

User Experience Deficiencies in Mobile Tourism Applications: A Preliminary Study from Generation Z and Tourism Practitioners

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Abstract—While previous research has broadly explored the user experience of mobile tourism applications (MTAs), few have examined user experience deficiencies from the dual perspectives of both tourism practitioners and Generation Z adults. This preliminary study sought to investigate user experience deficiencies present in MTA, with an emphasis on Generation Z adults. This study analysed the viewpoints of tourism practitioners and Generation Z users on MTA and revealed commonalities in their perspectives. Data was collected through semi-structured interviews with five tourism practitioners and eight Generation Z adults. Thematic analysis was used to identify key themes. The results revealed that the two groups of respondents held complementary perspectives on user experience deficiencies faced by MTA users. The findings reveal that numerous MTAs are plagued by perplexing information architecture, unappealing interfaces, and inadequate emotional resonance. This study transcends the systemic limitations and usability challenges identified in previous studies, concentrating on functionality issues, and offers initial practical suggestions for developers and designers to create user-centric interface designs.

Keywords—Mobile tourism applications; Generation Z; tourism practitioners; user experience; preliminary study

I. INTRODUCTION

User experience is a critical element that determines user engagement when users adopt mobile applications [1]. Mobile applications in tourism serve dual purposes as functional tools and essential elements that affect how travellers experience their journeys [2]. The user experience of MTA has become a popular research topic in recent years, with researchers studying usability [3], technology [4], and user acceptance [5]. Research into user experience elements that prevent users from engaging with MTA continues to lack sufficient investigation [6-8]. The tourism industry has experienced a rapid digital transformation through artificial intelligence and mixed reality technologies, leading to the revolutionisation of travel planning, experience sharing, and user engagement by MTA [9]. Existing research has not fully explored the limitations of MTA on user experience [6] [8].

There is little focus on the critical elements affecting user experience in MTA, especially the interface. While many researchers have addressed user experience issues in MTA in recent years, most studies remain limited to a single user or developer perspective. From a user perspective, existing research has emphasized user acceptance [10][11] and factors

influencing user experience [12-14]. These existing studies have mainly focused on three aspects: 1) users' willingness and intention to adopt MTA [15] [16]; 2) the functions and features that users are interested in [17] [18]; and 3) the perceived usability and ease of use of user interfaces [16][19][20]. In addition, a small number of researchers have studied the implementation of effective mobile tourism service systems from the perspective of developers [21]. Although current research has achieved some results on interface user experience, few studies have combined the dual perspectives of tourism practitioners and users to find out the deficiencies in the design of these interface user experiences. The lack of this dual perspective may lead to a deficient understanding of the user's authentic experience, resulting in an excessive reliance on subjective opinions or a failure to identify needs and pain points that users may not be aware of, severely hindering user engagement [4]. Among numerous user groups, Generation Z (born between 1995 and 2010) [22] remains underrepresented in current research [23] [24]. Comprehending the authentic user experience of MTA among Generation Z is essential, considering their significant dependence on mobile platforms as search engines for travel information [23]. Current study on Generation Z's engagement with MTA predominantly utilises quantitative methodologies, prioritising usage intentions and lacking qualitative investigations that examine authentic user experiences [4][9].

Consequently, this study aims to systematically identify user experience deficiencies in MTA from the perspectives of both tourism practitioners and Generation Z, focusing on user interfaces. This study specifically examines Generation Z adults, grounded in ethical and methodological considerations. The main objective of this study is to identify current user experience deficiencies of MTA among Generation Z adults, particularly in terms of the user interface.

II. METHODS

A. Study Design, Setting, and Participants

This study employed an exploratory qualitative approach to understand the perspectives of tourism practitioners and Generation Z adults on MTA interfaces. The research findings will help developers or designers develop more user-friendly MTA interface design strategies. This may reduce user complaints, thereby enhancing user engagement with MTA and amplifying their enthusiasm for the visit. This study employed

thematic analysis, widely considered a scientifically valid qualitative research method [24], combined with inductive analysis. Qualitative thematic analysis has been used by numerous researchers in the field of human-computer interaction [24] to understand user feedback or user experience. To ensure credibility, this study was reported using the COREQ (the Consolidated Criteria for Reporting Qualitative Research 32-item checklist) [25].

This study invited travel agency staff and tour guides in Tianjin, China, as well as travel-loving Generation Z adults (from various provinces in China) to participate in semi-structured interviews. Purposive sampling was used for all interviewed tourism practitioners and Generation Z adults. Interviewees were selected based on their years of experience, position, and industry experience. Ten well-known travel agencies were identified online, and invitations were sent to each; five agencies agreed to participate and recommended qualified staff members. For Generation Z adults, snowball sampling was employed: three initial participants were identified, who then invited or recommended additional candidates. All Generation Z interviewees had travelled at least three times a year. The final interviewees included five tourism practitioners (see Table I) and eight Generation Z adults (see Table II).

B. Data Collection

All research procedures adhered to COREQ [25]. Between mid-March and early May 2025, the first author contacted potential interviewees via social media platforms to establish communication, obtain informed consent, and schedule interviews at their convenience. Interviews were conducted by the first author through WeChat voice or telephone, following a semi-structured guide developed and validated in Chinese and English by the first, second, and third authors.

The interview guide comprised two sections. For tourism practitioners, it covered four dimensions: policy and strategic initiatives, marketing and referral channels, overall user experience, and effectiveness evaluation in relation to the target group. For adult Generation Z users, it explored five dimensions: user background and travel preferences, app-usage behaviour, functional and content needs, user experience challenges, and evaluation or recommendation tendencies. All interviewees gave verbal informed consent, including permission for audio recording where applicable. Depending on individual preferences, some interviews were audio-recorded, while others were documented through detailed real-time notes. Practitioner interviews lasted 18-28 minutes (total=113min), and Generation Z interviews lasted 20-58 minutes (total=233 min). No interviewees received compensation.

C. Qualitative Analysis

Data were analysed using inductive thematic analysis in this study [24]. All interviews were transcribed verbatim by the first author. Most interviews were conducted in Chinese, with one in English. The first author, a native Chinese speaker fluent in English, translated all Chinese transcripts into English. These translations were verified by an independent bilingual researcher who was not involved in this study. The second and

third authors, both native English speakers, reviewed the translated transcripts for accuracy and consistency.

The analysis followed Braun and Clarke's six-phase approach. All authors first familiarized themselves with the data through repeated reading. The first and second authors independently conducted initial coding, using short phrases to capture barriers, facilitators, and design-related insights. Preliminary themes were then identified inductively. All researchers compared and discussed the two coding sets in several meetings to resolve discrepancies and strengthen analytical rigor. Through this collaborative process, the team developed an integrated thematic framework comprising both shared themes across interviewees and themes specific to each group. Data were organized and coded systematically using Microsoft Word, Excel 2025, and NVivo.

III. RESULTS

Thirteen participants participated in these semi-structured interviews, including five tourism practitioners (see Table I) and eight Generation Z users (see Table II). This study was an exploratory, preliminary study designed to explore potential user experience barriers in existing MTA interfaces. This preliminary study presents critical topics raised by both tourism practitioners and users, reflecting many contemporary perspectives on the user experience of MTA.

TABLE I CHARACTERISTICS OF TOURISM PRACTITIONERS

Respondent No.	Sex	Age	Years of experience	Race/Ethnicity
S01	Female	43	8	Asian
S02	Male	38	6	Asian
S03	Female	45	10	Asian
S04	Female	40	8	Asian
S05	Female	35	6	Asian

TABLE II CHARACTERISTICS OF GENERATION Z USERS

Respondent No.	Sex	Age	Number of trips/year	Race/Ethnicity
U01	Male	28	≥3	Asian
U02	Male	28	>3	Asian
U03	Female	28	>3	Asian
U04	Female	25	>8	Asian
U05	Female	23	>3	Asian
U06	Female	27	>5	Asian
U07	Male	26	>3	Asian
U08	Female	27	>5	Africans living in China

A. Lack of Attention to the Interaction Styles and Aesthetic Differences Among People of Different Age Groups

Tourism practitioners noted significant age-related differences in how people obtain travel information. They observed that older individuals rely primarily on word-of-mouth recommendations or traditional travel agencies, whereas younger people prefer mobile apps and digital media. As one practitioner noted, "Different age groups have different preferences: older people primarily rely on word of mouth or travel agencies, while younger people primarily use apps" (S01). Practitioners generally inferred that younger users

constitute the primary audience for MTA. Several also emphasized the potential market benefits of designing apps specifically for this demographic. For example, one practitioner stated, "If there were a tourism app specifically targeting younger people, it would be of great benefit to Tianjin's tourism industry, and even to China's tourism industry" (S04).

Practitioners consistently described younger users as technologically proficient and aesthetically demanding. They observed that younger users favour mobile apps offering creative, interactive, and visually distinctive experiences. As one participant stated, "They seek fun and innovative forms, but current apps lack many of the experiences young people enjoy" (S02). Another remarked that "Young people today have much higher expectations for electronic products than previous generations" (S05). Participants also noted the appeal of trendy design styles, such as cyberpunk-inspired aesthetics, in attracting younger audiences (S01). These insights suggest that age-sensitive interface design, particularly one that combines novelty, visual engagement, and authenticity, may enhance the emotional connection between young users and mobile tourism platforms.

B. Deficiency of Trust and Authenticity in MTA

Both tourism practitioners and users emphasized that the lack of authenticity and credibility in many MTAs undermines user trust and satisfaction. Many practitioners stated that users primarily rely on MTA such as Ctrip for booking functions, but turn to external social media platforms like Xiaohongshu and TikTok to obtain or verify travel information. They reported frequent user complaints about false advertising, overly retouched images, and unreliable reviews. One practitioner remarked that users "often cross-check information between platforms because they do not fully trust the content on tourism apps" (S02).

Users also regarded certain content as lacking credibility. Several users expressed concerns over excessive photo filtering and the prevalence of counterfeit reviews. One user stated, "This information is overly embellished, and even the reviews are from merchants posing as customers" (U06). Another user explained, "Some photos are so exaggerated that I feel like I've been deceived" (U03). To ascertain the veracity of information, certain individuals frequently corroborate it across other platforms. One user stated, "I usually use Xiaohongshu, Douyin, Weibo, and Mafengwo simultaneously to verify the authenticity of the same information" (U03). Another user utilised an approach they deemed distinctive, stating, "I always choose IDs with IP addresses because they are more likely to be recommendations from locals" (U03). The implementation of these strategies indicates users' scepticism about information, implying that the informational quality of the interface needs improvement.

These respondents' comments reveal widespread distrust of the content within MTA. This not only leads to a poor user experience but can also create negative emotions for users. This underscores the necessity for MTA to enhance its content.

C. Deficient in Visual Appeal and Emotional Engagement

A lack of aesthetic appeal and emotional engagement in interfaces can hinder user experience and even lead to abandonment. Tourism practitioners and users identify these challenges from varying viewpoints, although both underscore the significance of visual quality and the elicitation of positive emotions in fostering user engagement. Regarding this issue, one practitioner stated, "The tourism industry needs apps that inspire travel" (S01). Another directly identified this aspect as crucial, stating, "Downloads of travel apps have plummeted, primarily because the interface...fails to inspire users to explore" (S04). Users' perspectives provide insights into challenges that contribute to this predicament, augmenting the practitioners' opinions. One user commented on their frequently used interface, stating, "The light grey font is completely illegible, especially in sunlight... It seems like so many platforms use the same design template, which causes visual fatigue." Another user echoed this worry, stating, "While colour doesn't affect usage, it subconsciously influences target selection" (U08). Another user recounted their experiences with many apps, stating, "So far, no tourism application has attracted me, and no application's interface can really inspire my passion for travel" (U04).

Dissatisfaction among practitioners and users regarding the interfaces of existing MTAs highlights the significance of their ideal interfaces in driving enhancements. In other words, the ideal interfaces these respondents described represent a target for improvement. One practitioner noted, "An app that creates a positive impression on tourists will also increase their awareness of tourist attractions" (S04). The same practitioner also mentioned that "aesthetics is also a key factor". Users can provide more comprehensive replies concerning aesthetic criteria. One user described key colour requirements: "The interface must be simple, include authentic tourist reviews, and have bright and natural colours... Entering the platform creates a sense of freshness" (U05). Another user elaborated on their criteria for interface style from a specific emotional perspective: "Visual design must convey high quality and a pleasing tone... I think minimalism is very effective" (U06). One more practitioner stressed the point of visual presentation, as they noted: "If the presentation is innovative, diverse, and pleasing to the eye, people will be more inclined to explore the platform" (S05). One user commented: "Adding images, videos, or even 3D renderings would be even better" (U07).

These user demands suggest that current interfaces are boring and require new visual presentation styles. These factors may lead to diminished user engagement with MTA.

D. Deficiencies in Information Structure and Limited Functional Innovation

The interfaces of most MTAs suffer from information clutter and a lack of innovative functional design. Concerning information architecture, both practitioners and users highlight ambiguous interface structures and intricate module logic. One practitioner noted, "The interface design lacks sufficient intuitiveness, and the search and booking process is cumbersome" (S03). Another user further stated, "Before every trip, I compare options across multiple platforms, making the preparation process time-consuming and laborious" (U01). Yet

another user noted, “Most apps lack a coherent module categorization logic, resulting in an overabundance of information” (S02). Another user shared a similar sentiment, stating, “Some apps are overly information-intensive and overwhelming to navigate” (U05). The user replies indicate a deficiency in the information architecture of the interfaces of most contemporary MTAs. This issue not only impacts information navigation and the layout of information modules but also increases cognitive load for users.

The homogeneity of interface functionality further demonstrates the homogeneity of interfaces and reveals a lack of innovation. The observed information that concerns users are inherently connected to the interface’s functionality. Three practitioners (S01, S02, and S03) conducted an overall observation of mobile apps in the tourism industry and found that booking apps accounted for the majority. One practitioner noted, “Most customers search for travel guides on social media platforms and ultimately book through them, but few use them to explore itineraries” (S03). Another practitioner explained that current apps need improvement and offered specific suggestions: “For example, recommending relaxing or exciting itineraries based on travellers’ moods could stimulate their desire to explore” (S02). Users echoed this sentiment differently. One user believed that apps with “rich features and easy operation” were more appealing (U02). Regarding itinerary planning, one user stated, “I prefer itineraries that are locally relevant and well-organized. I don’t like making travel plans, but I love traveling” (U03). This indicates that although certain users obtain travel information from alternative social media platforms and utilise MTA for reservations, it also highlights the inadequacy of MTA as an essential instrument within the tourism industry.

E. The Interaction Design is Monotonous

Users’ expectations for interface interaction design have gone far beyond basic usability, pursuing interactive design that is both engaging and culturally relevant. Although most respondents find current interfaces monotonous, many also find interaction design boring. Some claim that the interaction design of the current MTA is tedious and dull, hindering user engagement and leading to a significant loss of tourists to their destinations. One practitioner stated, “If the content is rich, the steps are simple, and the interface is engaging, users will derive greater enjoyment from it... However, last month, a minor app interaction issue caused a group of customers to visit another tourist attraction” (S04). Another practitioner stated, “If an app has rich interactive features, a clear interface, and simple steps, users will find it interesting” (S05). This view is confirmed by user feedback. One user commented, “The interface design needs to be clear and smooth... If it’s too slow, I won’t use it” (U08). These responses demonstrate that good interaction is an essential condition for users to perceive a positive user experience when using an app.

Furthermore, some respondents emphasized the importance of incorporating cultural attributes into interaction design. A practitioner (S01) emphasised the significance of local attributes in web tools for a certain tourism location. As an online channel showcasing local culture, tourism apps should and need to incorporate local cultural characteristics. Another user supported this sentiment, stating, “I feel more engaged if

the interface has a local feel” (U07). Yet another user stated, “I prefer products that reflect local culture and design” (U08).

This demonstrates that interaction design, as a design element of MTA, influences the user experience beyond usability. Users feel more engaged when they experience an interface that is engaging, culturally relevant, and evokes positive emotions.

IV. DISCUSSION

Results from semi-structured interviews in this preliminary study indicate that most respondents believe that interface factors significantly influence the use of MTA. Feedback from both sides indicates that Generation Z users’ engagement behaviour is influenced by the perceived attributes, aesthetic appeal, emotional engagement, and interactive functionality of the interface. Previous research exploring factors influencing user experience has primarily focused on the perspectives of tour guides [26], e-tourism professionals [21], and hoteliers and consumers [27]. This study synthesises practitioner and user viewpoints, augmenting and enhancing the current literature. For instance, incorporating emotionally resonant interface aspects in addition to usability can transform monotonous interfaces into captivating ones, hence improving the user experience. The viewpoints of practitioners and users highlighted in this study may offer strategic insights for app developers, designers, and other stakeholders in formulating design ideas.

Specifically, this preliminary study highlights the holistic perspectives of both practitioners and users on MTA. These perspectives suggest potential approaches for improving the user experience of these interfaces. By focusing on the aesthetic preferences and interaction habits of Generation Z adults, targeted design strategies can be developed to increase user engagement with MTA. This is expected to enhance user engagement with a certain tourist attraction or area, hence fostering economic development for that locale. Optimising interfaces can improve user experience and engagement by eliciting good feelings during interactions with MTA. Existing literature suggests that enhancing the information organization, fun, and personalization of MTA interfaces is crucial, as this can improve destination perception and motivate users to make travel decisions [28]. The viewpoints of practitioners in this study correspond with the current literature, highlighting that the provision of high-quality travel information, functionality, and user-friendliness customised to user needs and preferences can substantially improve the user experience. Furthermore, existing literature suggests that qualitative research methods have many advantages for studying user travel behaviour. One aspect is examining the motivations and viewpoints underlying user decisions based on their stated preferences and recognising potential obstacles [29]. Nevertheless, scholars using this methodology remain uncommon, especially when analysing user attitudes from the perspectives of both practitioners and users [29].

Users and practitioners have identified user experience issues in the interfaces of MTA. Their viewpoints indicate that numerous contemporary MTAs neglect generational user traits. This also indicates an absence of comprehensive user research about the industry’s comprehension of youthful users.

Generation Z, as nascent travellers, predominantly depends on social media platforms for travel inspiration [4][23]. Practitioners and users concur that contemporary MTA interfaces exhibit design uniformity and a deficiency in innovation, perceptual recognition, contextual relevance, investment in emotional design, clarity of information hierarchy, and present a high cognitive load. Despite previous studies aiming to enhance user experience through improved visual aesthetics and greater technical variety [17][30][31], there is a deficiency in specific strategies for implementation for MTA aimed at Generation Z. Table III offers recommendations for the main user experience deficiencies in MTA identified by Generation Z adults and tourism practitioners in this study. These findings offer developers and designers a feasible direction for creating MTAs that are both emotionally stimulating and functionally innovative.

TABLE III USER EXPERIENCE DEFICIENCIES AND SUGGESTED STRATEGIES IN MOBILE TOURISM APPLICATIONS TARGETING GENERATION Z

Deficiencies	Potential Strategies
Lack of attention to the interaction styles and aesthetic differences of Generation Z	Comprehend the interaction patterns and aesthetic characteristics of Generation Z. Offer a customizable user interface. For example, permit users to adjust the font or icon size.
Deficiency of trust and authenticity in MTA	Offer accurate destination information. Offer multi-dimensional destination information. Offer integrated information, reducing the need for users to switch between interfaces.
Deficient in visual appeal and emotional engagement	Offer high-quality visual information, such as high-quality images and videos. Incorporate elements that enhance user emotional engagement. For example, increase community interaction and reward mechanisms to motivate user participation.
Deficiencies in information structure and limited functional innovation	Offer modular content to avoid visual clutter. Offer functionality that matches user needs. Offer functionality tailored to the usage context.
The interaction design is monotonous	Offer a variety of interactive modes, such as AR virtual tours, to increase enjoyment.

This study has several key limitations. The limited sample size and relatively concentrated age range of the users in this study restrict the generalizability of the results. The study included practitioners from different travel agencies, but most of the agencies were in the same province. Although most of the practitioners were from the same province, their work scope was for the whole of China and even the wider region. The interview duration in this study may have limited interviewees' opportunities to fully articulate their personal perspectives, although it was sufficient to effectively gather initial core insights. To investigate the intricate concerns first identified in this study, extended interviews with users throughout a wider region should be considered. Furthermore, this preliminary study employed only semi-structured interviews and did not integrate them with observations or questionnaires. This may have limited in-depth verification of user behaviour. Nevertheless, the purpose of this study was to initially explore key issues.

V. CONCLUSION

This preliminary study found significant user experience challenges for MTA from the viewpoints of both tourism practitioners and Generation Z adults. The findings indicate that a chaotic information architecture, uniformity in interface design, and inadequate emotional engagement significantly reduce users' motivation and enthusiasm to explore. Despite the differing opinions of the two participant groups, their viewpoints were complementary, both underscoring the significance of sensory qualities, emotional engagement, credibility, and interactive innovation. These observations emphasise a disconnect between functional design and emotional experience, emphasising the necessity for emotion-driven, user-centred interface solutions. To improve the generalizability of the findings, future research should quantify them. While this study proposes some potential strategies to address user experience deficiencies, further refinement is needed. Future research should focus on improving the user experience of MTA from the developer's perspective and explore specific implementation strategies.

REFERENCES

- [1] G. Lu, S. Qu, and Y. Chen, "Understanding user experience for mobile applications: a systematic literature review," *Discover Applied Sciences*, vol. 7, no. 6, Jun. 2025, doi: <https://doi.org/10.1007/s42452-025-07170-3>.
- [2] M. Caber, Tahir Albayrak, Sezer Karasakal, and R. González, "Building customer citizenship behaviour through mobile application quality: the mediating role of flow experience and customer engagement," *Current Issues in Tourism*, pp. 1–16, Jul. 2023, doi: <https://doi.org/10.1080/13683500.2023.2241606>.
- [3] Ferhat Şeker, Gökhan Kadirhan, and A. Erdem, "The factors affecting tourism mobile apps usage," *Tourism & management studies*, vol. 19, no. 1, pp. 7–14, Jan. 2023, doi: <https://doi.org/10.18089/tms.2023.190101>.
- [4] M. Fu, B. Fraser, and C. Arcodia, "Digital natives on the rise: A systematic literature review on generation Z's engagement with RAISA technologies in hospitality services," *International Journal of Hospitality Management*, vol. 122, pp. 103885–103885, Sep. 2024, doi: <https://doi.org/10.1016/j.ijhm.2024.103885>.
- [5] P. Palos-Sanchez, J. R. Saura, and M. B. Correia, "Do tourism applications' quality and user experience influence its acceptance by tourists?," *Review of Managerial Science*, Jun. 2020, doi: <https://doi.org/10.1007/s11846-020-00396-y>.
- [6] A. K. A. Ahmad, S. N. Baharom, A. Abdul Rahman, M. Abdullah, and M. N. Abdul Aziz, "Developing User Interface Mobile Application for Tourist," *Ideology Journal*, vol. 5, no. 2, pp. 17–24, Sep. 2020, doi: <https://doi.org/10.24191/ideology.v5i2.220>.
- [7] M. Hamouda, "Mobile applications in tourism: Examining the determinants of intention to use," *International Journal of Technology and Human Interaction*, vol. 18, no. 1, Jan. 2022, doi: <https://doi.org/10.4018/ijthi.293198>.
- [8] Z. Gao, J.-H. Cheah, X.-J. Lim, Y. Liu, and A. M. Morrison, "Reinvestigating repurchase intentions for travel apps: a comparison of China's various tiers of cities," *Asia Pacific Journal of Tourism Research*, vol. 29, no. 9, pp. 1–30, Jun. 2024, doi: <https://doi.org/10.1080/10941665.2024.2358340>.
- [9] L. Nguyen Thi, L. Le Thi, T. Dao Thu, and H. Nguyễn Việt, "The Intention to Use Mobile Applications in Tourism Among Gen Z in Vietnam: The Effect of Technological Readiness and Technology Acceptance Factors," *Örgütsel Davranış Araştırmaları Dergisi*, vol. 7, no. 2, pp. 290–309, Jan. 2022, doi: <https://doi.org/10.51847/acdw70i581>.
- [10] Z. Huang and M. Benyoucef, "A systematic literature review of mobile application usability: addressing the design perspective," *Universal Access in the Information Society*, vol. 22, no. 3, Aug. 2022, doi: <https://doi.org/10.1007/s10209-022-00903-w>.

- [11] M. D. Kurniawan and Hanny Haryanto, "GOMS-based User Experience for Cultural Tourism Application in Indonesia," *Advance Sustainable Science Engineering and Technology*, vol. 6, no. 1, pp. 02401016–02401016, Jan. 2024, doi: <https://doi.org/10.26877/asset.v6i1.17862>.
- [12] J.-W. Moon, Y. An, and W. Norman, "Exploring the application of the uses and gratifications theory as a conceptual model for identifying the motivations for smartphone use by e-tourists," *Tourism Critiques: Practice and Theory*, vol. 3, no. 2, Aug. 2022, doi: <https://doi.org/10.1108/trc-03-2022-0005>.
- [13] M. F. A. B. Nordin, R. Aruchunan, and N. H. Mahamarowi, "The Development of Travel Mobile Application for Local Malaysian Tourism Destinations," in *2023 IEEE 14th Control and System Graduate Research Colloquium (ICSGRC)*, Aug. 2023.
- [14] B. Firmansyah, M. Jonathan, J. Andreas, S. Philip, and N. Hidayaturrehman, "Application of UI/UX in Tourism Information Service Problems: A Review," in *International Conference on Sustainable Information Engineering and Technology (SIET 2023)*, Oct. 2023, doi: <https://doi.org/10.1145/3626641.3627603>.
- [15] T.-S. Kuo, K. - C. Huang, T. Quyet Nguyen, and P. Hung Nguyen, "ADOPTION OF MOBILE APPLICATIONS FOR IDENTIFYING TOURISM DESTINATIONS BY TRAVELLERS: AN INTEGRATIVE APPROACH," *Journal of Business Economics and Management*, vol. 20, no. 5, pp. 860–877, Jul. 2019, doi: <https://doi.org/10.3846/jbem.2019.10448>.
- [16] W. A. A. W. Daud, M. T. A. Ghani, A. Z. Amiruddin, W. A. R. W. Musa, and A. H. M. Yasim, "User Perception Towards Tourism Mobile Application," *NeuroQuantology*, vol. 20, no. 12, Oct. 2022, doi: <https://doi.org/10.14704/NQ.2022.20.12.NQ77172>.
- [17] T. Stefanov, Silviya Varbanova, Milena Stefanova, and Yoanna Tsenkova, "Mobile Applications for Cultural Tourism – Past, Present, and Future. Criteria for a Successful Mobile App," *International journal of interactive mobile technologies*, vol. 17, no. 24, pp. 54–78, Dec. 2023, doi: <https://doi.org/10.3991/ijim.v17i24.42819>.
- [18] P. Y.-H. Sia, S. S. Saidin, and Y. H. P. Iskandar, "Systematic review of mobile travel apps and their smart features and challenges," *Journal of Hospitality and Tourism Insights*, vol. 6, no. 5, Nov. 2022, doi: <https://doi.org/10.1108/jhti-02-2022-0087>.
- [19] S. Xiong and T. Zhang, "Enhancing tourist loyalty through location-based service apps: Exploring the roles of digital literacy, perceived ease of use, perceived autonomy, virtual-content congruency, and tourist engagement," *PloS one*, vol. 19, no. 1, pp. e0294244–e0294244, Jan. 2024, doi: <https://doi.org/10.1371/journal.pone.0294244>.
- [20] S. Chandel, N. Rai, and S. Chaubey, "Exploring the Intention of Religious Tourists to Use Travel Apps: The Moderating Role of Digital Privacy," *International Journal of Religious Tourism and Pilgrimage*, vol. 12, no. 3, Jan. 2024, doi: <https://doi.org/10.21427/8w2y-wn93>.
- [21] A. A. Alharmoodi, M. Khan, C. Mertzanis, S. Gupta, P. Mikalef, and V. Parida, "Co-creation and critical factors for the development of an efficient public e-tourism system," *Journal of Business Research*, vol. 174, p. 114519, Mar. 2024, doi: <https://doi.org/10.1016/j.jbusres.2024.114519>.
- [22] M. D. Benítez-Márquez, E. M. Sánchez-Teba, G. Bermúdez-González, and E. S. Núñez-Rydmán, "Generation Z within the Workforce and in the Workplace: a Bibliometric Analysis," *Frontiers in Psychology*, vol. 12, no. 1, Feb. 2022, doi: <https://doi.org/10.3389/fpsyg.2021.736820>.
- [23] A. P. P. Vancia, C. A. Băltescu, G. Brătucu, A. S. Tecău, I. B. Chițu, and L. Duguleană, "Examining the Disruptive Potential of Generation Z Tourists on the Travel Industry in the Digital Age," *Sustainability*, vol. 15, no. 11, p. 8756, Jan. 2023, Available: <https://www.mdpi.com/2071-1050/15/11/8756>.
- [24] V. Braun and V. Clarke, "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology*, vol. 3, no. 2, pp. 77–101, 2006, doi: <https://doi.org/10.1191/1478088706qp0630a>.
- [25] A. Tong, P. Sainsbury, and J. Craig, "Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups," *International Journal for Quality in Health Care*, vol. 19, no. 6, pp. 349–357, 2007, doi: <https://doi.org/10.1093/intqhc/mzm042>.
- [26] H. Zhang, X. Y. Leung, B. Bai, and Y. Li, "Uncovering crowdsourcing in tourism apps: A grounded theory study," *Tourism Management*, vol. 87, p. 104389, Dec. 2021, doi: <https://doi.org/10.1016/j.tourman.2021.104389>.
- [27] S. I. Lei, D. Wang, and R. Law, "Perceived technology affordance and value of hotel mobile apps: A comparison of hoteliers and customers," *Journal of Hospitality and Tourism Management*, vol. 39, pp. 201–211, Jun. 2019, doi: <https://doi.org/10.1016/j.jhtm.2019.02.006>.
- [28] T. Luo, A. E. Mohamed, and N. S. Yusof, "Travel Choices and Perceived Images Influenced by AI Interactive Approaches of Travel Apps: An Evidence From Chinese Mobile Travel Users," *Sage Open*, vol. 14, no. 4, Oct. 2024, doi: <https://doi.org/10.1177/21582440241290393>.
- [29] R. C. McIlroy, "'A reservation I have is that presumably no travel app will improve the actual services': Place based perspectives of mobility as a service," *Transportation Research Part F: Traffic Psychology and Behaviour*, vol. 102, pp. 424–448, Apr. 2024, doi: <https://doi.org/10.1016/j.trf.2024.03.010>.
- [30] Avishkar Nikam, I. K. Verma, and P. Ranade, "An Interactive Mobile Application to Enhance Travel Planning Using a User-Centric Approach: A UX Design Case Study," *International Journal of Interactive Mobile Technologies (IJIM)*, vol. 19, no. 17, pp. 115–128, Sep. 2025, doi: <https://doi.org/10.3991/ijim.v19i17.51279>.
- [31] A. Manna, D. Chakraborty, J.-H. Cheah, and M. Sigala, "The digital tourist: examining user experience in travel apps using machine learning approach," *Tourism Recreation Research*, pp. 1–18, Sep. 2025, doi: <https://doi.org/10.1080/02508281.2025.2545802>.