). Perspectives on mental accounting: An exploration of budgeting and investing. *Financial Planning Review, 1*, e1011. <https://doi.org/10.1002/cfp2.1011>
- Zaikuskaitė, L., Grzybek, A., Mumford, R. E., & Dimitrios Tsivrikos. (2023). The Theory of Planned Behaviour doesn't reveal 'attitude-behaviour' gap? Contrasting the effects of moral norms vs. idealism and relativism in predicting pro-environmental behaviours. *PLOS ONE, 18*, e0290818–e0290818. <https://doi.org/10.1371/journal.pone.0290818>

# Appendix

## Appendix A: Supplier Interview Guide

### SUPPLIER INTERVIEW GUIDE

#### Section A: Context

1. Briefly describe your company and your experience supplying compostable packaging to restaurants or hotels.
2. Over the past few years, have you observed increased interest in compostable packaging? Has that translated into actual orders?

#### Section B: Intention–Behaviour Gap

3. How often do restaurants or hotels express interest in sustainable packaging but delay or avoid switching?
4. What are the most common reasons they give for not adopting or postponing the decision?
5. Have you seen cases where buyers initially agreed but later reverted to conventional packaging? Why?

#### Section C: Status Quo Bias & Organisational Inertia

6. How difficult is it for buyers to switch from their current packaging supplier? What typically slows down the decision?
7. Who is usually involved in the final decision — procurement, finance, operations, or senior management?
8. In your experience, is resistance more due to internal processes, cost concerns, or simply reluctance to change existing systems?

#### Section D: Loss Aversion & Risk Perception

9. What operational risks do buyers most frequently worry about (e.g., leakage, durability, customer complaints)?
10. Do buyers appear more focused on potential risks and short-term costs than on long-term environmental or reputational benefits?
11. How sensitive are they to small price differences compared to conventional packaging?

#### Section E: Mental Accounting & Social Norms

12. Do buyers typically treat compostable packaging as a necessary operational cost, a branding investment, or an avoidable additional expense?
13. How much influence do customer expectations, competitor behaviour, or regulatory pressure have on adoption decisions?
14. In your view, what is the single biggest behavioural barrier preventing wider adoption?

## Appendix B: Restaurant Interview Guide

### Restaurants Interview Guide

*We're conducting an academic study on how restaurants make decisions about sustainable packaging, especially compostable options, in metropolitan cities in India. We're interested in understanding your experience and decision process.*

#### Background and Context

1. Can you briefly describe your restaurant?

- Type of cuisine
  - Approximate size (seating/takeaway/delivery focused)
  - Years in operation
2. What types of packaging do you currently use for takeaway or delivery?
  3. When did you start using compostable packaging?
  4. What initially led you to consider compostable alternatives?

### **Decision-Making Process (Organisational Structure)**

5. Who was involved in the decision to switch to compostable packaging? Was it an easy decision, or did it take time?
6. Were there internal disagreements? (Depends if it is a sole proprietor or a partnership)
7. Was it trial-based before full adoption?
8. Did the decision require formal approval or budget adjustment?

### **Evaluation and Consideration Stage**

9. Before switching, what were your main concerns about compostable packaging?  
[Concerns about leakage, durability, storage?]
10. Did you compare it with conventional plastic packaging? In what ways?
11. Were there any perceived risks at that stage?
  - Customer complaints?
  - Cost fluctuations?
  - Supply reliability?

### **Cost and Budget Perception (Mental Accounting)**

How did you evaluate the cost difference between conventional and compostable packaging?  
Was cost the biggest deciding factor, or one of many factors?

### **Section 5: Switching and Adjustment Phase**

How difficult was it to move away from your previous packaging supplier?  
Looking back, was there any hesitation before making the final decision?  
If you had to switch back to conventional packaging tomorrow, how easy would that be?

### **Customer Perception and Social Norms**

Do customers notice that you use compostable packaging?  
Have customers ever commented on it?  
Do you believe customers expect restaurants to use sustainable packaging today?  
Would you have made this switch if customers were completely indifferent?

## Reflection and Intention–Behaviour Gap

Before switching, did you already consider your restaurant environmentally responsible?

What would make other restaurants hesitant to adopt compostable packaging?

What would make adoption easier for businesses like yours?

If a new restaurant owner asked you for advice about switching to compostable packaging, what would you tell them?

*Before we close, we would like to ask whether you prefer to remain anonymous in our research paper, or if you are comfortable with us mentioning your restaurant's name. It is completely your choice, and we will respect whatever you decide.*

## Appendix C: Supplier Sampling Matrix

ID	Supplier Type	Years in Compostables	Geographic Coverage	Primary Client Segment	Pricing Position	Decision Context Exposure	Estimated Annual B2B Volume	Market Maturity Context
S1	Large national manufacturer	10+ yrs	Pan-India (Metro focus)	Premium hotel chains	Premium	Formal procurement committee	High (>₹5 Cr)	High regulatory exposure
S2	Large distributor-importer	8+ yrs	8–10 states	QSR chains	Competitive	Centralised procurement teams	High	Mixed regulatory
S3	Integrated manufacturer + private lab	12+ yrs	National	Institutional caterers	Mid-premium	Multi-level decision chain	High	Compliance-driven
S4	Export-oriented manufacturer	9+ yrs	National + Export	Hospitality groups	Premium	Risk-sensitive procurement	High	International compliance norms
S5	Regional manufacturer	6 yrs	Single state	Mid-scale restaurants	Mid-range	Owner + finance approval	Medium	Moderate enforcement
S6	Regional distributor	5 yrs	2 states	Cloud kitchens	Competitive	Fast-cycle procurement	Medium	Low–moderate enforcement
S7	Boutique-focused supplier	4 yrs	Metro city	Cafés & boutique hotels	Premium	Brand-driven decisions	Medium	High normative pressure
S8	Price-focused regional supplier	7 yrs	Single state	Local QSR outlets	Low-cost	Price-sensitive owner decisions	Medium	Low regulatory
S9	Former plastic supplier (transitioned)	3 yrs	3 states	SME restaurants	Competitive	Legacy supplier switching	Medium	Low–moderate enforcement
S10	Sustainability-first eco-brand	5 yrs	Pan-India urban	Sustainability-focused brands	Premium	Marketing + ESG alignment	Medium	High normative pressure
S11	Startup (circular model)	2–4 yrs	Metro + Tier 1	Hotels with ESG targets	Premium	Cross-functional ESG teams	Low–Medium	High regulatory awareness
S12	Tech-enabled supplier (LCA data)	6 yrs	National	Certified green hotels	Premium	Data-driven procurement	Medium	High compliance
S13	Local wholesaler (hybrid stock)	2 yrs	Tier-2 cities	Small eateries	Low-cost	Informal owner decisions	Low	Weak enforcement
S14	Tier-2/Tier-3 distributor	5 yrs	Tier-2 & Tier-3	Regional restaurants	Competitive	Cost-dominant decision	Low–Medium	Low regulatory
S15	Hybrid plastic + compostable supplier	8 yrs	Multi-state	Mixed hospitality	Tiered pricing	Direct product comparison	Medium	Mixed enforcement

## Appendix D: Restaurant Sample Description

ID	Restaurant Type	Years in Operation	Geographic Footprint	Primary Customer Segment	Pricing Position	Decision Context	Estimated Order Volume	Sustainability Exposure Context
R1	Legacy South Indian chain	15+ yrs	Multi-outlet city chain	Families + mass breakfast crowd	Mid-range	Centralised management + operations	Very High	Low customer sustainability pressure
R2	Casual Italian vegetarian chain	10+ yrs	Multi-city brand	Families + mall dining	Mid-premium	Corporate + franchise input	High	Moderate awareness but cost sensitive
R3	Contemporary regional Indian restaurant	7+ yrs	Single flagship	Urban food enthusiasts	Premium	Chef + ownership decision	Medium	High sustainability narrative
R4	Farm-to-table concept restaurant	6+ yrs	Multi-location metro	Conscious urban diners	Premium	Founder-driven sustainability decisions	Medium	Strong brand alignment with sustainability
R5	Health-focused café concept	5+ yrs	Metro urban neighbourhoods	Fitness-conscious professionals	Mid-premium	Brand + operations	Medium	High consumer sustainability awareness
R6	Zero-waste themed café	3–5 yrs	Single outlet urban	Sustainability-driven consumers	Premium	Founder-led values-based decisions	Low–Medium	Very high sustainability expectation
R7	Chef-led coastal cuisine restaurant	5+ yrs	Single metro location	Experience-driven diners	Premium	Culinary leadership + brand team	Medium	High normative sustainability pressure
R8	Heritage café brand	30+ yrs	Multi-location city icon	Mixed: families + students	Mid-range	Legacy management + operational pragmatism	Very High	Low sustainability pressure
R9	Urban lifestyle café	3–5 yrs	Single neighbourhood café	Young professionals	Mid-range	Owner-managed operations	Medium	Moderate awareness
R10	Conscious lifestyle café brand	4–6 yrs	Multi-city urban	Health-conscious urban consumers	Premium	Sustainability integrated into brand strategy	Medium	High sustainability expectation
R11	High-volume South Indian quick service	15+ yrs	Multi-outlet city chain	Mass market diners	Low–Mid	Owner + operations	Very High	Low regulatory enforcement
R12	Boutique urban café	4 yrs	Single metro location	Young urban audience	Mid-range	Owner + brand-led decisions	Medium	Moderate sustainability expectations

# Appendix E: Coding Framework

## Restaurant

Open Code	Cost Sensitivity	Customer Environmental Awareness	Delivery Dependency	Heat & Moisture Limitation	Hybrid Adoption Strategy	Ideological Commitment	Infrastructure Gap	Leakage Risk	Operational Practicality Priority	Reputational Risk	Storage Constraints	Supplier Reliability Risk
Restaurant												
Restaurant_1	0	1	0	0	0	3	0	0	3	0	0	3
Restaurant_10	2	2	1	0	0	0	0	0	8	0	1	0
Restaurant_11	0	1	0	0	1	0	0	0	10	0	1	1
Restaurant_12	2	0	0	1	0	0	0	0	10	0	0	2
Restaurant_2	6	1	1	1	1	0	0	0	2	0	1	0
Restaurant_3	1	2	0	0	0	0	1	0	9	0	0	1
Restaurant_4	0	0	0	1	0	0	0	0	13	0	1	0
Restaurant_5	0	2	0	0	0	0	1	0	8	1	1	0
Restaurant_6	0	0	0	0	1	0	0	0	11	0	0	0
Restaurant_7	0	0	0	1	0	0	0	0	9	0	0	2
Restaurant_8	1	1	1	1	1	0	0	0	6	0	1	1
Restaurant_9	0	0	1	0	0	0	0	2	10	1	0	0

## Suppliers

Open Code	Brand Positioning Motivation	Contract Lock-In	Cost Competitiveness	Demand Growth Optimism	Intention-Purchase Gap	Market Education Gap	Operational Risk Concerns	Pilot Without Purchase	Procurement Dominance	Supplier Switching Friction	Supply Continuity Expectations
Supplier											
Supplier_1	1	0	0	0	0	10	0	1	2	1	0
Supplier_10	8	0	2	0	1	4	0	0	0	0	0
Supplier_11	0	0	0	0	1	14	0	0	0	0	0
Supplier_12	0	0	0	0	0	15	0	0	0	0	0
Supplier_13	0	0	2	1	0	10	0	0	0	0	2
Supplier_14	0	0	1	0	0	13	0	0	0	0	1
Supplier_15	0	0	5	0	0	10	0	0	0	0	0
Supplier_2	1	0	4	0	0	9	1	0	0	0	0
Supplier_3	0	2	1	0	0	11	0	0	1	0	0
Supplier_4	1	1	1	0	0	12	0	0	0	0	0
Supplier_5	0	0	2	0	0	12	0	0	0	0	1
Supplier_6	0	0	1	0	0	10	0	0	0	0	4
Supplier_7	4	0	1	0	0	8	0	0	0	1	1
Supplier_8	0	1	3	0	0	11	0	0	0	0	0
Supplier_9	0	0	0	0	0	14	0	0	0	0	1