

# Large language models as travel co-planners: the GIFT model of youth–AI interaction

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## Abstract

This study examines how members of Generation Z and Generation Alpha perceive and use LLMs in tourism planning. Drawing on six age-specific focus groups with 57 participants (26 Generation Alpha pupils aged 11–14 and 31 Generation Z BSc students aged 20–24) conducted in Budapest, Hungary, the study uses a qualitative, Grounded Theory–informed approach to explore prior use, anticipated practices, credibility assessments, and the meanings attached to LLMs. Participants in both cohorts were familiar with digital technologies and valued fast, personalized services, but their accounts differed in decision-making autonomy, social embeddedness, and evaluative practices. Generation Alpha participants more often positioned LLMs as an exploratory assistant within family-based decision structures, whereas Generation Z participants more frequently described comparing or verifying AI-generated outputs through other sources and social input. These patterns are better understood as different modes of credibility assessment and reliance than as simple differences in trust. The resulting *GIFT* (*Generational Interpretations of Future-oriented Technologies*) framework conceptualizes youth–AI interaction in tourism planning as context-dependent, with LLMs serving as cognitive support tools and potential co-creators. GIFT is presented as an exploratory framework grounded in this sample rather than as a universal theory. The study links human–AI interaction to the social contexts in which young people make travel decisions and offers implications for tourism professionals, educators, and AI developers.

## Introduction

Generative artificial intelligence, including large language models (LLMs) such as ChatGPT, is becoming part of everyday information seeking and decision support, including travel planning (Ali et al., 2023; Shi et al., 2024; Hu and Lin, 2026). Tourism is a useful setting in which to examine this shift because travel decisions combine uncertainty with experiential and social considerations. Empirical work on ChatGPT in tourism has largely examined general traveler samples or adult respondents, for example, trust in personalized recommendations and technology-acceptance outcomes (Ali et al., 2023; Solomovich and Abraham, 2026), whereas age-specific research on younger users remains limited. Youth should also not be treated as a single group of “digital natives” (Kirschner and De Bruyckere, 2017). Familiarity with digital technology does not necessarily indicate comparable digital or artificial intelligence (AI) literacy, particularly when users must judge and verify AI-generated information. Comparative evidence on how Generation Z and Generation Alpha use generative AI in travel decisions remains scarce. The two sampled groups occupy different developmental and social positions, which can affect both their authority in travel

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planning and the ways they assess information. Tourism planning is especially suitable for examining these differences because travel choices are information intensive and usually negotiated with family or peers. In this study, Generation Alpha refers to participants aged 11–14, while Generation Z refers to BSc students aged 20–24. These labels describe the sampling groups rather than fixed or causal categories. Published cohort boundaries vary, and the patterns observed here may also reflect age, developmental stage, education, social context, and decision-making autonomy.

This study therefore focuses on a *specific gap*: the limited comparative, qualitative evidence on how younger age groups engage with generative AI during tourism planning. We do not assume that stable generational differences exist. Instead, the analysis examines how forms of use, evaluation, and meaning-making emerged across the two sampled groups. The research question (RQ) asks how members of these groups use and interpret ChatGPT in tourism-related decision-making contexts. Six age-specific focus groups were conducted using a qualitative, Grounded Theory–informed design. The approach captures participants’ reported practices as well as the interpretations and social dynamics surrounding them. The analysis led to the *GIFT framework* (*Generational Interpretations of Future-oriented Technologies*), an empirically grounded and context-specific synthesis. Both cohorts were familiar with digital environments and expected speed and personalization, yet their accounts differed in decision-making autonomy, social embeddedness, and evaluative practices. Generation Alpha more often described ChatGPT as an exploratory assistant situated within family decision structures. Generation Z participants more frequently described comparing AI-generated suggestions with social media, peer input, or other sources. These patterns suggest different ways of assessing credibility and exercising decision-making agency. They are interpreted here as sample-specific tendencies, not as universal characteristics of the two generations. By conceptualizing ChatGPT as a socially situated and symbolically interpreted actor within decision-making processes, this study contributes to a more nuanced understanding of human–AI interaction. Specifically, it highlights how decision-making autonomy, social embeddedness, and evaluative practices shape the perceived role of AI in tourism planning. It also refines generalized accounts of trust by distinguishing between uncritical reliance, delegated evaluation, comparison, and active verification of AI-generated content. These insights have both theoretical and practical implications for AI design, digital literacy education, and youth-oriented tourism services.

The remainder of the paper is structured as follows. The next chapter reviews the relevant literature, focusing on AI as a social actor, the role of generative AI in tourism, and generational differences in technology use. The methodology section outlines the qualitative research design and analytical procedures. The findings chapter presents the results of the focus group analysis, followed by a discussion of theoretical and practical implications, as well as limitations and directions for future research.

## Literature review

### Artificial intelligence as a social actor and co-creator

AI is increasingly experienced as more than a functional tool. Systems that communicate in natural language can encourage users to attribute intention or other human-like qualities to them. This tendency has long been documented in human–computer interaction (Nass and Moon, 2000; Sundar, 2020), and recent work shows that anthropomorphic cues remain salient in generative AI and LLM interactions (Jarrahi et al., 2026; Karami et al., 2026). Jarrahi et al. (2026) examine how users perceive and interpret the humanization of generative AI, while Karami et al. (2026) identify anthropomorphic behaviors in ChatGPT outputs. These developments matter because conversational reciprocity can make a system appear more agentic even though its responses remain algorithmically generated. In hospitality settings, users likewise form social and ethical evaluations of AI agents that go beyond functional performance (Lin et al., 2024). Co-creation provides a useful lens for understanding this interaction. Prahalad and Ramaswamy (2004) originally described consumers as active participants in shaping experiences; with generative AI, the interaction instead involves iterative engagement with machine-generated content whose production is partly

opaque. Related work on digitally mediated consumer interaction has also considered hybrid forms of human–machine co-creation (Dwivedi et al., 2023). For younger users, the social meaning of AI may be particularly important because digital agents are already part of familiar media and learning environments (Rathore, 2023). ChatGPT can therefore be encountered as more than an information source: it may also become a conversational aid for exploring travel ideas at a stage when personal autonomy is still developing. In tourism, where choices often carry symbolic and identity-related meanings, this makes the perceived social role of AI worth examining directly.

## The nature of human–AI interactions

Despite the increasing adoption of ChatGPT, user trust remains an issue. Trust has emerged as a central construct in the evaluation and adoption of AI systems. While early models of technology acceptance primarily emphasized perceived usefulness and ease of use (e.g., Yilmaz et al., 2023; Kim and Moon, 2025), more recent research has underscored the importance of trust dynamics, especially when AI agents operate in socially or emotionally relevant domains such as education, healthcare, or tourism (e.g., Gursoy et al., 2023). Recent tourism-focused studies on generative AI further emphasize that trust, credibility, and user expectations are closely intertwined in shaping AI-supported travel experiences (Hu and Lin, 2026). A study involving over 500 participants reported widespread concerns regarding the credibility of ChatGPT’s responses and the security of its data usage (Shi et al., 2024). While continuous database updates may partially address these limitations, they do not eliminate the epistemic uncertainty inherent in machine-generated content. Importantly, recent literature suggests that trust in AI should not be treated as a singular construct but rather as a multi-dimensional and context-dependent phenomenon, encompassing perceptions of reliability, transparency, and accountability (Glikson and Woolley, 2020). One key factor influencing trust in AI is the user’s ability to assess the credibility and originality of machine-generated content. In interactions with LLMs like ChatGPT, users are often confronted with confident yet unverifiable outputs, which may appear coherent and convincing despite lacking factual grounding (Kim and Moon, 2025). This has led scholars to emphasize the role of epistemic vigilance, that is, the cognitive processes through which users monitor, question, and verify information sources (Sperber et al., 2010). In this sense, behaviors such as cross-checking AI-generated outputs with alternative sources may reflect not low trust per se, but an active strategy of credibility assessment. Conversely, higher levels of apparent “trust” in AI, particularly among younger or less experienced users, may stem from habituation or the delegation of evaluative responsibility (e.g., reliance on parents, teachers, or platforms), rather than from deliberate confidence in the system’s accuracy. This challenge becomes particularly salient in situations where users rely on AI for decision support, such as in travel planning. In such contexts, trust is dynamically negotiated and intertwined with social context, prior experience, and the perceived stakes of the decision, rather than being a stable individual trait.

## Generational AI usage

The widespread adoption of digital technologies has also produced enduring generational labels, most notably Prensky’s (2001) idea of the “digital native.” The concept assumes that people who grew up with digital media possess an intuitive fluency with technology. This assumption has been widely criticized. Kirschner and De Bruyckere (2017), for example, argue that familiarity with digital tools should not be confused with deeper competence or critical awareness. Young users can be comfortable with interfaces while still differing substantially in how they evaluate information or understand the limitations of digital systems. Technology use within youth cohorts is therefore better treated as heterogeneous and shaped by social context, developmental stage, and the situation in which a tool is used.

Understanding these nuances is particularly relevant when comparing Generation Z and Generation Alpha in their interactions with AI. Because the birth-year boundaries assigned to these generations vary across sources and sometimes overlap, this study uses the labels descriptively rather than treating them as fixed or causal categories. In the present research, Generation Alpha refers to the sampled participants aged 11–14, while Generation Z refers to the

sampled BSc students aged 20–24. Observed differences may therefore reflect not only cohort positioning but also age, developmental stage, educational status, prior experience, social context, and decision-making autonomy.

Both cohorts have grown up in digitally mediated environments, but extensive exposure should not be treated as evidence of uniform digital or AI literacy. Generation Z developed alongside social media, mobile platforms, and recommendation algorithms and has been associated with rapid information scanning and movement across platforms (Elkatmış, 2024). In practice, this can place ChatGPT within a wider information environment rather than make it a single, self-contained source. Generation Alpha, by contrast, is growing up in an environment in which smart assistants, generative AI, and gamified interfaces can be present from an early age (Kaplan-Berkley, 2022; Drugas, 2022). Survey-based and industry data point to early exposure to tablets and smartphones (Reschke, 2024), while other work describes expectations for immediacy, visual engagement, and automation (Gibson, 2024). These patterns indicate digital familiarity, not a measured level of digital literacy. Early exposure may shape expectations about feedback and personalization without guaranteeing an equivalent ability to assess the credibility or limitations of AI-generated content. Generation Alpha is also encountering AI in educational and family settings, which can normalize these systems as part of everyday routines (Emiroğlu, 2023). However, their evaluative capacities are still developing and should not be characterized as uniformly limited or advanced. Levels of critical engagement are likely to vary according to individual experience, educational support, family mediation, and the context in which AI is used. This creates a potential tension: extensive immersion in digital environments can coexist with uneven levels of digital reflexivity, understood here as the capacity to question the credibility, origins, purposes, and implications of algorithmically generated content. Digital literacy therefore extends beyond operational familiarity. In the context of generative AI, it includes judging the credibility of information and deciding when another source or person should be consulted. Differences in AI use may consequently reflect evaluative strategies and social positioning rather than straightforward differences in technological competence.

## The role of generative AI in tourism

Generative AI has quickly entered tourism as a source of conversational information and recommendations. Systems such as ChatGPT can produce destination descriptions, suggested itineraries, and other travel-related content in response to user prompts (Mich and Garigliano, 2023; Larson, 2023; Greene, 2023). Their outputs can be personalized, but factual accuracy, timeliness, and local relevance are not guaranteed (Zhang and Prebensen, 2024; Shi et al., 2024). ChatGPT can also combine different elements of a trip into a provisional itinerary, including cultural or gastronomic suggestions (Altınay et al., 2024). As a result, generative AI can influence both the options users consider and the way they begin to imagine a trip. Users often value ChatGPT for the speed and breadth of its suggestions (Solomovich and Abraham, 2026), but perceived credibility remains mixed. Fluency and responsiveness can create a positive impression even when users remain uncertain about accuracy or contextual fit (Ali et al., 2023). Trust in this setting is therefore better viewed as something users negotiate through experience and comparison. Ali et al. (2023), for example, show that perceived intelligence and trustworthiness are related but distinct. A system can appear capable without being treated as a sufficient basis for a travel decision.

Beyond its role as an information and recommendation tool, generative AI may also support co-creation in tourism marketing and planning. According to Zhang and Prebensen (2024), generative AI can serve as a co-creator of promotional materials, producing text that is often indistinguishable from that of human marketers. From the user's side, ChatGPT offers convenience, speed, and breadth of information, often creating full itineraries or suggesting hidden gems based on user-defined criteria (Altınay et al., 2024). Nevertheless, the value of these outputs depends on how users interpret, verify, modify, and integrate them into their own planning processes. Engagement with AI in tourism is therefore shaped by expectations of authenticity, contextual relevance, transparency, and social validation. Generative AI's role becomes even more nuanced when considering youth engagement in tourism planning. While younger generations are not always the final decision-makers in travel choices, they increasingly act as influential co-planners within family units. A cross-national study by Chiang et al. (2022) found that children's preferences significantly shape decisions about travel activities, even when budget and timing remain in adult control. This

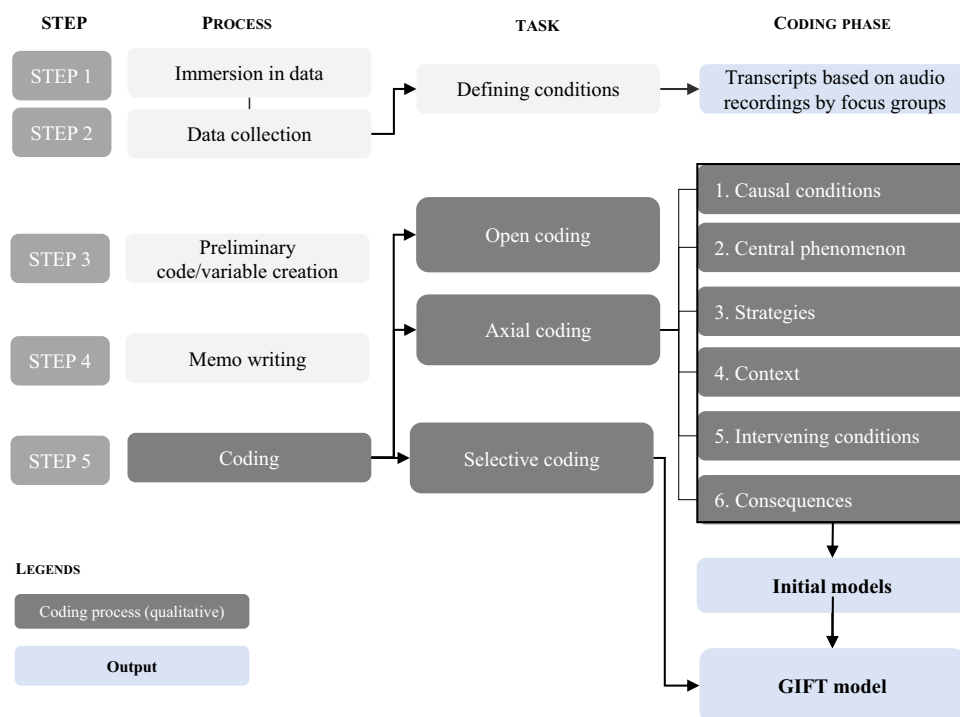
participatory trend aligns with broader shifts toward democratized decision-making, where platforms like ChatGPT may provide additional resources for exploration, empowerment, and family dialog. For younger cohorts, travel can carry symbolic and identity-related meanings alongside its practical aspects. Generative AI may support this process by suggesting options that users perceive as age-appropriate or relevant to current interests. Expectations nevertheless vary with context. Older and more autonomous participants may place more weight on authenticity or uniqueness, whereas younger participants may evaluate suggestions within family decision structures. These are not assumed to be universal generational preferences; they can also depend on travel experience and decision authority. Recommendations that appear generic or socially irrelevant may be rejected even when they are technically plausible, while suggestions that resonate with peer or influencer cues may gain attention.

Overall, the integration of generative AI into youth-centered tourism planning reflects a dual trajectory: one of cognitive convenience and personalized exploration, and another of symbolic meaning-making and social validation. At the same time, the literature remains limited in explaining how these dynamics differ across youth cohorts and how such differences emerge in practice, particularly in socially situated and collaborative decision-making contexts.

## Research gap

Although a growing number of studies have addressed the role of generative AI in tourism, these studies have primarily focused on functional outcomes and general user attitudes, often overlooking how such technologies are interpreted and used in specific social and developmental contexts. For example, recent work has examined AI-enabled tourism experiences and user engagement from perspectives such as technology mindfulness and digital interaction (Lin et al., 2025). Existing research tends to treat younger users as a relatively homogeneous group or focuses predominantly on adult populations. As a result, there is limited understanding of how different youth cohorts, such as Generation Z and Generation Alpha, engage with generative AI in ways that reflect their potentially different social positioning, developmental stage, and decision-making environments. Furthermore, while prior studies have provided valuable insights into AI adoption through survey-based approaches, they often capture static attitudes, such as perceived usefulness or trust, rather than the dynamic processes through which users interact with, evaluate, and make sense of AI-generated content in situated decision-making contexts. This limits our ability to understand how AI becomes embedded in exploratory and collaborative decision-making practices, such as tourism planning. Another limitation concerns the conceptualization of AI primarily as a tool or recommender system. Less attention has been paid to the symbolic and relational dimensions of AI use, particularly how systems like ChatGPT may function as conversational partners, co-creators, or socially embedded actors within family and peer interactions. This is especially relevant in tourism contexts, where decision-making is not only functional but also experiential and identity-related. Finally, although trust is frequently identified as a key factor in AI adoption, it is often treated as a generalized construct. As discussed earlier, emerging research suggests that user engagement with AI involves more nuanced processes, including credibility assessment, epistemic vigilance, and context-dependent reliance. However, little is known about how such evaluative practices vary across youth cohorts and how they shape the use of AI in domain-specific contexts such as tourism. Taken together, these gaps point to the need for a comparative, process-oriented, and context-sensitive investigation of youth–AI interaction. In response, this study adopts a qualitative, Grounded Theory–informed approach to explore how Generation Z and Generation Alpha engage with ChatGPT in tourism planning. Rather than assuming predefined differences, the study seeks to uncover how patterns of use, evaluation, and meaning-making emerge across generational contexts. The comparison is used as an analytical lens for examining patterns within the two sampled age groups, rather than as a research design capable of isolating generation as an independent causal factor.

By developing a context-specific conceptual framework, this research offers an empirically grounded conceptualization of youth engagement with generative AI, highlighting how social context, developmental stage, and evaluative practices shape the perceived role of AI in decision-making processes. More specifically, the study seeks to contribute by: (1) conceptualizing AI-supported tourism planning as a socially embedded process; (2) distinguishing generalized trust from practices of credibility assessment, verification, and delegated reliance; (3) examining how



**Fig. 1 Research process.** Source: Authors' own editing.

ChatGPT may function as a cognitive support tool and co-creative partner; and (4) linking AI literacy to decision-making autonomy and the social contexts in which AI-generated information is interpreted. This perspective aims to provide both theoretical refinement and actionable insights for tourism professionals, educators, and AI developers seeking to better understand and serve younger audiences.

## Methodology

Figure 1 represents how we conducted the research.

### Data collection

The study began with the formulation of the following research question: *RQ: How do members of Generation Z and Generation Alpha experience, interpret, and use ChatGPT in tourism-related decision-making contexts?* A literature review was subsequently conducted to map the existing literature, refine the research focus, and support the development of theoretical sensitivity in line with qualitative research practices. After identifying the research gaps and refining the research question, a qualitative, Grounded Theory-informed research design (Corbin and Strauss, 1990) was adopted to explore emergent patterns of interaction and meaning-making. Data were collected in March 2024 through six face-to-face focus-group discussions conducted in quiet rooms at the participating schools and university. Purposive sampling was used to recruit participants from two age-based groups. The generational labels served as descriptive sampling categories: the Generation Alpha sample comprised participants aged 11–14, whereas the Generation Z sample comprised BSc students aged 20–24.

The Generation Alpha sample included 26 pupils recruited from several classes in Budapest primary schools with the assistance of homeroom teachers. The three Alpha focus groups consisted of 8, 8, and 10 participants. A teacher was present during these discussions for safeguarding and logistical purposes, while each discussion was led by one moderator. Before participation, written parental consent and the children's verbal assent were obtained. The

**Table. 1** Composition of the focus groups.

| Cohort and group     | <i>n</i> | Gender composition | Mean age | Duration |
|----------------------|----------|--------------------|----------|----------|
| Generation Alpha FG1 | 8        | 2 girls, 6 boys    | 12 years | 95 min   |
| Generation Alpha FG2 | 8        | 5 girls, 3 boys    | 12 years | 72 min   |
| Generation Alpha FG3 | 10       | 5 girls, 5 boys    | 14 years | 82 min   |
| Generation Z FG1     | 12       | 6 women, 6 men     | 22 years | 105 min  |
| Generation Z FG2     | 11       | 6 women, 5 men     | 22 years | 102 min  |
| Generation Z FG3     | 8        | 3 women, 5 men     | 23 years | 92 min   |

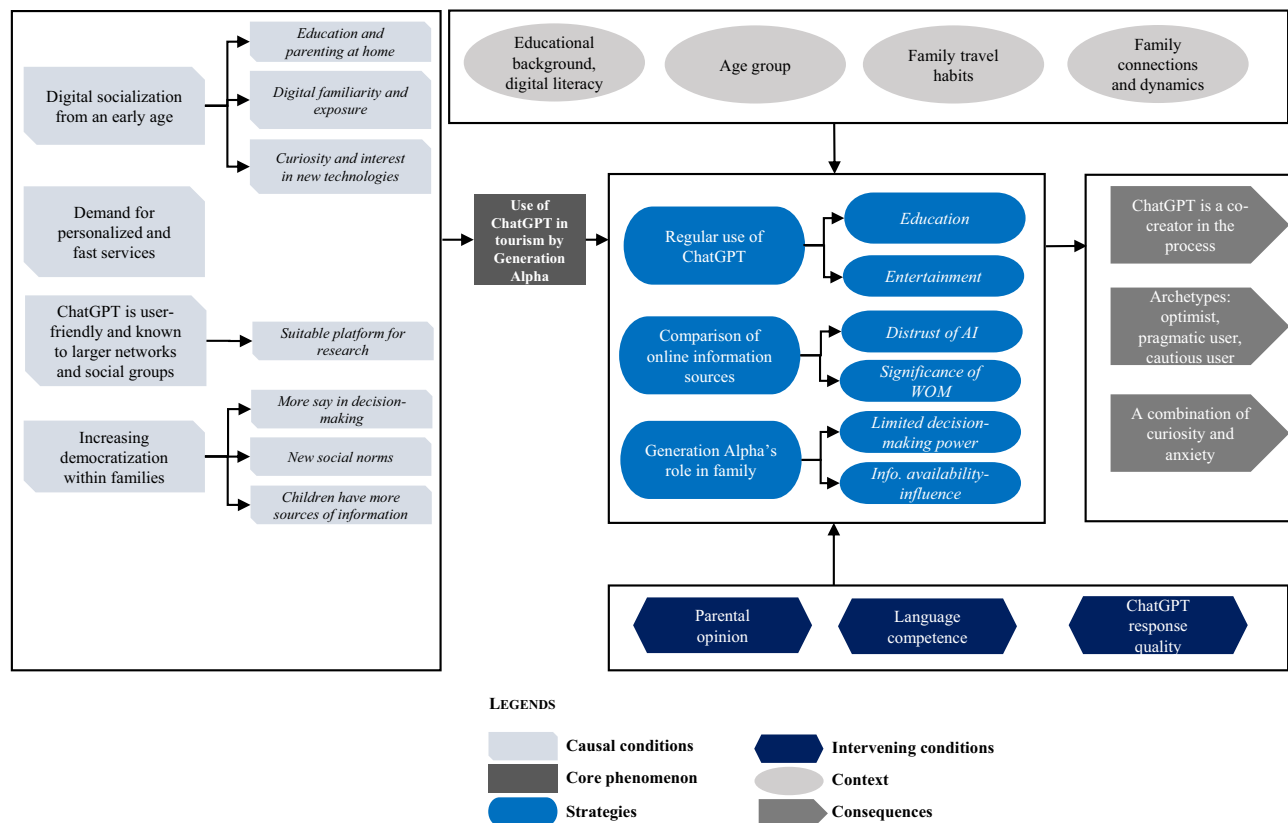
Generation Z sample included 31 BSc students recruited through university social-media platforms. The three focus groups consisted of 12, 11, and 8 participants and were each led by one moderator. Members of this cohort reported frequent general use of ChatGPT, although their prior use of the system specifically for travel planning varied. In the Alpha sample, only three participants reported previous travel-related use of ChatGPT.

The interview guide included questions about participants' previous experiences with ChatGPT as well as scenario-based questions concerning how they might use it for travel planning. In the Generation Alpha groups, participants were also shown the same ChatGPT-generated 5-day itinerary for a family trip to Siófok (Lake Balaton, Hungary) and were invited to evaluate and modify it. This common stimulus enabled participants with little or no previous AI-assisted travel-planning experience to discuss the perceived usefulness and limitations of the generated recommendations. Statements describing actual prior use were distinguished from hypothetical expectations during the subsequent analysis. The six focus groups contained between 8 and 12 participants and included 57 participants in total: 26 from Generation Alpha and 31 from Generation Z. The overall sample comprised 27 female and 30 male participants. Table 1 presents the composition and duration of the individual groups. No financial or other incentives were provided.

All discussions were conducted in Hungarian and audio-recorded. The recordings were transcribed verbatim by the second author. The Hungarian-language transcripts formed the basis of the analysis, and the quotations selected for inclusion in the manuscript were translated into English by the first author. Data collection and analysis were conducted iteratively, allowing emerging insights from earlier focus groups to inform subsequent discussions, in line with the constant comparative logic of Grounded Theory. A unified data structure was created to support theme clustering and coding.

## Data analysis

While classical GT discourages prior literature review (Glaser and Strauss, 1967), we followed Corbin and Strauss' (1990) enhanced framework that promotes the development of theoretical sensitivity through engagement with the relevant literature. Accordingly, literature insights were used as sensitizing concepts rather than as predefined categories imposed on the data. The analysis process consisted of memo writing and multi-level coding. During the research process, we used memo writing as a tool to record findings, compare theoretical reflections and support coding decisions. These memos also served to document analytical decisions and reflect on potential researcher assumptions, thereby enhancing transparency and reflexivity. The transcripts from the six groups were manually analyzed and organized in Microsoft Excel, allowing for continuous comparison of statements. The two cohorts were initially analyzed separately so that categories could be developed within each social and age-based context. Cross-group comparison was then used to identify convergent, divergent, and overlapping patterns. During the analysis, accounts of participants' previous use of ChatGPT were distinguished from responses to hypothetical scenarios or to the common itinerary stimulus. Hypothetical statements were interpreted as expectations, preferences, or anticipated practices and were not treated as evidence of established travel-planning behavior. The analysis also considered the interactional nature of focus-group data, including agreement, disagreement, and the ways in which participants elaborated on or challenged one another's statements.



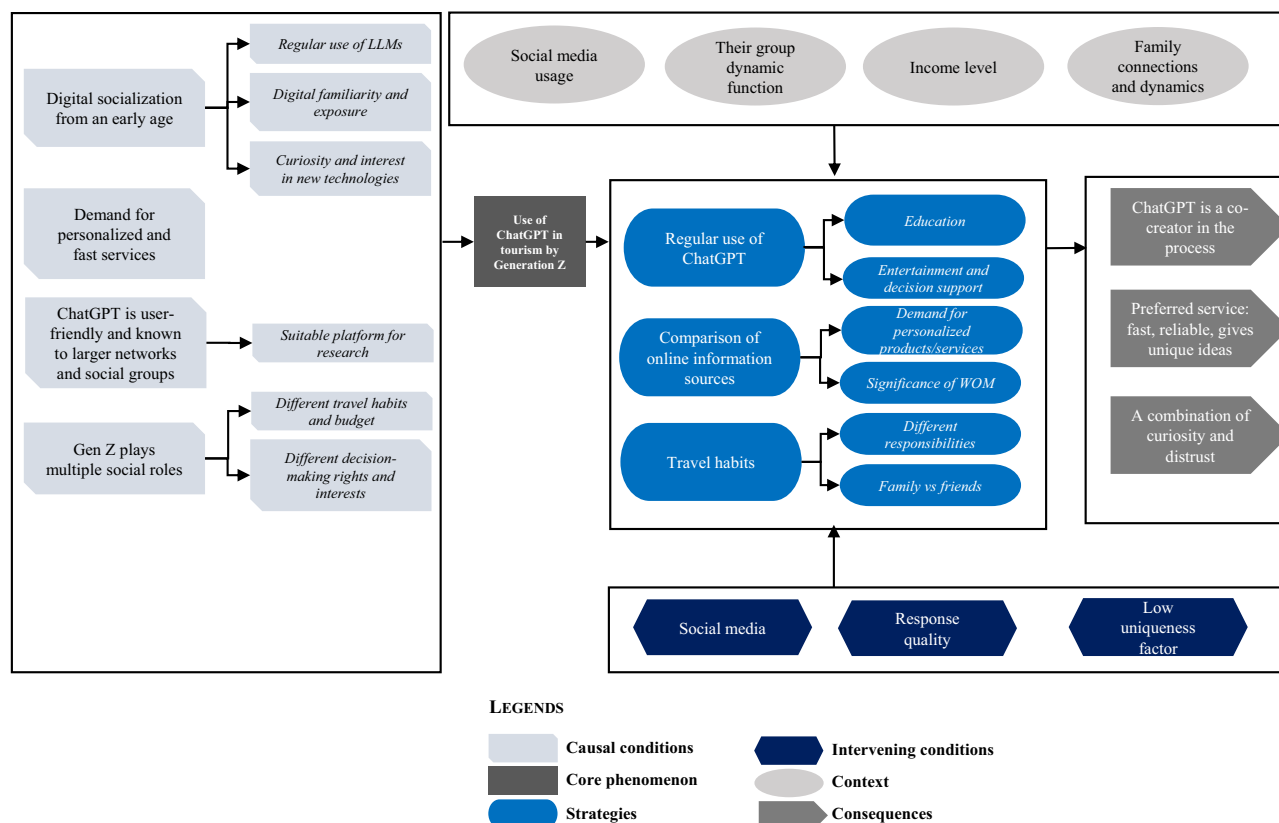
**Fig. 2 Axial coding—Generation Alpha.** Source: Authors' own editing.

## Coding

The coding process was informed by the three-step GT procedure established by Corbin and Strauss (1990):

- *Open coding*: initial categories were established based on recurring narratives.
- *Axial coding*: these clusters were further explored by examining relationships between categories. While the paradigm model (e.g., causal conditions, context, strategies, consequences) provided an analytical lens, categories were not mechanically imposed but iteratively refined based on patterns emerging from the data.
  - *Causal conditions*: deciding factors on the central phenomenon.
  - *Central phenomenon*: the core concept around which the data is structured. In this case: the use of ChatGPT in tourism by the two generations.
  - *Strategies*: actions or responses related to the central phenomenon.
  - *Context*: factors that shape the execution of strategies.
  - *Intervening conditions*: broader social or personal dynamics that impact strategies.
  - *Consequences*: short- or long-term results of the strategy execution.
  - *Selective coding*: the elements and findings of the axial coding were reorganized into a conceptual framework. The model should be understood as an interpretive, empirically grounded framework that synthesizes key patterns identified across the data.

Throughout the coding process, constant comparison was applied both within and across the two sampled groups to ensure that similarities, differences, and alternative interpretations were systematically considered, thereby reducing the risk of premature categorization or confirmation bias. Statements that contradicted or qualified the dominant



**Fig. 3 Axial coding—Generation Z.** Source: Authors' own editing.

patterns were retained as divergent cases and used to refine the developing categories. This procedure was particularly important because participants within the same cohort did not necessarily share identical attitudes, levels of autonomy, or previous experience with ChatGPT. This study is based on a limited and context-specific sample; therefore, the findings are not intended to be statistically generalizable but to provide analytical insights. While the analysis followed an iterative process, full theoretical saturation is not claimed. Additionally, prior literature was used as sensitizing input, which may have influenced interpretation, although constant comparison was applied to mitigate bias. Finally, the focus-group setting may have introduced group dynamic effects, which should be considered when interpreting the results.

## Results

The findings are presented in two stages. The axial coding models for Generation Alpha and Generation Z are discussed first (Figs. 2 and 3), followed by the GIFT framework developed through selective coding. GIFT is a conceptual synthesis of recurring and contrasting patterns in the data rather than a strictly linear outcome of coding. Because experiences varied within both groups, the analysis includes divergent and qualifying cases alongside the more common patterns.

## Perspectives of Gen Alpha

### Central phenomenon

Generation Alpha participants approached ChatGPT primarily as an exploratory assistant that could help generate and refine ideas for family travel. Their engagement was frequently playful, curiosity-driven, and connected to their broader educational and entertainment uses of the system. However, only three participants reported having previously used ChatGPT specifically for travel-related purposes. Consequently, many statements concerning tourism represented anticipated uses or responses to the common Siófok itinerary rather than accounts of established travel-planning behavior. Participants' evaluations combined enthusiasm with considerable variation in perceived authority. One participant expressed a highly optimistic view: *"I think it is smarter than we are, and the whole world has been fed into it, so it can surely be a great help"* (Alpha-FG2, girl, age 12). Such statements indicate perceived technological competence, but they should not be interpreted as evidence of uniformly uncritical trust across the cohort.

### Causal conditions

Early digital socialization contributed to participants' familiarity with conversational technologies and to their willingness to experiment with AI-generated suggestions. ChatGPT's speed, user-friendly interface, and ability to provide personalized responses were frequently perceived as attractive features. Familiarity through school, peers, family members, and online communities also appeared to normalize the platform and reinforce its legitimacy. Nevertheless, routine exposure to digital interfaces did not necessarily imply that participants accepted the generated information without evaluation. The children's growing participation in family decision-making also shaped their imagined use of ChatGPT. In many cases, the system was viewed as a means of proposing activities or expressing preferences within a planning process still controlled by adults. The degree of participation varied considerably. One boy described his preferred role as simply having to *"just pack and be happy about it"* (Alpha-FG1, boy, age 12), whereas another explained that he and his sister were responsible for searching for accommodation and flights before their parents checked the available options (Alpha participant, boy, age 12). These contrasting accounts show that decision-making autonomy differed even among participants of a similar age.

### Contextual conditions

Participants' engagement with ChatGPT was shaped by age, educational experience, family travel habits, parental attitudes, and prior exposure to AI. Younger age generally limited their authority over budgets, bookings, and final destination choices, while leaving space for imaginative exploration and suggestions concerning activities. Children from families in which travel planning was discussed collaboratively appeared more able to position themselves as active contributors. Differences in digital reflexivity were also evident. Familiarity with digital technologies did not automatically translate into systematic credibility assessment. Some participants initially treated the system's fluency as an indication of knowledge, whereas others immediately questioned whether the itinerary was realistic or current. Family mediation was particularly important: parental or older-sibling evaluation often functioned as an additional layer of verification, meaning that reliance on ChatGPT was embedded in a broader family decision structure rather than based solely on the child's individual judgment.

### Intervening conditions

Parental approval acted as a gatekeeping condition affecting whether and how freely children could experiment with ChatGPT. Participants also identified response quality as a central determinant of usefulness. Detailed and clearly structured recommendations encouraged further engagement, whereas generic, unrealistic, or potentially outdated

information reduced confidence in the output. Language competence was mentioned as a further condition that could affect the formulation of prompts and the relevance of responses.

The common Siófok itinerary made these evaluative processes observable. Although participants generally considered the itinerary useful, they criticized the number and sequence of activities and stated that they would not follow it without modifications. They also proposed checking details through tourism websites, Google Maps, Booking.com, social media, airline websites, destination websites, and travel guides. These reactions demonstrate emerging credibility assessment rather than either unconditional acceptance or complete rejection of the system.

## Strategies

Participants described using ChatGPT generally for education, entertainment, and curiosity, while travel-specific use remained limited. In evaluating the common itinerary, they compared ChatGPT's output with other online sources and proposed additional prompts concerning activity sequencing, weather alternatives, cost, routes, and more creative programmes. This iterative prompting was perceived as improving both the relevance and the distinctiveness of the itinerary. The process also allowed participants to incorporate their own preferences into the AI-generated plan. As one participant explained, *"I am especially happy that the holiday now includes not only the machine's ideas but ours as well. I think that is really good"* (Alpha-FG1, girl, age 11). This illustrates a form of co-creation in which the initial AI-generated output serves as a provisional draft that is questioned and modified rather than accepted as a finished travel plan. A minority position further qualified the dominant pattern. Some participants in the third focus group stated that they would not want to use ChatGPT for travel planning because their families enjoyed planning holidays together and they did not wish to delegate even part of this activity to an AI system. Thus, efficiency was not universally valued when it was perceived as replacing a meaningful family practice.

## Consequences

Three broad orientations emerged among the Generation Alpha participants: optimistic, pragmatic, and cautious engagement. These orientations are heuristic descriptions rather than fixed user types, as individual participants sometimes moved between enthusiasm, functional evaluation, and skepticism during the discussions. ChatGPT was generally positioned as a potential co-creator or exploratory assistant rather than as the final decision-maker. It could provide an initial itinerary, suggest activities, and help participants express preferences, but final validation remained with children, parents, or other information sources. The perceived value of the system therefore resulted from the interaction between technological output, user modification, and family negotiation. Curiosity also coexisted with anxiety about accuracy, dependence, and the broader effects of automation. This ambivalence was captured by one participant's observation that *"the smarter our machines become, the less smart we become"* (Alpha-FG1, girl, age 12). Rather than representing a simple contradiction, the combination of enthusiasm and concern suggests that participants were beginning to negotiate both the opportunities and the perceived risks of AI-assisted decision-making.

## Perspectives of Gen Z

Figure 3 represents the results of the axial coding process, focusing on Gen Z perspectives.

### Central phenomenon

Generation Z participants generally described ChatGPT as a multi-purpose resource for information seeking, idea generation, and the initial organization of travel options. General use of ChatGPT was frequent within this sample, although prior use specifically for travel planning varied. Its perceived role therefore ranged from an already integrated planning resource to a tool participants anticipated using in future situations. Compared with the younger

participants, the Generation Z students generally described greater authority over destination choice, budgeting, accommodation, and travel with friends or partners. Nevertheless, their engagement with ChatGPT remained context-dependent. Participants were more willing to use it for early-stage exploration or low-stakes brainstorming than to treat it as the sole basis for bookings or final decisions. As one participant summarized, “*ChatGPT is a starting point or a source of ideas, not the sole decision-maker*” (Z-FG3, man, age 24).

### Causal conditions

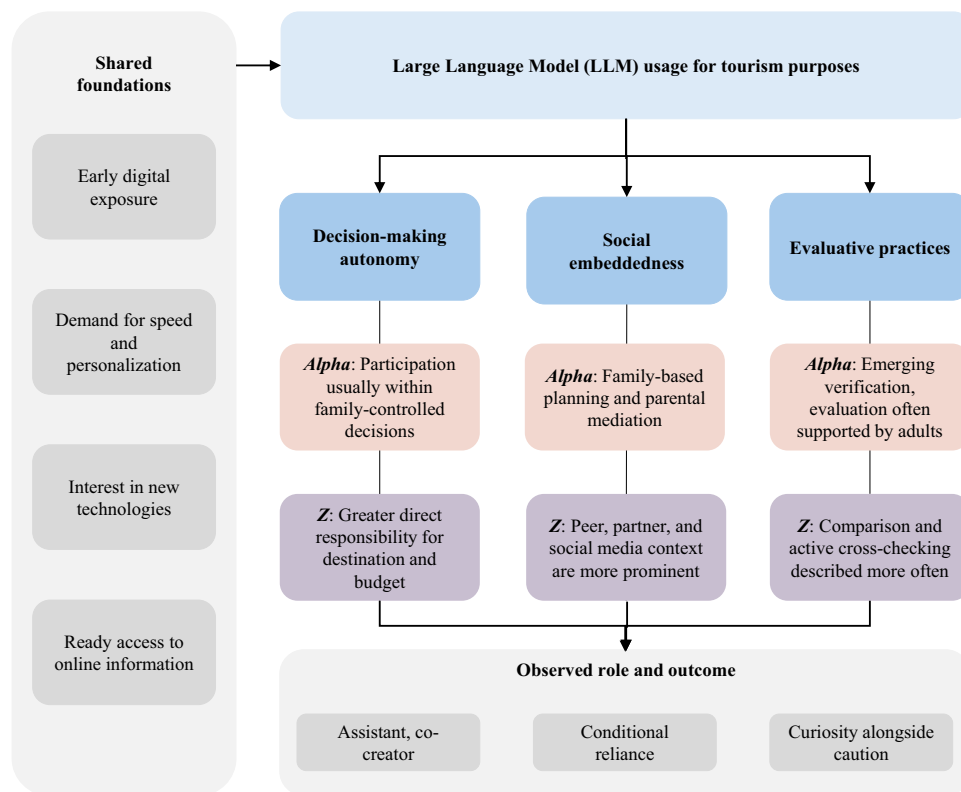
Early and sustained exposure to digital platforms supported participants’ operational familiarity with AI interfaces. However, such familiarity frequently coexisted with reflective comparison across platforms. Participants positioned ChatGPT within a broader information environment that included search engines, social media, review platforms, mapping applications, and booking websites. Speed and personalization were important service expectations. ChatGPT was valued when it reduced the time required to generate an initial set of alternatives or adapted suggestions to specific interests. Conversely, outputs perceived as generic, repetitive, or insufficiently tailored were considered to offer little advantage over conventional search tools. Peer use and wider online discussion also legitimized experimentation with ChatGPT, although social familiarity did not remove concerns about reliability. Participants’ multiple roles as students, family members, friends, partners, and sometimes independent travelers further shaped how they evaluated the system. The usefulness of AI-generated information depended on whether it supported the requirements of the particular travel situation, group composition, and distribution of planning responsibilities.

### Contextual conditions

Social-media content influenced both destination inspiration and participants’ standards for novelty, visual appeal, and authenticity. Viral content, influencers, and short-form videos provided experiential and socially validated information that text-based AI recommendations did not always reproduce. ChatGPT was therefore rarely evaluated in isolation; participants assessed whether its suggestions aligned with or added value to information obtained from other platforms. Group dynamics also influenced usage. In collaborative travel planning, participants described different roles, including initiating ideas, comparing options, managing budgets, and challenging suggestions. In this setting, ChatGPT could function as a relatively neutral starting point for discussion, but its recommendations still had to be negotiated within the group. Budget and income constraints constituted further contextual conditions, particularly when suggestions were financially unrealistic or lacked sufficient cost information. Although the students had greater independence than the Alpha participants, family expectations and responsibilities remained relevant in some travel contexts. Their autonomy was therefore neither complete nor uniform, and it varied depending on whether they were traveling independently, with friends or partners, or with family members.

### Intervening conditions

Response quality strongly influenced continued use. Participants valued precise, actionable, and contextually specific information, whereas vague or repetitive answers reduced perceived usefulness. A lack of uniqueness emerged as a particularly important concern: recommendations that reproduced widely available or highly generic suggestions were considered less valuable than content offering novel, lesser-known, or creatively combined options. Negative experiences did not necessarily lead to the rejection of ChatGPT. Instead, they often prompted participants to reformulate prompts or verify the output through other platforms. This indicates that perceived shortcomings could generate additional evaluative activity rather than simple non-use. Social-media aesthetics and peer endorsement also affected the appeal of recommendations but did not automatically establish their factual credibility.



**Fig. 4 Selective coding—GIFT—Generational Interpretations of Future-oriented Technologies.** Note: Cohort patterns are tendencies observed in the present sample and are not intended as fixed generational traits. Source: Authors' own editing.

## Strategies

Generation Z participants integrated ChatGPT into a broader repertoire of digital resources, including Google, Google Maps, Booking.com, social media, and review-based platforms. Their general use of the system was often regular, but travel-planning practices varied according to prior experience and the perceived importance of the decision. Participants described switching between platforms according to whether they required inspiration, logistical information, prices, reviews, maps, or confirmation of current details. AI-generated recommendations were commonly described as requiring comparison with peer reviews, social-media content, booking platforms, or official sources. Such cross-checking should not be interpreted simply as low trust. Rather, it represents a pragmatic form of epistemic vigilance in which users assess the relevance, credibility, and feasibility of information before incorporating it into a decision. As one participant explained, *"I check ChatGPT's answers against Google, Facebook, or official sources"* (Z-FG1, woman, age 22). Travel context also influenced strategy. Participants could use ChatGPT independently when exploring options, but they could also introduce its suggestions into discussions with friends, partners, or family members. Its role therefore shifted between individual cognitive support and collaborative planning assistance.

## Consequences

ChatGPT was primarily perceived as an idea-sparring partner or co-creative assistant rather than as a final authority. It could generate a preliminary itinerary, organize options, or offer an initial direction, after which users refined, compared, and selectively incorporated the recommendations. Its co-creative role was therefore linked to iterative interaction and user modification rather than to one-off automated decision-making. The preferred service was fast, reliable, personalized, and capable of producing distinctive ideas. Speed alone was insufficient when the output appeared generic or failed to reflect budget, group composition, or specific travel interests. Participants' evaluations

therefore involved a tension between convenience and the desire for authenticity and uniqueness. As one participant explained, “*Sometimes it bothers me that the system provides overly generic answers. There is also a considerable risk of unreliable outputs, which is particularly concerning in travel planning*” (Z-FG2, woman, age 23). Overall, curiosity and skepticism coexisted within the Generation Z discussions. Participants remained willing to experiment with ChatGPT, particularly during early and low-risk planning stages, while questioning the accuracy, originality, and timeliness of its recommendations. This pattern is better characterized as conditional and evaluative reliance than as either trust or distrust in a general sense.

### Selective coding

The final selective coding stage integrates both generational axial models into a framework of how LLMs, specifically ChatGPT, are perceived and used in tourism-related contexts by Generation Alpha and Generation Z. While both cohorts share common ground in digital nativity and demand for fast, personalized services, the analysis points to recurring patterns of variation related to autonomy, social context, and evaluative practices, rather than clearly bounded or universally applicable generational differences (Fig. 4).

### Shared foundations across generations

At the core of the model is the use of ChatGPT in tourism. Participants in both cohorts reported substantial familiarity with digital technologies, shaped by early exposure, education, family, and everyday media use. This familiarity should not be interpreted as a measured level of digital literacy. The popularity of LLMs and the ready availability of online information create a shared environment in which AI-assisted planning can appear normal. Both groups also valued speed and personalization. ChatGPT was often treated as a convenient starting point for ideas, although reliance and depth of engagement varied. These shared foundations matter because the GIFT framework is intended to explain patterns within a common digital environment rather than to portray the cohorts as wholly distinct.

### Generational distinctions

The distinctions shown in Fig. 4 are tendencies in this sample and often overlap. The GIFT framework organizes them around three dimensions. Decision-making autonomy concerns who has authority to propose, evaluate, and finalize travel choices. Generation Alpha participants were more often situated within family-controlled planning, whereas Generation Z participants described greater direct responsibility for budgets, destinations, and arrangements, though this was not uniform. Social embeddedness captures the people and platforms involved in planning. Alpha accounts were more strongly family-based; Z accounts more often included friends, partners, peers, and social-media input. Evaluative practices concern how AI-generated suggestions are judged. Generation Z participants more frequently described active comparison and cross-checking, while Alpha participants more often described emerging verification supported by parents or other sources. These patterns are better understood as differences in how credibility is assessed, and responsibility is distributed than as simple differences in trust.

### Ambivalence and dual contributions

The same affordance could be interpreted differently depending on the planning context. Speed and automation, for instance, could make ChatGPT convenient while also raising concerns about generic or unoriginal suggestions. Family or peer involvement could expand a participant’s role in planning but could also introduce further negotiation. GIFT therefore treats ambivalence as a feature of situated use rather than as a cohort trait. Across both groups, ChatGPT was described as useful for exploration, while reliance remained conditional on who held decision authority, who else participated in planning, and how the output was checked. These observations place decision-making autonomy, social embeddedness, and evaluative practices at the center of the framework. Together, they help

explain why the same system can be experienced as convenient or questionable in different situations. GIFT is an empirically grounded synthesis of this sample and should not be read as a typology that fixes individuals into generational categories.

## Discussion and conclusion

### Main findings and theoretical insights

This study contributes to a deeper understanding of how young generations interpret and utilize LLMs in tourism-related contexts. Using a comparative, Grounded Theory–informed approach, we explored the meanings and social functions that ChatGPT assumes for Generation Alpha and Generation Z. The findings point to patterns of variation in how AI is integrated into decision-making processes, shaped by social context, developmental stage, and evaluative practices. The resulting *GIFT framework (Generational Interpretations of Future-oriented Technologies)* highlights that differences in AI usage are closely related to social positioning and decision-making environments. Although participants in both cohorts were familiar with digital environments and had prior exposure to LLMs, their interaction patterns and expectations differed in context-dependent ways shaped by decision-making autonomy, social setting, and also prior experience. Generation Alpha, typically embedded in family-based decision structures, uses ChatGPT as a shortcut and a source of cognitive support. Their engagement is often shaped by delegated authority and familiarity with digital systems. In contrast, Generation Z more frequently demonstrates a reflexive and comparative approach, evaluating AI outputs against multiple sources and integrating them into broader decision-making processes. Importantly, these differences are better understood as variations in evaluative strategies, such as reliance, comparison, and verification, rather than as simple differences in “trust” or competence. A key contribution of this study lies in conceptualizing LLMs as socially situated actors whose perceived value and role are dynamically negotiated. In this sense, co-creation with AI differs from traditional human co-creation by involving iterative interaction with algorithmically generated content, where users simultaneously explore and evaluate outputs. This highlights the fluid and context-dependent roles AI can play in experiential domains such as tourism planning. Moreover, our findings extend existing technology acceptance perspectives by identifying *ambivalence as a central feature of youth–AI interaction*. Both Alpha and Z users simultaneously exhibit curiosity and caution, suggesting that engagement with AI involves an ongoing balancing between exploration and evaluation. *This ambivalence reflects an adaptive response to the epistemic uncertainty and perceived limitations of AI-generated content*. The identified user personas (e.g., optimistic, pragmatic, cautious, and critical) further indicate that AI engagement is not uniform even within generational cohorts. These personas should be interpreted as situational orientations rather than stable user types. Finally, this study contributes to the conceptualization of digital literacy by linking it to decision-making agency and social embeddedness. The findings suggest that meaningful engagement with LLMs involves the ability to navigate multiple sources, interpret outputs contextually, and negotiate their role within social settings (e.g., family or peer groups). Overall, the GIFT framework should be understood as an exploratory, context-sensitive model that captures patterns of interaction rather than offering a universal theory, thereby providing a foundation for further empirical refinement.

### Practical contributions

The insights derived from this study carry important implications for tourism professionals, platform designers, educators, and policymakers seeking to harness AI-based tools such as ChatGPT in a socially responsive and generation-sensitive manner.

*Context-sensitive AI design for youth users:* rather than assuming uniform generational preferences, the findings suggest that AI-based tourism services should be adaptable to different usage contexts. For younger users (e.g., Generation Alpha), interfaces that support guided exploration, visual interaction, and parental involvement may

enhance usability. For older users (e.g., Generation Z), features that enable comparison, customization, and transparency—such as linking AI-generated itineraries to peer reviews or real-time booking data—can better align with their evaluative practices.

*Enhancing credibility and transparency in tourism applications:* across both cohorts, engagement with AI is shaped by ongoing credibility assessment. Tourism platforms integrating generative AI may therefore benefit from features that make information sources more visible, allow users to verify recommendations, or provide alternative perspectives (e.g., user-generated reviews vs. AI-generated suggestions).

*Supporting youth participation in travel planning:* the findings highlight the increasing role of young users as co-decision-makers in tourism contexts. AI-enabled tools can support this by facilitating collaborative planning within families or peer groups, for example through shared itinerary builders or interactive recommendation systems.

*Developing AI-critical digital literacy:* the study underscores the importance of technical familiarity together with critical engagement with AI-generated content. Educational initiatives may therefore address credibility assessment, algorithmic bias, and responsible AI use in ways that connect these issues to everyday decision-making.

*Ethical considerations in youth–AI interaction:* as generative AI becomes embedded in decision-making processes, particularly among younger users, issues related to data protection, age-appropriate design, and transparency become increasingly important. Tourism platforms should consider implementing age-sensitive design features and clear communication practices to support safe and informed use.

## Limitations and future research directions

This study draws on a limited, context-specific sample recruited from schools and university communities in Budapest, Hungary. It may therefore not capture the socio-economic, geographic, educational, or cultural diversity of young users. The findings are qualitative and are not statistically generalizable. Focus-group dynamics may also have shaped the discussion, and the presence of a teacher in the Generation Alpha groups could have affected how freely some younger participants expressed disagreement or criticism. The comparison between the sampled cohorts is another important limitation. Generation Alpha participants were 11–14-year-old school pupils, whereas Generation Z participants were 20–24-year-old BSc students. Cohort membership was therefore intertwined with age, developmental stage, education, travel experience, family dependence, and decision-making autonomy. The observed differences cannot be attributed uniquely to generation. Travel-specific use of ChatGPT was also limited among the Alpha participants and varied within the Generation Z sample, so part of the analysis concerns reactions to a common itinerary or hypothetical future use rather than established planning practices. Formal institutional ethics approval was obtained retrospectively rather than before data collection. Although informed consent, assent, anonymization, and low-risk procedures were used, the absence of prospective committee review remains a limitation. Future research could test the broader applicability of GIFT through quantitative or mixed-method designs and follow perceptions of AI over time. Observational work would be valuable for capturing real-life LLM use. Studies that compare participants of similar ages, educational backgrounds, or levels of decision-making autonomy could also help separate cohort effects from developmental and social factors. Future work should distinguish more systematically between actual and hypothetical AI-assisted travel planning and examine whether the framework transfers to domains beyond tourism.

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## Declarations

**Competing interests** The authors declare no competing interests.

**Ethical approval** This study was reviewed and approved by the Corvinus University of Budapest Research Ethics Committee (Hungary). Approval ID: KRH/250/2025. Date of approval: 17 October 2025. Ethical approval was obtained retrospectively, after the data collection was completed. At the time of conducting the focus group interviews, all participants (and guardians, in the case of minors) had already provided written informed consent, in line with international ethical guidelines. Given that the research involved non-invasive, low-risk, anonymized group discussions without any sensitive topics or interventions, the retrospective approval process was acceptable under institutional policy. The ethics committee reviewed all relevant documentation (e.g., consent forms, anonymization procedures, recruitment protocols) before granting the official approval. The study was conducted in accordance with the university's Rectoral Provision No. 2/2020 (V.26) and complied with internationally accepted research ethics standards.

**Informed consent** All adult participants provided written informed consent prior to participation. For participants under 18 years of age, written consent was obtained from their parents or legal guardians, and verbal assent was obtained from the minors themselves before data collection. All participants were informed about the study's purpose, their right to withdraw at any time, and the anonymous handling of their responses.

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## References

- Ali F, Yasar B, Ali L, Dogan S (2023) Antecedents and consequences of travelers' trust towards personalized travel recommendations offered by ChatGPT. *Int J Hosp Manag* 114:103588. <https://doi.org/10.1016/j.ijhm.2023.103588>
- Altınay Z, Altınay F, Tlili A, Vatankhah S (2024) "Keep your friends close, but your enemies closer:" ChatGPT in tourism and hospitality. *J Hosp Tour Technol*. <https://doi.org/10.1108/JHTT-03-2024-0139>
- Chiang YC, Su C-J, Liao H-H, Chaudhary M, Lan Y-F (2022) Children's dominance in family vacation decision-making (FVDM): a multi-national analysis. *Tour Rev* 77(3):796–814. <https://doi.org/10.1108/TR-07-2020-0317>
- Drugas M (2022) Screenagers or" Screamingers"? Current perspectives on Generation Alpha. *Psychol Thought* 15(1):1. <https://doi.org/10.37708/psyc.v15i1.732>
- Dwivedi YK, Hughes L, Wang Y, Alalwan AA, Ahn SJ, Balakrishnan J, Barta S, Belk R, Buhalis D, Dutot V, Felix R, Filieri R, Flavián C, Gustafsson A, Hinsch C, Hollensen S, Jain V, Kim J, Krishen AS, Wirtz J (2023) Metaverse marketing: How the metaverse will shape the future of consumer research and practice. *Psychol Mark* 40(4):750–776. <https://doi.org/10.1002/mar.21767>
- Elkatmış M (2024) Examination of social media usage habits of Generation Z. *Front Psychol* 15: 1370823. <https://doi.org/10.3389/fpsyg.2024.1370823>
- Emiroğlu B (2023) Consumer behaviour of Generation Alpha in tourism. *J Eurasia Tour Res* 4(Türk Turizminin Geçmiş ve Gelecek Yüzyılı):90–97. <https://dergipark.org.tr/en/pub/atadergi/issue/80632/1362015>
- Gibson F (2024) Reading vs screening: the development of Generation Alpha. Regis University Student Publications (comprehensive collection). <https://epublications.regis.edu/theses/1126>
- Glikson E, Woolley AW (2020) Human trust in artificial intelligence: review of empirical research. *Acad Manag Ann* 14(2):627–660. <https://doi.org/10.5465/annals.2018.0057>
- Greene J (2023) ChatGPT (software)—EBSCO. Salem Press Encyclopedia of Science. <https://research.ebsco.com/c/n3fo33/viewer/html/qgjo3a7spv>
- Gursoy D, Li Y, Song H (2023) ChatGPT and the hospitality and tourism industry: an overview of current trends and future research directions. *J Hosp Mark Manag* 32(5):579–592. <https://doi.org/10.1080/19368623.2023.2211993>
- Hu J, Lin B (2026) What is next for travel innovation? Generative artificial intelligence (GAI) in tourism product development from multi-perspectives. *Asia Pac J Tour Res* 31(1):130–149. <https://doi.org/10.1080/10941665.2025.2568617>
- Jarrahi MH, Karami A, Park L, Jarrahi E, Lutz C (2026) Anthropomorphizing AI: perceptions, interpretations, and the humanization of generative AI. *Soc Media + Soc* 12(3):1–15. <https://doi.org/10.1177/20563051261469393>

- Kaplan-Berkley S (2022) Digital tools and streaming media converge to inspire social interactions of Generation Alpha. *Int J Early Child* 54(2):185–201. <https://doi.org/10.1007/s13158-021-00301-y>
- Karami A, Lutz C, Jarrahi MH, Park L, Jarrahi E (2026) Anthropomorphic behaviors of AI. Preprint at <https://doi.org/10.48550/arXiv.2607.18247>
- Kim J, Moon J (2025) Determinants of usefulness of ChatGPT for learning in technology acceptance model (TAM) using information credibility, fun, and responsiveness and moderating role of fun. *SAGE Open* 15(1):21582440251320173. <https://doi.org/10.1177/21582440251320173>
- Kirschner PA, De Bruyckere P (2017) The myths of the digital native and the multitasker. *Teach Teach Educ* 67:135–142. <https://doi.org/10.1016/j.tate.2017.06.001>
- Larson A (2023) Large language model (LLM). *EBSCO Research Starters*
- Lin B, Huang L, Wang C (2025) Virtual tourism destination ambassadors enhancing social media engagement: technology mindfulness perspectives. *J Vacat Mark* 13567667251400785. <https://doi.org/10.1177/13567667251400785>
- Lin B, Lee W, Wise N, Choi HC (2024) Consumers' ethical perceptions of autonomous service robots in hotels. *J Hosp Tour Res* 48(6):964–974. <https://doi.org/10.1177/10963480231194693>
- Mich L, Garigliano R (2023) ChatGPT for e-Tourism: a technological perspective. *Inf Technol Tour* 25(1):1–12. <https://doi.org/10.1007/s40558-023-00248-x>
- Nass C, Moon Y (2000) Machines and mindlessness: social responses to computers. *J Soc Issues* 56(1):81–103. <https://doi.org/10.1111/0022-4537.00153>
- Prahalad CK, Ramaswamy V (2004) Co-creating unique value with customers. *Strategy Leadersh* 32(3):4–9. <https://doi.org/10.1108/10878570410699249>
- Prensky M (2001) Digital natives, digital immigrants. *Horizon* 9(5):1–6. <https://doi.org/10.1108/10748120110424816>
- Rathore B (2023) Future of AI & Generation Alpha: ChatGPT beyond boundaries. *EDUZONE Int Peer Rev/Ref Multidiscip J (EIPRMJ)*. [https://www.researchgate.net/profile/Bharati-Rathore-2/publication/368960777\\_Future\\_of\\_AI\\_Generation\\_Alpha\\_ChatGPT\\_beyond\\_Boundaries/links/6401c77fb1704f343f9d0578/Future-of-AI-Generation-Alpha-ChatGPT-beyond-Boundaries.pdf](https://www.researchgate.net/profile/Bharati-Rathore-2/publication/368960777_Future_of_AI_Generation_Alpha_ChatGPT_beyond_Boundaries/links/6401c77fb1704f343f9d0578/Future-of-AI-Generation-Alpha-ChatGPT-beyond-Boundaries.pdf)
- Reschke M (2024) Generation Alpha: online habits and media preferences by the numbers. *Basis Technologies*. <https://basis.com/blog/generation-alpha-online-habits-and-media-preferences-by-the-numbers>
- Shi J, Lee M, Girish VG, Xiao G, Lee CK (2024) Embracing the ChatGPT revolution: unlocking new horizons for tourism. *J Hosp Tour Technol* 15(3):433–448. <https://doi.org/10.1108/JHTT-07-2023-0203>
- Solomovich L, Abraham V (2026) Exploring the influence of ChatGPT on tourism behavior using the technology acceptance model. *Tour Rev*. <https://doi.org/10.1108/TR-10-2023-0697>
- Sperber D, Clément F, Heintz C, Mascaro O, Mercier H, Origgi G, Wilson D (2010) Epistemic vigilance. *Mind Lang* 25(4):359–393. <https://doi.org/10.1111/j.1468-0017.2010.01394.x>
- Sundar SS (2020) Rise of machine agency: a framework for studying the psychology of human–AI interaction. *J Comput-Mediat Commun* 25(1):74–88. <https://doi.org/10.1093/jcmc/zmz026>
- Yilmaz H, Maxutov S, Baitekov A, Balta N (2023) Student attitudes towards ChatGPT: a technology acceptance model survey. *Int Educ Rev* 1(1):57–83. <https://doi.org/10.58693/ier.114>
- Zhang Y, Prebensen NK (2024) Co-creating with ChatGPT for tourism marketing materials. *Ann Tour Res Empir Insights* 5(1):100124. <https://doi.org/10.1016/j.annale.2024.100124>

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