



THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE ■

The Better Bali Programme, Addressing Overtourism in Bali

Florence Wright, Nhi Pham Yen, Jiayu Zheng, Rishika Aggarwal

London School of Economics and Political Sciences

PB403 Societal and Environmental Psychology

Group 6

Word Count: 5013

Table of Contents

<i>Background</i>	4
<i>Introduction</i>	5
<i>Integrated Stakeholder Relationship Analysis</i>	6
<i>Application of Theoretical Concepts</i>	8
<i>Solution Proposal</i>	14
<i>Discussion</i>	18
<i>Limitations</i>	19
<i>References</i>	20
<i>Appendix</i>	26

Background

Overtourism has become an increasing concern in many popular destinations worldwide. It does not simply refer to large numbers of visitors, but to situations where tourism activities and behaviour exceed what local systems can support. This puts pressure on infrastructure, natural resources, local communities, and cultural institutions leading to environmental damage, social tension, and declining experiences for both residents and visitors (UNWTO, 2018). Importantly, overtourism is distinct from mass tourism. Chaney (2023) argues that overtourism occurs when pressure from the tourism industry becomes socially or environmentally unacceptable, even if tourism has long been part of the economy. Therefore, overtourism is a system-level issue shaped not just by tourist numbers but also by local systems, governance and corporations.

In Bali overtourism is a growing issue, with approximately 6.3 million foreign visitors in 2025 often concentrated in a small number of well-known areas, such as Ubud, Kuta, and Canggu (BPSPD, 2025; Pramuja, 2024). These locations are widely acknowledged to be experiencing particularly intense crowding, reinforced by social media channelling tourist flows to “must-see” destinations (Song, 2023). In Bali, places such as Ubud and Kuta are frequently labelled as “Instagram hotspots”, reflecting how digital platforms reinforce spatial concentration (The Jakarta Post, 2025). This concentration places pressure on infrastructure and public space, leading to traffic congestion, noise pollution, long waiting times reducing comfort for both tourists and residents (Suyadnya et al., 2025). Such problems arise when tourism growth outpaces infrastructure development, especially in island destinations with limited land and road capacity (Brajcich, 2024). Tourism development has also contributed to rising land prices and rental costs, particularly in high-demand zones, making housing less affordable for local residents and contributing to gentrification (Reuters, 2024).

Another key issue related to overtourism in Bali is the waste and plastic pollution generated by tourists, especially during peak tourist seasons (Diah, 2025). This has resulted in high levels of plastic pollution in Bali’s marine and conservation areas, requiring frequent beach clear ups (Hendrawan et al., 2023). Finally, overtourism also reduces tourist satisfaction. Empirical research shows that overcrowding lowers perceived authenticity and overall experience quality (Yu et al., 2020).

Together, these issues suggest that overtourism in Bali is a systemic issue which impacts local communities, the environment and tourists themselves.

Introduction

Bali's popularity as a tourism destination is driven by a combination of low-cost flights, visa-free entry, and a myriad of factors that continue to welcome millions to the 'Island of the Gods' (Maya Poetra & Nurjaya, 2014; Pandit, 2025). However, it is exactly because of these conditions of accessibility and growth that Bali has a tourism dilemma. Rather than visitor numbers alone, the problem lies in how tourism has been organised, promoted, and normalised, generating pressures that exceed the island's environmental, social, and cultural capacity (Bertocchi & Visentin, 2019). This shift marks a transition from tourism as an economic opportunity to overtourism as a systemic challenge.

The causes of overtourism are multifaceted and complex, involving interactions among tourist behaviour, government agents and agendas, investors' drive for profit, and local communities operating within constrained tourism-dependent economies. Despite the Indonesian government's efforts to curb the negative extraneities of this phenomenon through taxes and awareness campaigns, durable behavioural and structural change remains limited. To address this gap, this paper uses a systems-behavioural approach that primarily draws on Installation Theory and Activity Theory (Lahlou, 2017), along with Social Identity Theory (Tajfel & Turner, 1979) and Meadows' (1999) Leverage Points. Here, tourist behaviour is analysed as channelled through an interaction among physical affordances, embodied competences, and social regulation. These installations not only shape tourist behaviours but also reinforce unsustainable norms and mindsets, making extractive and convenience-driven practices the default outcome of the tourism system.

This paper examines how Bali's tourism system has conventionally produced overtourism through concentration in hotspots, resource strain and norm misalignment. Next, key stakeholders are analysed, along with the justification of tourists as the primary stakeholders. Furthermore, theoretical frameworks and methodological approaches guide the analysis of the problem, demonstrating why arrival is a deep leverage intervention window. Finally, it presents "The Better Bali Programme" as an intervention to encourage pro-environmental behaviour (PEB) amongst tourists through education and new social norms, alongside limitations and the broader implications.

Integrated Stakeholder Relationship Analysis

Stakeholder analysis is fundamental to understanding overtourism in Bali, as the phenomenon is an emergent result of interactions between multiple actors with interconnected but often conflicting interests. (Milano et al., 2019). In this context, tourism in Bali operates as a complex, integrated system of exchanges, a structure we will later define as a Socio-Economic Platform (SEP), in which the tourist sits at the centre, while governments, businesses, communities, and NGOs respond to their presence. The resulting pressures of overtourism emerge not merely from visitor volume but from how these actors, each driven by diverse motives, interact and create a system mismatch within this platform (Figure 1).

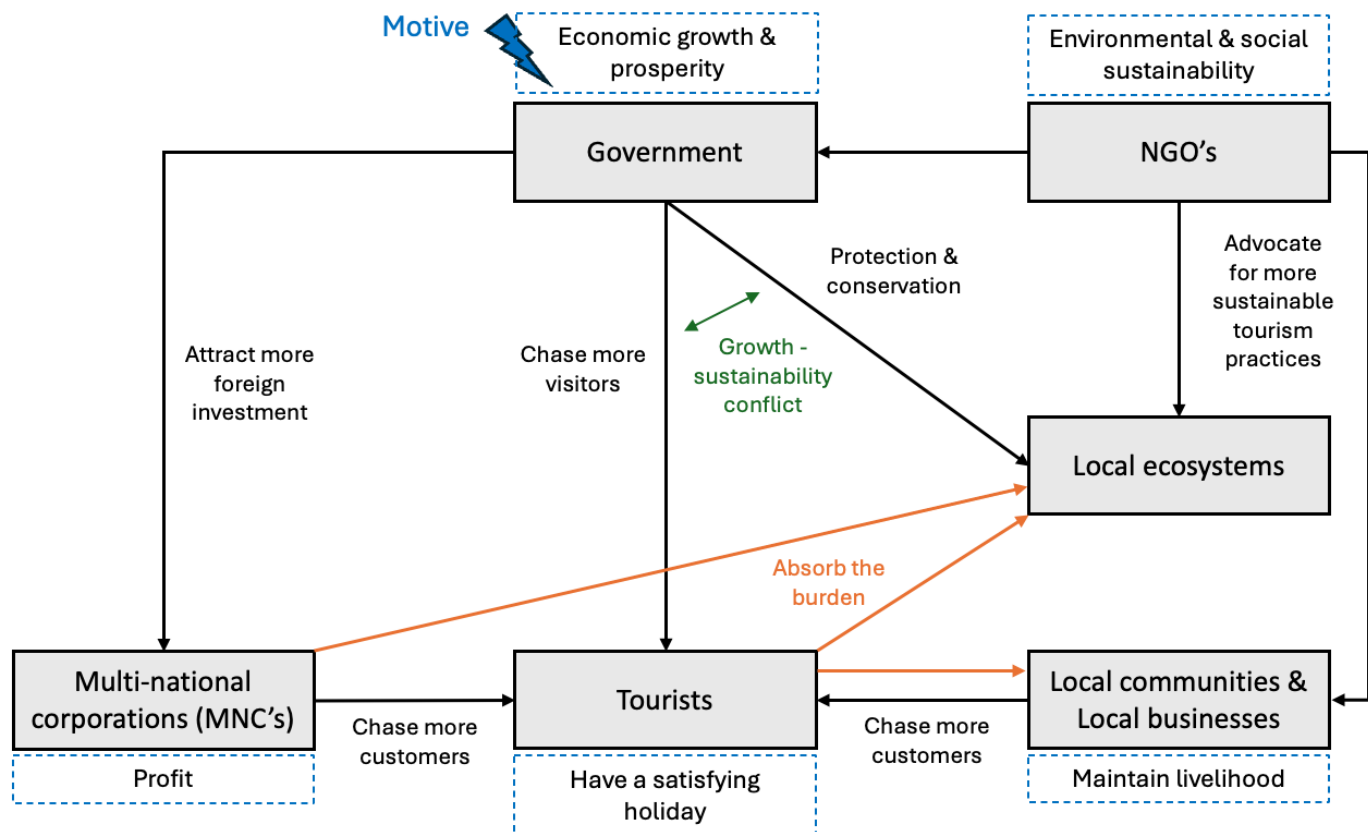


Figure 1: Stakeholder Map

Tourists play a central role in this system because their movement, consumption, and behaviour directly shape how other stakeholders act. Tourist demand determines where businesses invest, which areas receive infrastructure, and where environmental pressure becomes concentrated. Local communities and local businesses are strongly affected by this relationship. While many residents' livelihoods depend on the industry, they also experience the social and environmental

costs caused by tourist concentration (Mananda, 2025). For instance, tourism-driven water demand has increased sharply in Bali's main tourist areas, creating severe concerns regarding fair access (Yamamoto et al., 2021; Phan et al., 2021). Survey evidence further suggests that many residents believe tourism growth has exceeded the island's ecological capacity (Mananda, 2025, citing UNDP Bali Survey). This creates a structural tension: communities depend on tourists for income, yet their quality of life is reduced by the very same tourist flows.

This tension is reinforced by the relationship between tourists and businesses. Local businesses often prioritize convenience and popularity to meet demand, while large-scale developments and hotels intensify competition for land and water (Warren & Wardana, 2018). These corporate practices frequently externalize negative impacts, such as rising housing costs and resource scarcity, to the surrounding community (Wardana et al., 2018; Reuters, 2024). Because these businesses respond directly to tourist demand, tourist behaviour indirectly shapes corporate practices across the sector.

Governments are positioned between these competing interests. While tourism is economically vital to Bali, contributing an estimated 60–70% of the island's regional GDP, governments are also responsible for managing the negative impacts associated with overtourism. Policy measures such as the foreign tourist levy and formal conduct rules for visitors indicate that tourist behaviour has become a governance concern (LoveBali, 2024; Bali Governor Circular, 2025). However, enforcement remains uneven, and reporting suggests that only a fraction of visitors consistently comply with these measures (TIME, 2024). These policy efforts highlight the limits of top-down regulation in a system where behavioural change is not yet embedded.

Environmental NGOs interact with this system mainly by responding to the visible consequences of tourist consumption. Organisations such as Sungai Watch have removed over 1.6 million kilograms of non-organic waste from Bali's waterways, clearly demonstrating the scale of pollution linked to tourism (Sungai Watch; The Guardian, 2024). While NGOs play an important role in awareness-raising and clean-up efforts, their work also shows that reactive solutions cannot address the root causes of overtourism without broader changes in tourist behaviour and system design.

Across all these relationships, tourists remain the common link, connecting economic benefits, environmental pressure, governance challenges, and community impacts. Although tourists do not control the tourism system alone, their behaviour influences how other stakeholders act and adapt. This is why focusing on tourists is not about assigning blame, but about recognising them as a high-impact and high-flexibility stakeholder. By reshaping tourist behaviour through better guidance,

system design, and norm-setting at key moments of the journey, it becomes possible to ease pressure across the entire stakeholder network and support more sustainable outcomes for Bali.

Application of Theoretical Concepts

Theoretical background & methodological approach

The following analysis and intervention development is grounded in Activity Theory, Installation Theory (Lahlou, 2017), Meadow's (1999) leverage points framework, and Social Identity Theory by Tajfel & Turner's (1979). Together, these sociopsychological frameworks provide a robust lens for deconstructing and redesigning human behaviour in the context of overtourism in Bali.

Activity Theory understands human behaviour as a goal-directed activity, always shaped by internal motives and external context. This framework allows for the mapping of a subject's activity trajectory along a temporal axis, dissecting a journey into subgoals that can be achieved by performing tasks. To provide a more granular situational analysis, Installation Theory is applied at each step of this trajectory. It examines three fundamental determinants, or layers, that channel behaviour:

1. **Physical/Material Affordances:** The objects and environment that enable or constrain action.
2. **Embodied Competences:** The internal knowledge, skills, and habits of the subject.
3. **Social Institutions:** The rules, norms, and cultural expectations that govern what is considered acceptable behaviour.

Combined, these three layers form an 'installation', which functions as a resilient societal channelling system to guide behaviour. While installations are highly effective at channelling behaviour, many are not designed with sustainability in mind and can inadvertently reinforce unsustainable practices. Since behaviour is the emergent result of these three co-determining layers, they serve as the ideal targets for interventions. By strategically redesigning specific components of an installation, or establishing new ones based on the same principles, we can re-engineer the context of activities, shifting human behaviour toward more sustainable outcomes (Lahlou, 2024).

To address the challenge of overtourism in Bali, we have adopted a four-stage methodological approach focused on the tourist as the primary stakeholder:

1. **Journey mapping:** We map the tourist journey to delineate the subgoals and tasks required to satisfy their underlying motives for visiting Bali.

2. Situational analysis: For each point of action, we analyse the three layers of the installation to examine how the channelling takes place, which stakeholders are involved, and identify critical components that cause unsustainable outcomes.

3. Intervention point identification: Potential points for intervention are identified and evaluated by determining which layers (material, embodied, or institutional) are most influential at critical moments in the trajectory. Our approach prioritizes identifying deep leverage points where interventions yield the most systemic impact.

4. Holistic solution development: Finally, we develop a solution designed to modify the identified determinants through environmental design, training and education, or new regulations and norms.

Journey Mapping

For the activity analysis, the tourists' journey was divided into three phases: Pre-Arrival, Arrival and During Travel. The journey begins in the initial state of the tourist, where a desire arises to travel, driven by particular motives (Lahlou, 2024). To answer the question of what makes tourists travel, we draw on the widely adopted tourist motivation model by Dann (1977). According to his Push-Pull model, tourists are "pushed" to travel by internal, intrinsic motivators, such as the desire for escape, relaxation, adventure, rest, health, prestige, or social interaction, which represent the primary end goal. Simultaneously, they are "pulled" by the external attributes of a destination that appear to satisfy those motives (Crompton, 1979; Uysal & Jurowski, 1994).

As illustrated in Figure 2, the initial state begins with the urge to fulfil these push motives, which then triggers a series of subgoals. These include deciding on a destination, influenced by pull factors, booking travel, arriving and settling into Bali, and eventually embarking on activities. The goal of a "satisfied vacation" is achieved only when the tourist successfully navigates these subtasks by aligning them with the destination's pull factors, like choosing waterfall tours or yoga classes.

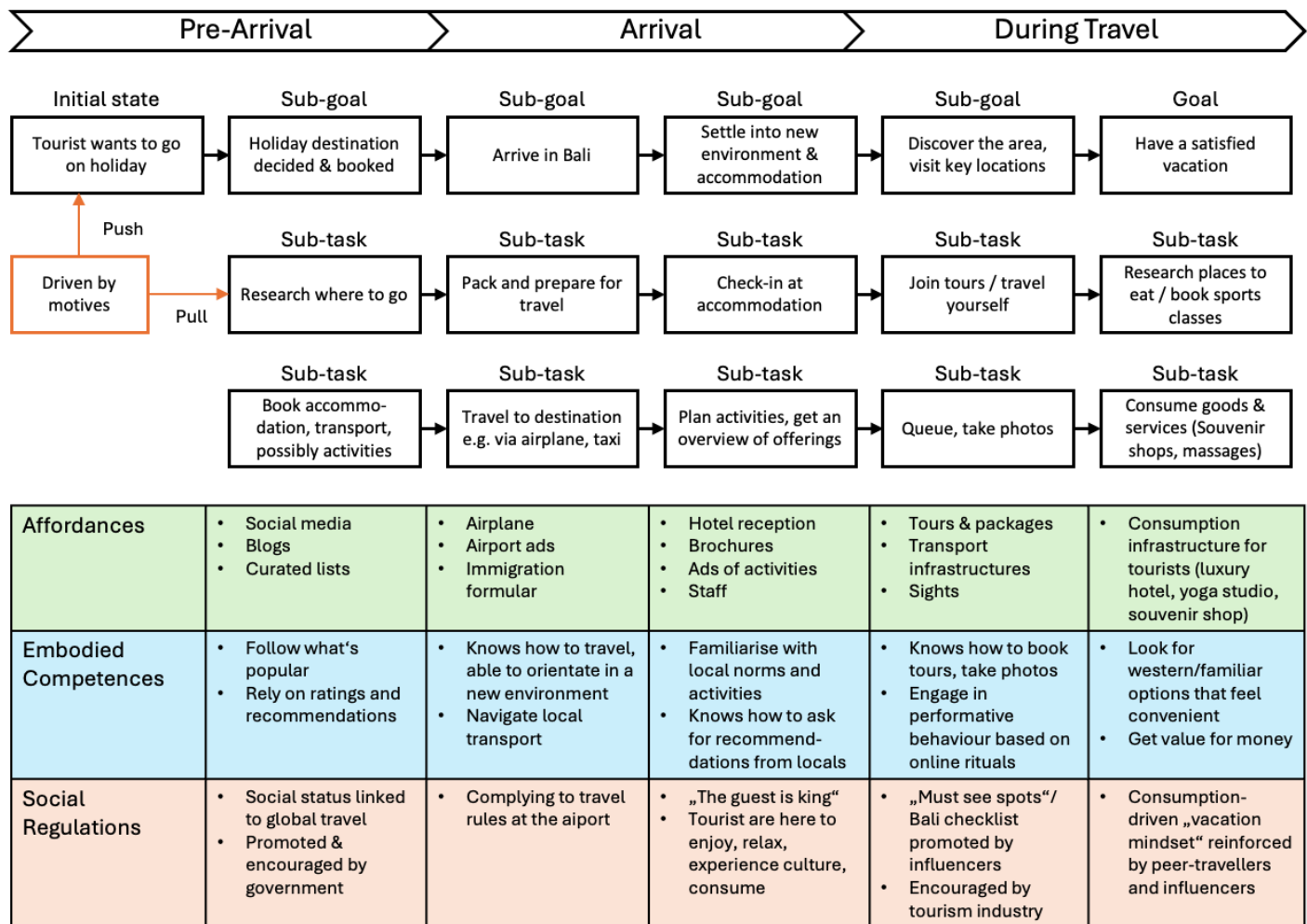


Figure 2: Tourist Journey

A key insight from the integration of the Push-Pull model with Activity Theory is that while a tourist's motives (the "Push") are often internal and fixed, the goals (the "Pull") they choose to satisfy those motives are flexible. According to Activity Theory, a motive is the underlying driver of an activity, but it does not dictate a single specific path. Rather, the specific "local route" they take is decided opportunistically based on the conditions they encounter (Lahlou, 2024).

In the context of Bali, a tourist may be "pushed" by a motive for prestige or social status. Currently, the prevailing installations direct this motive toward the goal of visiting overcrowded hotspots to capture "performative" social media content. This is because the current affordances (digital algorithms) and social regulations (peer-traveller norms) suggest these locations as the primary "means" to satisfy that status-seeking motive. Conversely, there is an opportunity to redesign the installations so that the tourist is "pulled" toward new, more sustainable goals that satisfy those same motives.

Situational Analysis: Drivers of Unsustainable Behaviour

While the current tourist journey meets the tourist's individual goals, the analysis reveals a set of installations that channel behaviour into unsustainable mass-tourism patterns in Bali.

The Unsustainable Tourist Mindset

Travel activates behavioural patterns that differ from everyday norms, with tourists expecting high levels of service and convenience, prioritising speed, comfort, and familiarity, often opting for and reverting to westernised services and global brands, leading to convenience-driven behaviour (Barr et al., 2011; Gossling et al., 2018; MacCannell, 1976; Urry, 1990). Dinhopl & Gretzel (2016) and Mariani et al. (2018) show that social media boosts the consumption of iconic sites, leading to overtourism and concentration in 'insta-famous' attractions, underpinning a 'checklist' mentality and performative travel. Ultimately, these behaviours reinforce unsustainable tourism systems, as tourists direct disproportionate amounts of money to commercial businesses that offer high-volume, price-competitive commodities and services, rather than local, regenerative alternatives (Bertocchi & Visentin, 2019).

Role of Algorithms in Shaping Tourist Behaviour

Online platforms and algorithmic systems play a huge role in this pre-travel decision-making (BBC Storyworks, 2025). Tourists rely on search engines, online travel agencies, review platforms and social media to reduce uncertainty and cognitive effort while planning trips; however, these pages are driven by algorithms that operate on popularity biases, pulling people towards a limited number of destinations and attractions, ultimately creating hotspots (Abubakar & Ilkan, 2016; Gretzel et al., 2015; Mariani et al., 2016). Furthermore, travel norms and hotspot concentrations are reinforced through social media, where outsourcing decision-making prioritises familiarity and perceived safety over sustainability (Dinhopl & Gretzel, 2016).

Window of opportunity

Drawing on Activity Theory and Installation Theory, algorithmic channelling and the prevailing tourist mindset are the primary unsustainable drivers of overtourism in Bali. To identify where interventions can achieve the greatest systemic impact, Meadows' (1999) concept of leverage points is used. Shallow leverage points include interventions that are easier to implement but show limited potential to trigger transformational change; on the other hand, deep leverage points are difficult to implement but have greater transformational potential, often focusing on mindset shifts and transcending paradigms (Meadows, 1999). In the context of tourism, these include the shared meaning of tourism and the definition of good tourist behaviour. While platforms and recommendations help shape choices in the trip-planning process, underlying norms and identities

help manage behaviour. Behavioural change is most durable when it reshapes norms and identities rather than constraining individual choices.

Why Algorithmic Pre-travel Intervention is Shallow Leverage

Despite their influence and popularity, algorithms are structurally constrained and have a shallow leverage point. Not only does the control over algorithms lie with global corporate actors who emphasise engagement, conversion, and advertising revenue over sustainability outcomes (Gossling et al., 2018), but pre-travel sustainability interventions have repeatedly shown little behavioural impact. The awareness-behaviour gap, as described by Miller et al. (2010) and Barr et al. (2011), explains how tourists express pro-environmental preferences during the planning and pre-travel phases but shift to convenience-driven behaviours once their travel begins, indicating that awareness isn't enough. Ajzen (1999) further expands on pre-travel decision-making, suggesting that its abstract nature, which is future-oriented and cognitively overloading, makes pre-travel a weak point of intervention. Additionally, online sustainability messaging tends to compete with cost, convenience, and accessibility, which are required to translate intentions into action, making algorithmic pre-travel interventions a shallow leverage point that does not modify the goals, norms, or identities (Meadows, 1999). Consequently, the arrival window poses a great opportunity to introduce an intervention to address overtourism in Bali.

The Effect of Liminality and Arrival as Deep Leverage

In contrast to pre-travel planning, arrival marks a liminal phase in which tourists transition from everyday routines into a temporary social role at their destination. These spaces are characterised by normative ambiguity, heightened attention, and openness to guidance (Jaimangal-Jones et al., 2009; Turner, 1969). Verplanken et al. (2008) further demonstrate the role of habit discontinuity, in which individuals are displaced from familiar contexts into new environments, and how it weakens automatic behaviours and increases receptivity to new norms. Kurz et al. (2015) suggest that interventions introduced at such moments are more likely to influence behaviour compared to interventions delivered in 'stable' contexts. This makes arrival the perfect window of opportunity to introduce our interventions.

Upon arrival, tourists often search for cues about 'how to behave' (Edensor, 2001). With the instability of norms, identity formation becomes paramount, and behaviour is guided by situational interpretation, making arrival a deeper leverage point and a more realistic intervention point than pre-travel. To make the most of this opportunity and create lasting change, social reinforcement is necessary. According to Tajfel & Turner's (1979) Social Identity Theory, people follow the norms of groups they identify with. Research shows that tourists often see themselves as consumers, view

destinations as service environments, and treat holidays as a break from normal responsibilities (Urry, 1990). These ideas are spread through marketing, infrastructure, and what other tourists do. By creating a clear and socially accepted identity, as discussed in the solution section, new norms can be supported through group behaviour and social signals.

Goldstein et al. (2008) demonstrate that in-context social norm cues lead to stronger behaviour change than informational promotions. Bator & Cialdini (2000) further highlight the impact of social pressure and accountability, noting that behaviour is more likely to change when it is socially expected and visible to others. Combined with Lahlou's (2017) Installation Theory, this suggests that situated, embodied, and socially embedded interventions have a greater impact than abstract informational campaigns, providing evidence that arrival-based interventions align more closely with empirically backed mechanisms that drive behaviour change.

On-Site Behaviour Drivers

Once tourists arrive, decision-making shifts from abstract planning to situated action, and local recommenders become highly influential. Moscardo and Murphy (2011) show that frontline workers, such as hotel staff, guides, and drivers, play an important role in shaping tourists' movement, spending, and time allocation. Furthermore, tourists often deviate from pre-planned itineraries in response to local advice (Blichfeldt & Halkier, 2014). These local recommendations help reduce uncertainty and cognitive load in unfamiliar environments, channelling tourist behaviour towards specific locations and businesses. Ultimately, this underscores that hotels and arrival spaces offer the most powerful and practical points for behavioural intervention within the tourist activity system.

The proposed interventions are designed to shift tourists away from convenience-driven mindsets and instead promote PEB and stewardship. PEB includes actions that mitigate negative environmental and socio-cultural impacts, including waste reduction, resource conservation, environmentally responsible consumption, and respect for local cultures (Cheng & Galanza, 2025; Agyeiwahh et al., 2023). Installation Theory shows that tourists are frequently channelled into unsustainable behaviours that prioritise convenience and consumption. Consequently, the intervention seeks to foster more sustainable mindsets among tourists. Applying Meadows' leverage points framework, targeting mindsets is identified as a deep leverage intervention. The concept of liminality highlights the arrival moment as a strategic opportunity for intervention. Recognising the well-documented awareness-behaviour gap, the proposed solution extends beyond education by utilising Social Identity Theory to establish new norms through the social identity of the "Better Bali Tourist". The objective is to normalise sustainable behaviour, making it easy and socially desirable,

thereby enabling tourists to satisfy their holiday motives while supporting local communities and protecting the environment.

Solution Proposal

The Better Bali Programme consists of three new installations for a tourist to be channelled through an airport ritual, a community-led welcome ceremony, and the Better Bali Pass Network (Figure 3). Together, these installations are designed to reshape tourists' mindsets, norms, and behaviours, as defined previously. Therefore, the programme moves beyond surface-level behavioural nudges and instead targets a deeper leverage point, transforming the dominant tourist mindset from extractive consumption towards sustainability, reciprocity, and contribution.

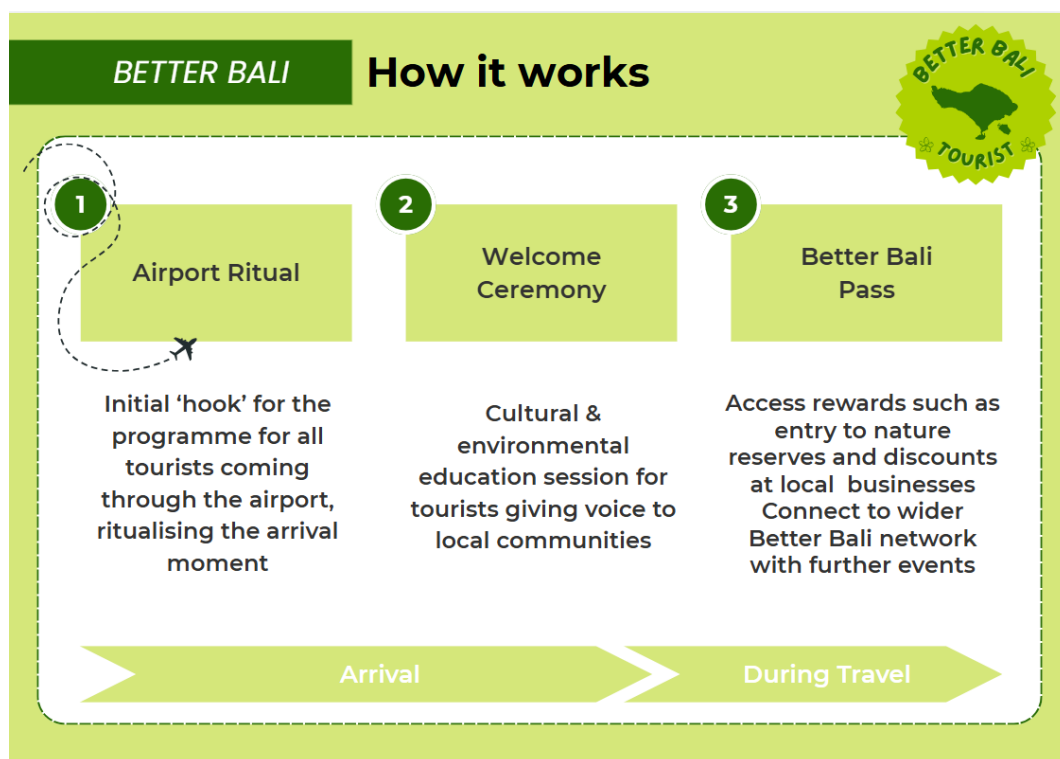


Figure 3: The Better Bali Programme

1. The Airport Ritual

The airport ritual is the first point when tourists learn about the programme. As Bali is an island destination, nearly all international tourists pass through Ngurah Rai International Airport, making it a key passage point and an ideal site for intervention (Ke List, 2025). Positioned immediately after passport control, staffed booths would formally welcome tourists to Bali and introduce the Better Bali

Programme. Tourists would receive a symbolic bracelet and a short informational leaflet outlining the programme's purpose and how to sign up for a welcome ceremony to receive a Better Bali Pass.

Within Installation Theory, this intervention primarily leverages physical affordances and social regulation. Physically, the airport booth guarantees visibility and accessibility as all tourists will see it before dispersing across the island. Socially, the ritualised welcome introduces a new social identity of "Better Bali Tourists" at the very start of the trip, before alternative norms and routines have formed, using this opportunity of liminality. The bracelet acts as both a physical reminder and a social signal, marking participation in a collective identity associated with responsible and respectful tourism.

Ritualisation plays a critical role in accessing deeper leverage points. Drawing on Interaction Ritual Theory, symbolic acts at moments of transition have been shown to generate solidarity, group belonging, and commitment to shared norms (Xiang et al., 2022). In the tourism context, such rituals can foster place attachment, which has been empirically linked to stronger PEB intentions (Cheng & Galanza, 2025). By framing arrival not just as logistical entry but as a meaningful welcome to Bali, the airport ritual begins to connect tourists emotionally to Bali, starting to shape a stewardship-oriented mindset.

Holding this intervention at the airport avoids self-selection bias (Rotondi et al., 2024). Unlike voluntary sustainability initiatives that primarily attract tourists who already identify as "ethical" or "green", the airport booth ensures that all visitors, regardless of prior mindsets and plans, are exposed to the programme and invited to participate.

2. The Welcome Ceremony

The second stage builds on the new mindset initiated through a community-led welcome ceremony, ideally attended within the first one or two days of arrival. Attendance at the ceremony is required to activate the Better Bali Pass, creating an incentive structure that encourages participation while preserving voluntariness and perceived autonomy, an important factor in sustained behavioural commitment (Yip et al., 2024).

The welcome ceremony is the programme's key educational intervention. Organised collaboratively between accommodation providers, local communities, and the Better Bali Programme, it would take place in a convenient setting, e.g., at the tourists' accommodation. The content would combine practical guidance on sustainable tourist behaviour with cultural education, highlighting local perspectives on sustainability, overcrowding, and cultural respect. This stage primarily develops competencies within Installation Theory as tourists are equipped with the

knowledge, awareness, and practices required to act sustainably during their stay. Research suggests that environmental awareness and perceptions significantly increase responsible tourist behaviour (Cheng & Wu, 2015; Li et al., 2021), particularly when delivered through situational education rather than abstract or online information campaigns (Wang et al., 2022; Meschini et al., 2021). The content itself should be shaped by local communities. For example, the session could draw upon Tri Hita Karana, the Balinese philosophy emphasising harmony between humans, nature, and the spiritual realm (Ardani et al., 2025). By situating learning within the destination itself and centring local voices, the ceremony increases awareness and competencies with legitimacy, further channelling tourists towards a more sustainable mindset.

Simultaneously, the ceremony draws upon social regulation. Participation is public, and commitment to sustainability and cultural respect is framed as desirable. Tourists who attend can no longer plausibly claim ignorance of the impacts of their actions, increasing accountability. This is particularly important given extensive literature demonstrating that education and awareness alone do not reliably translate into PEB (Miller et al., 2010; Ingaldi & Dziuba, 2022). By educating tourists about PEB in a public setting, the programme enables social regulation, helping close the awareness-behaviour gap. However, this may not be enough to encourage tourists to maintain PEB throughout the trip, leading to the requirement of maintaining behaviours and norms through the Better Bali Pass.

3. *The Better Bali Pass*

The Better Bali Pass is the programme's final and ongoing intervention, designed to sustain newly formed norms and PEBs throughout the tourists' holiday with ripple effects to future tourist mindsets. Delivered as a physical card with a digital app following attendance at the welcome ceremony, the pass provides access to incentives, recommendations, and activities aligned with sustainability and supporting local communities. For example, the pass could grant access to certain nature reserves, sustainable tourism villages, or reward attending a litter picking session with a free scuba diving session. These are all initiatives that already exist in Bali but are not frequented by tourists (Swargia et al 2025). This kind of gamification and reward-based mechanisms are a proven concept, with empirical evidence to support (Mahmoud et al., 2023). A contemporary benchmark is the 'CopenPay' scheme (2026), which successfully incentivized environmental stewardship in Copenhagen by offering rewards for activities such as cycling. Discounts at local sustainable businesses would be subsidised by the scheme, ensuring there is no cost to local supporting organisations. This enables tourists to easily find out how to continue enjoying their holiday in ways

which are environmentally friendly and demonstrate respect for local ways of life (Kastenholz et al., 2018).

From an Installation Theory perspective, the pass integrates all three components. Physically, it affords access to discounts, curated experiences, and alternative destinations that divert tourists away from overcrowded hotspots. Competence-wise, it continuously guides tourists towards sustainable choices, reducing friction, cognitive dissonance (from the awareness-behaviour gap), and decision fatigue. Socially, it reinforces the identity of “Better Bali Tourists” through visible markers such as badges or stickers, enabling social signalling and peer reinforcement. Social Identity Theory is central to this. Identifying with environmentally conscious traveller groups has been shown to significantly strengthen PEB intentions, both directly and via increased environmental awareness (Cheng & Galanza, 2025). Empirical work on tourist groups, such as backpackers, further demonstrates that group identification predicts sustainable behaviour (Agyeiwaah et al., 2023). The Better Bali Pass seeks to intentionally cultivate and mainstream such an identity, ensuring that engaging in PEB is a shared social norm amongst tourists.

The Role of Local Community Involvement

For the Better Bali Programme to be a success it is vital that local communities are closely involved in each step of the process, designing the airport ritual, planning the welcome ceremony and deciding what makes up the Better Bali Pass. A key critique how the Indonesian government is currently handling tourism in Bali is the marginalisation of local people in planning and decision-making (Aryasih et al., 2025).

Community-based tourism literature consistently shows that interventions are more effective and equitable when local stakeholders co-design, implement, and benefit from initiatives (Scheyvens, 1999; Goodwin & Santilli, 2009). Furthermore, there is recent evidence from Bali itself of where local involvement in planning in sustainable tourism villages led to more successful and sustainable projects (Ardani et al., 2025). Local communities have rich contextual knowledge of environmental pressures, cultural sensitivities, and viable alternatives. Moreover, as discussed earlier, relational approaches, where tourists are guided by local recommendations and narratives, are especially influential in shaping norms and behaviour of tourists (Blichfeldt & Halkier, 2014). Whilst the tourism industry grows in Bali, many local people do not feel the benefits. By offering involvement, endorsement of local projects, and employment opportunities, the Better Bali Programme would enable the tourism industry to benefit more people in Bali.

Discussion

The analytical approach taken in this paper examined tourist activity as a systemic and structured trajectory, exploring the three layers of installation and their determinant components at each step. By placing the subject's motives at the centre of the design process, the proposed Better Bali Programme ensures that interventions allow tourists to fulfil their original "push" motives through more sustainable goals (Lahlou, 2024).

The cornerstone of this strategy is the targeting of mindsets and norms as deep leverage points within the liminal moment of arrival. In this state, the 'plasticity' of the tourist allows for a fresh start where they are open to adopting new behaviours. We utilize the airport ritual and welcome ceremony as installations to plant the seeds of an intrinsic mindset shift. To overcome the common awareness-behaviour gap, the Better Bali Pass serves as an extrinsic mechanism that stabilizes these new patterns throughout the trip. This dual approach ensures the intervention's resilience and creates a sustainable activity trajectory that takes root before the typical consumerist norms have a chance to solidify.

Beyond individual behaviour, this solution set operates as a SEP. As defined by Lahlou (2024), an SEP is a constellation of installations where the activity paths of multiple stakeholders cross, enabling transactions that involve social exchange processes. Participants contribute resources in exchange for rewards, which are measured in various "currencies", including monetary, social, cultural, or psychological resources. To ensure the viability of the Better Bali Programme, we designed the SEP to facilitate "good" transactions that yield satisfying social contracts for all participants. While a comprehensive financial model is beyond the scope of this paper, the socio-psychological dimensions of the SEP provide a robust theoretical foundation for its sustainability.

The success of this platform hinges on aligning the diverse interests identified in the stakeholder analysis. For the government, the proposal avoids the growth-sustainability conflict by maintaining visitor volume while improving tourists' behaviour. This alignment suggests that governmental promotion or the re-channelling of existing levies into the SEP could be a viable funding avenue.

For local communities, the SEP acts as a mechanism for empowerment and reciprocity. By giving locals, a voice in the arrival ceremony, they are empowered to establish social norms that favour local businesses and community-run destinations. In this transaction, locals could provide cultural knowledge in exchange for both social acknowledgement and monetary compensation. Similarly, accommodation providers benefit from the SEP by promoting and optionally hosting these

ceremonies. In exchange for enhanced guest satisfaction and positive reviews, they could contribute by promoting the Better Bali Program or providing the location for the arrival ceremony.

Finally, for the tourists, the SEP transforms the arrival into a seamless, high-value cultural immersion. They contribute time and potentially a ceremony fee in exchange for "self-developing resources" like knowledge and personal growth. Ultimately, while the current Bali tourism model externalizes negative costs to the local environment, our programme functions as a redesigned SEP that internalizes these externalities. It redirects the flow of currencies beyond mere "goods for money," ensuring that every transaction supports the long-term resilience of Bali's cultural and ecological systems.

Limitations

This proposal is primarily grounded in theoretical frameworks and desk research, which may not fully capture the nuanced, daily realities of Balinese tourism. Consequently, it is essential to conduct small-scale pilot tests to evaluate the effectiveness of these installations before full-scale implementation. Simultaneously, engaging in deep co-design with local stakeholders is critical to ensure the intervention is culturally respectful and locally embedded.

Furthermore, the program's success is entirely dependent on the cooperation of diverse stakeholders. Building the necessary partnerships and aligning their varying incentives represents a significant logistical and political undertaking.

The solution proposal comprises a suite of different channelling devices, each requiring varying levels of stakeholder agency and financial investment. Due to the exploratory scope of this report, a detailed feasibility study regarding the specific resources required to implement the entire intervention was neglected.

While individual components like the Copenhagen Pass or interaction rituals (Xiang et al., 2022) serve as successful "proofs of concept," their specific combination is a novel idea. Consequently, there is limited empirical evidence to guarantee that these tools will successfully change behaviour in the long term.

Despite these limitations, the proposed intervention addresses overtourism at a systemic level, grounded in sociopsychological theory. By designing for a positive feedback loop, the programme seeks to transform "sustainable travel" from an optional choice into a social norm. As tourists engage and promote their experiences, the goal is to establish the arrival ceremony as a "must-do" cultural staple, making the "Better Bali Tourist" a salient and desirable social identity.

References

- Abubakar, A. M., & Ilkan, M. (2016). Impact of online WOM on destination trust and intention to travel: A medical tourism perspective. *Journal of Destination Marketing & Management*, 5(3), 192–201. <https://doi.org/10.1016/j.jdmm.2015.12.005>
- Agyeiwaah, E., Pratt, S., Iaquinto, B. L., & Suntikul, W. (2023). Social identity positively impacts sustainable behaviours of backpackers. *Tourism Geographies*, 25(1), 1–22.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ardani, W., Sudiartini, N. W. A., & Yudhaningsih, N. M. (2025). An integrated approach for the development of a sustainable tourism village in Bali Province, Indonesia.
- Aryasih, P. A., Sunarta, I. N., Adikampana, I. M., & Indrawati, Y. (2025). Decision making for tourism development in Bali: An analytic hierarchy process approach. *International Journal of Environmental Sciences*, 11(21s), 2818–2827.
- Badan Pusat Statistik Bali Province. (2025). *Tourism statistics: International tourist arrivals to Bali Province, January–November 2025* Bali Central Bureau of Statistics official data summary (as reported by Bali Hotels Association) <https://www.balihotelsassociation.com/monthly-passengers-statistic/index.cfm>
- Barr, S., Shaw, G., Coles, T., & Prillwitz, J. (2011). A holiday is a holiday: Practicing sustainability, home and away. *Journal of Transport Geography*, 19(3), 474–481. <https://doi.org/10.1016/j.jtrangeo.2010.04.007>
- Bator, R. J., & Cialdini, R. B. (2000). New ways to promote pro-environmental behaviour: The application of persuasion theory to the development of effective pro-environmental public service announcements. *Journal of Social Issues*, 56(3), 527–541. <https://doi.org/10.1111/0022-4537.00182>

- BBC Storyworks. (2025). *Global Tourism Economy Forum: How digitalisation is revolutionising the travel industry*. BBC News. <https://www.bbc.com/storyworks>
- Bertocchi, D., & Visentin, F. (2019). The overcrowding of tourism destinations: A perspective of socio-spatial justice. *Tourism Planning & Development*, 16(2), 165–178.
<https://doi.org/10.1080/21568316.2018.1556323>
- Blichfeldt, B. S., & Halkier, H. (2014). Mussels, tourism and community development: A case study of place branding through food festivals. *European Planning Studies*, 22(8), 1587–1603.
<https://doi.org/10.1080/09654313.2013.784594>
- Brajcich, K. (2024). *What is overtourism and why is it a problem?*
- Chaney, S. (2023). Overtourism beyond mass tourism: When tourism pressure becomes socially unacceptable. *Journal of Sustainable Tourism*.
- Cheng, S., & Galanza, J. S. (2025). Formation mechanism of tourists' pro-environmental behavioural intentions from a social identity perspective. In *Proceedings of the 2025 International Conference on Economic Management and Big Data Application* (pp. 132–142).
- Cheng, T. M., & Wu, H. C. (2015). How do environmental knowledge, environmental sensitivity, and place attachment affects environmentally responsible behaviour? *Journal of Sustainable Tourism*, 23(4), 557–576.
- Chong, K. L. (2020). The side effects of mass tourism: The voices of Bali islanders. *Asia Pacific Journal of Tourism Research*, 25(2), 157–169.
- CopenPay. (2026). *CopenPay: Free attractions for thoughtful actions*. Visit Copenhagen.
<https://www.visitcopenhagen.com/copenpay>
- Crompton, J. L. (1979). Motivations for pleasure vacation. *Annals of Tourism Research*, 6(4), 408–424. [https://doi.org/10.1016/0160-7383\(79\)90004-5](https://doi.org/10.1016/0160-7383(79)90004-5)

Dann, G. M. (1977). Anomie, ego-enhancement and tourism. *Annals of Tourism Research*, 4(4), 184–194. [https://doi.org/10.1016/0160-7383\(77\)90037-8](https://doi.org/10.1016/0160-7383(77)90037-8)

Dias, Á., Viana, J., & Pereira, L. (2026). Barriers and policies affecting the implementation of sustainable tourism: The Portuguese experience. *Journal of Policy Research in Tourism, Leisure and Events*, 18(1), 184–202.

Diah, F. (2025). Overtourism after the COVID-19 pandemic: Ecological degradation and social tensions in tourist destinations. *Environment Conflict*, 2(1), 51-67.

Dinhopl, A., & Gretzel, U. (2016). Selfie-taking as touristic practice. *Annals of Tourism Research*, 59, 126–139. <https://doi.org/10.1016/j.annals.2016.04.015>

Edensor, T. (2001). Performing tourism, staging tourism: (Re)producing tourist space and practice. *Tourist Studies*, 1(1), 59–81. <https://doi.org/10.1177/146879760100100104>

Goldstein, N. J., Cialdini, R. B., & Griskevicius, V. (2008). A room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of Consumer Research*, 35(3), 472–482. <https://doi.org/10.1086/586910>

Goodwin, H. and Santilli, R. (2009) Community-Based Tourism: A Success? *ICRT Occasional Paper*, 11, 1-37.

Greene, D., Demeter, C., & Dolnicar, S. (2024). The comparative effectiveness of interventions aimed at making tourists behave in more environmentally sustainable ways: A meta-analysis. *Journal of Travel Research*, 63(5), 1239–1255.

Gössling, S., Scott, D., & Hall, C. M. (2018). Global trends in tourism. *Tourism Recreation Research*, 43(2), 131–149. <https://doi.org/10.1080/02508281.2018.1452021>

Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1–20.

Hendrawan, I. G., et al. (2023). Characteristics and distribution of stranded plastic pollution in Bali conservation areas. *Marine Pollution Bulletin*, 193, 114922.

Ingaldi, M., & Dziuba, S.T. (2021). Sustainable tourism: tourists' behaviour and their impact on the place visited.

Jaimangal-Jones, D., Pritchard, A., & Morgan, N. (2010). Going the distance: Locating journey, liminality and rites of passage. *Leisure Studies*, 29(3), 253–268.

Kastenholz, E., Eusébio, C., & Carneiro, M. J. (2018). Segmenting the rural tourist market by sustainable travel behaviour. *Journal of Destination Marketing & Management*, 10, 132–142. <https://doi.org/10.1016/j.jdmm.2018.09.001>

Kurz, T., Gardner, B., Verplanken, B., & Abraham, C. (2014). Habitual behaviors or patterns of practice? *WIREs Climate Change*, 6(1), 113–128.

Lahlou, S. (2017). *Installation theory: The societal construction and regulation of behaviour*. Cambridge University Press.

Lahlou, S. (2024). *Why people do what they do: And How to Get Them to Change*. Polity.

Larson, L. R., Stedman, R. C., Cooper, C. B., & Decker, D. J. (2015). Understanding the multi-dimensional structure of pro-environmental behavior. *Journal of Environmental Psychology*, 43, 112–124.

Li, J., Zhang, Q., & Wang, F. (2025). Driving factors of pro-environmental behavior among rural tourism destination residents. *Scientific Reports*, 15, 2457.

MacCannell, D. (1976). *The tourist: A new theory of the leisure class*. Schocken Books.

Mahmoud Abou Kamar, A. M., Elbayoumi Salem, I., & Elbaz, A. M. (2023). Gamification impact on tourists' pro-sustainability intentions. *Tourism Review*, 78(2), 487–504.

Mananda, I. G. P. B. S. (2025). A penta-helix governance model for sustainable tourism in Bali.

Sustainability.

Mariani, M. (2019). Big data and analytics in tourism and hospitality. *SSRN Electronic Journal*.

Meadows, D. H. (1999). *Leverage points: Places to intervene in a system*. Sustainability Institute.

Meschini, M., et al. (2021). Educational briefings in touristic facilities promote tourist sustainable behavior. *Biological Conservation*, 259, 109122.

Miller, G., Rathouse, K., Scarles, C., Holmes, K., & Tribe, J. (2010). Public understanding of sustainable tourism. *Annals of Tourism Research*, 37(3), 627–645.

Milano, C., Novelli, M., & Cheer, J. (2019). *Overtourism and tourismphobia*.

Moscardo, G., & Murphy, L. (2011). Toward values education in tourism. *Journal of Teaching in Travel & Tourism*, 11(1), 76–93.

Pandit, I. G. S. (2025, June 25). The global problem of overtourism, and why Bali is at a tipping point. *The Jakarta Post*.

Pramuja, R. A. (2024). Living with overtourism: Community narratives of cultural, environmental, and social change in Bali, Indonesia. *Advances in Tourism Studies*, 2(4), 251-257.

Phan, T. D., et al. (2021). Tourism development and water inequality. *Water Resources Management*, 35(6), 1935–1951.

Reuters. (2024). Bali's tourism boom fuels development but raises concerns over land and housing.

Scheyvens, R. (1999). Ecotourism and the empowerment of local communities. *Tourism Management*, 20(2), 245–249.

Song, Q. (2023). Demystifying the nexus between social media usage and overtourism. *Journal of Travel & Tourism Marketing*.

Suyadnya, I. W., Cahyadi, R., Tirtayani, L. A., & Nuryani, A. F. (2025). Overtourism sensitivity and tourism development in Canggu, Bali. *Cogent Social Sciences*, 11(1), 2521364.

Swariga, I. M., Anggara, B., & Raditia, I. G. A. (2025). A model for implementing sustainable tourism in mangrove ecotourism. *Bali Tourism Journal*, 9(2), 24–28.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict.

UNWTO. (2018). 'Overtourism'? *Understanding and managing urban tourism growth beyond perceptions*.

Urry, J. (2002). *The tourist gaze*. Sage.

Uysal, M., & Jurowski, C. (1994). Testing the push and pull factors. *Annals of Tourism Research*, 21(4), 844–846. [https://doi.org/10.1016/0160-7383\(94\)90091-4](https://doi.org/10.1016/0160-7383(94)90091-4)

Verplanken, B., et al. (2008). Context change and travel mode choice. *Journal of Environmental Psychology*, 28(2), 121–127.

Yamamoto, E. M. S., et al. (2021). Impact of rapid tourism growth on water scarcity in Bali. *Water Resources Management*, 35(12), 4009–4024.

Yip, L., et al. (2024). Autonomous motives foster sustained commitment to action. *Personality and Social Psychology Bulletin*, 50(5), 750–765.

Yu, C. P., et al. (2020). Effects of crowding on tourist satisfaction. *Tourism Management*, 79, 104088.

Zhang, H., Fu, X., Cai, L. A., & Lu, L. (2014). Destination image and tourist loyalty. *Tourism Management*, 40, 213–223.

Large Language Model Usage

Section	Tool used	Prompt
Background	Chat GPT	I am writing a background about the overtourism in Bali. But my word count has exceeded the requirement. Could you please refine the paragraph for me so it is about 400 words, without changing the meaning and citation I used?
Integrated Stakeholder Analysis	Gemini	Help me refine this: Stakeholder analysis is fundamental to understanding overtourism in Bali because the phenomenon is not the product of a single actor, but of the interaction between multiple stakeholders with interconnected, yet sometimes conflicting interests (Milano et al., 2019). Tourism in Bali operates as a complex system—or a socio-economic platform—in which the tourist sits at the centre, while governments, businesses, communities, and NGOs respond to their presence. The resulting pressures emerge not just from visitor volume, but from how these actors, each driven by diverse motives, interact within the system.
	Gemini	Help me correct this draft and write it more concise: (inserted draft)
Theoretical Background & Methodological Approach	Gemini	I am writing a group essay that is about overtourism in Bali and the development of an intervention to address unsustainable issues. It starts with the background which elaborates on the problems of overtourism in Bali. Then goes into a stakeholder analysis and then pointing it to the tourist as the main stakeholder, where one of the root causes of overtourism lies. We believe that tourists keep on coming and choose to go to Bali. But also when they are in Bali they behave unsustainably. After that we introduce the theoretical frameworks that we use to analyse the problem. We analyse the tourist journey to then identify potential intervention points and develop a solution. I now drafted the part where I introduce the theoretical concepts and our approach. Help me refine it: (inserted draft)
	Gemini	Help me write this better: Combined, these three layers constitute an "installation". Installations are resilient societal channelling systems to guide people's behaviour. However, not all installations are designed in a way that is also environmentally sustainable. As behaviour is co-determined by these layers, they serve as the primary target for designing interventions by redesigning or replacing them to change how we behave to become more sustainable.

Journey Mapping	Gemini	This is my journey mapping and situational analysis that i will include as a visual into the essay. I now drafted the part where I introduce that visual and elaborate on that. First under the Journey mapping subheading i want to generally explain that we divided the journey into the three phases: pre-travel, arrival and during-travel. Then i want to elaborate on the activity analysis. So, answer the question: What makes tourist travel? Then briefly referring to the subgoals and tasks that are laid out in the visual to ultimately reach the goal of having a satisfied vacation. According to activity theory and installation theory one cannot change the motive. But the goals can be changed to satisfy the motives. Here are my notes: (inserted draft)
	Gemini	Help me refine this part that comes after the analysis of installation theory and transitioning to the solution proposal. Situational analysis: Drivers of unsustainable behaviour While the current tourist journey serves to satisfy the tourist's individual goals, the analysis revealed some problematic installations in place that create unsustainable mass-tourism patterns in Bali.
	Gemini	Can you suggest alternative formulations for this paragraph: By applying Activity and Installation Theory, we have narrowed the root causes of overtourism in Bali down to algorithmic channelling and the prevailing tourist mindset. To achieve the most effective impact, we must evaluate where in the tourist trajectory an intervention can act as a high-leverage point.
Situational Analysis: Drivers of Unsustainable Behaviour	Chat GPT	I need to reduce the word count in this section. Could you please highlight redundant text and sections that aren't necessary in the paragraph provided? Could you also cross-check the references and ensure they are suitable for the sections used.
	ChatGPT	Provide synonyms to refine the language
Solution Proposal	Chat GPT	Help me find an academic source for proof of concept of gamification and reward based mechanisms for sustainable tourism (<i>I then read and checked the sources chat gpt recommended</i>)
	Chat GPT	Please help me refine my language and cut down words from my writing (copied draft,) <i>I then compared the draft to my writing to identify where words could be easily cut</i>
	Chat GPT	Find me an academic article that emphasises how local people are marginalised and overlooked with the Indonesian government makes decisions around tourism (<i>I had news articles but struggled to find an academic paper, I then checked the chat gpt output for the best source</i>)

Discussion	Gemini	i want to bring in the idea of how we can redesign the socio-economic platform so that we rearrange transactions happening and therefore inspire avenues for funding this solution. Attached are my ideas how we can apply the concepts on our case in Bali in handwritten.
	Gemini	This is my current draft of the discussion of limitations. Help me refine it. (Inserted draft)
	Gemini	I adapted the discussion, so it links better to the solution and the theoretical underpinning. Help me refine it. (inserted draft)
	Gemini	Help me improve this paragraph: The pivotal elements of this strategy are the mindsets and norms targeted as the deep leverage points at the liminal moment of arrival. In this liminal state, tourists are exceptionally receptive to new norms and guidance. While the first two installations (the airport ritual and the welcome ceremony) are set up to plant the intrinsic mindset shifts, the Better Bali Pass serves as an extrinsic stabiliser of more sustainable behaviour to overcome the awareness-action gap and make the overall intervention more resilient. Ultimately, the programme establishes a sustainable tourist mindset and accompanies it with more sustainable activity trajectories, before unsustainable "consumer" norms from embodied competences and social institutions can solidify.
Limitations	Gemini	This is my current draft of the limitations. Help me refine it. (inserted draft)