

Mohammad Shahidul Islam / Chai Ching Tan / Kareem M. Selem

Employing Experience Portfolio Theory in AI-Driven Hospitality Businesses: Proposed Framework and Managerial Implications

Abstract

This paper seeks to identify gaps in the existing literature and provide a unique perspective on experience portfolio theory (EPT) framework development within artificial intelligence (AI)-driven hospitality context. An interpretive conceptual research technique was employed to examine the current literature and propose EPT in the AI-driven hospitality context. Inspired by comparative research focused on guest experiences, this methodological approach recognizes knowledge as socially produced. Findings proved that AI-driven hospitality values benefit significantly from the EPT's focus on ensuring that guest experiences are consistent with their expectations, which improves accommodation practices that guests find more satisfying and pleasurable. This paper highlights the EPT framework's potential analytics and benefits in understanding guest motives and enhancing their experiences in AI-driven hospitality settings. By acknowledging heterogeneous characters of guest encounters and welcoming hedonic/utilitarian aspects, EPT provides more all-encompassing and balanced perspectives for hospitality professionals to craft enjoyable and memorable accommodations for their guests.

Keywords: experience portfolio theory, artificial intelligence, hospitality industry, guests, transformative experiences

1. Introduction

It is commonly known that the hospitality sector contributes to economic growth by creating new jobs and high incomes worldwide (Tan et al., 2024). As guests increasingly search for unique hotels, this industry has experienced constant growth over the past years with the introduction of artificial intelligence (AI) tools (Bulchand-Gidumal et al., 2024). Hence, it is becoming essential to comprehend guest behaviours and factors influencing their experiences in AI-driven hospitality settings (Barač–Miftarević, 2024; Fjesme, 2020; Lončarić et al., 2022). As such, hospitality practitioners should concentrate on this industry's tangible components (e.g., hotels, motels, and restaurants) (Baker et al., 2020). Guest experiences, including their feelings and memories, are intangible, emotional variables that must be considered (Zaman et al., 2024).

From a theoretical standpoint, experience economy theory (EET) divides guests into categories based on their goals, psychological characteristics, and socio-demographic factors (Freeman et al., 2024). Further, this theory is an effective tool for market segmentation, marketing strategy development, and service design in the hospitality industry (Baker et al., 2020). Whereas EET is practical, it considers guests as static beings. Guest preferences can change over time due to various personal, societal, and environmental factors, which EET inadequately accounts for (Freeman et al., 2024). Given the growing recognition of the importance of

Mohammad Shahidul Islam, PhD, Assistant Professor, BRAC Business School, BRAC University, Dhaka, Bangladesh; ORCID ID: <https://orcid.org/0000-0002-9366-5372>; e-mail: mohd.sh.islam@bracu.ac.bd

Chai Ching Tan, PhD, Full Professor, International College, National Institute of Development Administration, Nawamindradhiraj Building, Klonbchan Bangkok, Bangkok 10240, Thailand; ORCID ID: <https://orcid.org/0000-0003-1596-3785>; e-mail: chai_ching.tan@nida.ac.th

Kareem M. Selem, PhD, Corresponding Author, Lecturer, Hotel Management Department, Faculty of Tourism and Hotels, Suez Canal University, Ismailia, Egypt; ORCID ID: <https://orcid.org/0000-0003-2987-4134>; e-mail: karim.ibrahim@tourism.suez.edu.eg

guests' subjective experiences in defining hotel success (Zaman et al., 2024), focusing on their experiences rather than themselves might be restrictive (Bulchand-Gidumal et al., 2024).

In response to the above constraints with EET, the existing paper highlights experience portfolio theory (EPT), an innovative and rigorous approach to comprehending and improving guest experiences. EPT is distinguished by its emphasis on the experiences each guest seeks, whether they are immersive cultural encounters or quiet escapes using AI tools (Papathanassis, 2020). EPT also includes risk management components and long-term planning, reflecting decision-making intricacies in guest behaviours (Baker et al., 2020). This recognition of guests' decision-making processes sets EPT apart from other theories (Bulchand-Gidumal et al., 2024). Furthermore, EPT goes beyond researching guest behaviours to provide accurate advice on crafting personalized, memorable experiences (Buhalis et al., 2022).

Accordingly, EPT provides a robust framework that captures the complexities and diversities of hospitality encounters in ways that traditional theories adequately do not (Papathanassis, 2020). EPT is essential to hospitality studies and practices, potentially affecting future industry improvements (Buhalis et al., 2022). Consequently, a theoretical framework considers the comprehensive nature of guest experiences in the AI-driven hospitality domain. The suggested framework (i.e., hotel guest-based EPT) should concentrate not on intangible and emotional elements of hospitality settings. It also focuses on concrete and physical elements that give guests distinctive and unforgettable experiences. According to Fjesme (2020), EPT suggests that guests should diversify their activities while away to get the most out of their AI-driven hospitality experiences. As the EPT notion suggests, guests can create accommodations that cater to their passions by combining hedonistic, social, and instructional pursuits throughout AI-driven hotels.

Guest experiences are multidimensional, nuanced, and personal; existing reality theories do not always fully represent those (Freeman et al., 2024). As such, the existing paper intends to provide EPT with a robust framework for comprehending AI-driven hospitality experiences. In contrast to guest typologies' compartmentalization approach, EPT presents a diverse perspective, emphasizing several experiences that guests seek. This approach is the precursor of Shefrin and Statman's (2000) behavioural portfolio concept and correlates with current developments in AI-driven personalized hospitality. EPT echoes Buhalis et al.'s (2022) notion that AI-driven hospitality is an individualized, dynamic process that evolves based on personal and contextual circumstances. For example, risk management and return on investment (ROI) in EPT throw insight into guest decision-making, which needs to be regarded in EET (Baker et al., 2020).

EPT's long-term planning outlook corresponds with the emerging trend of transformational hospitality (Papathanassis, 2020). It supports guests' experiences of wanting significant, long-term changes due to their AI-driven experiences (Gupta et al., 2022). EPT fills the gaps left by prior theories by adding a comprehensive, dynamic, and decision-centric perspective to understanding guest experiences (Baker et al., 2020; Papathanassis, 2020). Incorporating EPT into AI-driven hospitality research may give academics and practitioners a better understanding of guest behaviors, allowing them to create outstanding and personalized experiences. Consequently, EPT provides significant insight into the AI-driven hospitality context and may affect guest experience design and practice improvements.

2. Literature review

2.1. Conceptual analogy of EPT

The EPT foundation is evidence that guest experience portfolios—a collection of past, present, and anticipated experiences—influence their decision to experience in the future. EPT is distinct from EET because it embraces and values design experience diversity (Gupta et al., 2022). Hence, this sets EPT apart from competing theories of AI-driven hospitality experiences. EPT takes a different tack by equating guest experiences

with financial investor work. Investors seek to balance portfolio risk with potential reward by investing in various securities and real estate (Baker et al., 2020; Papathanassis, 2020); however, conventional explanations center on experience degrees.

In the hospitality industry, EPT considers guest profiles a compilation of different moments and experiences (Freeman et al., 2024). These activities include opening/closing rooms contactless, using voice-bot/chatbot services, using room service robots, checking in/check out without reservation employees, and identifying each menu item's contents using HoloLamp devices. Each guest has a unique portfolio of experiences, and they can tailor their AI-driven experiences (Ahmad, 2024) to meet their hedonic and utilitarian requirements based on the activities they choose to experience (Buhalis et al., 2022). With this customized approach, guests may tailor their AI-driven experiences to their interests and needs in the hospitality context (Bulchand-Gidumal et al., 2024).

EPT is an essential and promising concept in hospitality research and practice since it provides a more nuanced and personalized perspective on AI-driven hospitality encounters (Buhalis et al., 2022). Investors in stock markets engage in risk management by choosing between high-risk, high-reward equities investments and lower-risk, more stable-return bond investments (Ahmad, 2024). Similarly, guests engage in risk management by making informed judgments about the nature of their AI-driven hospitality experiences (Wang & Uysal, 2024). Thus, EPT highlights how guests construct unique itineraries by balancing various degrees of AI-driven experience risks (Buhalis et al., 2022).

Given AI-enabled risk management, EPT provides a complete picture of accommodation planning and experience processes in AI-driven hotels. It acknowledges that guests conduct thorough risk assessments before making decisions (Wang & Uysal, 2024). Some guests seek out difficult experiences, while others stick to tried-and-true ones. EPT's acceptance of the importance of risk management in the hospitality industry paves the way for new theoretical and applied research. In turn, this allows hospitality professionals to tailor AI-driven experiences to the risk tolerance levels of their guests, boosting their satisfaction with their accommodations. On the other hand, EPT draws a fascinating parallel between financial investors' goals seeking high rates of ROI and those of guests looking to get the most pleasure out of their AI-driven experiences (Zhao et al., 2024).

Unlike more conventional theories like Maslow's hierarchy of needs theory, which primarily focuses on meeting particular psychological criteria (Islam et al., 2024), EPT brings ROI to AI-driven hospitality experiences (Zhao et al., 2024). This novel perspective sheds insight into the efficiency of experience acquisition and offers a novel approach to analyzing guest goals and experiences (Wang & Uysal, 2024). Further, EPT claims that guests would select experiences within AI-driven hotels in the same way that investors weigh various investment prospects' pros and cons (Freeman et al., 2024). As such, guests would consider the time and money needed to experience each AI-driven event against the potential benefits they would receive (Buhalis et al., 2022).

Given the EPT's focus on ROI, guests can choose which memories to carry home with them (Zhao et al., 2024). To get the most out of their AI-driven experiences, guests employ voice bots to reduce lighting levels in hotel rooms, head to the main restaurant through virtual paths in augmented reality apps, and experience robotic room service. Taking this unique stance, EPT adds a dynamic component to understanding guest habits and preferences (Baker et al., 2020). This insightful perspective enriches studying guest motives and delight, extending the way for AI-driven hospitality experiences to be more tailored to each guest's interests (Tan et al., 2024). Furthermore, EPT adds AI-driven hospitality experiences to periodic rebalancing and long-term planning principles (Zhao et al., 2024).

As financial investors, guests should reevaluate their experience portfolio as their interests and circumstances change (Shahid & Paul, 2022). This dynamic approach to AI-driven experiences helps us comprehend changing guest behaviors over time when experiencing AI tools within the hotel arena. Furthermore, long-term

planning applies to the AI-driven hospitality sector (Papathanassis, 2020). Therefore, guests may engage in long-term AI-driven experiences to attain existential authenticity (Tan et al., 2024). This introduction of long-term planning into the EPT framework expands our understanding of how AI-driven experiences are enhanced. In this scenario, guests could not participate in planned experiences at AI-driven hotels (Tan et al., 2024). This component of EPT calls attention to the necessity of versatility in AI-driven hospitality businesses, which are essential worldwide and are unpredictable and continually changing.

2.2. Theoretical grounding of EPT

EPT has the potential to significantly impact the hospitality industry and academic studies of AI-driven experiences. EPT gives a distinct and insightful viewpoint on guest experience design because of its emphasis on diversifying experience portfolios and meeting hedonic and utilitarian objectives (Papathanassis, 2020). The distinctive feature of EPT is its focus on pleasurable and practical components of AI-driven accommodations (Back et al., 2020). The four primary sorts of guest experiences that EPT suggests guests have had have been balancing and transformative (Buhalis et al., 2022).

The EPT's ability to capture the complexity and diversity of guest experiences has potential in AI-driven hospitality domains. It goes beyond knowing why guests stay to how these experiences may be blended and managed for maximum enjoyment (Buhalis et al., 2022). Thus, it provides practitioners with a holistic framework for producing and marketing AI-driven hotel services that adapt to guest interests and needs (Tan et al., 2024), filling gaps left by previously mentioned theories (Papathanassis, 2020). The EPT framework is helpful because it provides different lenses through which to view AI-driven hospitality experiences, which can assist industry professionals in creating and delivering more memorable and enjoyable excursions for their guests. Accordingly, hospitality professionals may boost guest loyalty and positive word-of-mouth if they consider their guests' hedonistic and utilitarian needs and design experiences. In the hospitality marketing literature, there are two primary guest demands: hedonic and utilitarian (Deb & Lomo-David, 2020).

Hedonistic wants are associated with enjoyment, emotional fulfilment, and pleasure, whereas utilitarian wants are more practical, functional, and task-oriented (Scarpi, 2020). Hedonistic desires are frequently connected to hospitality businesses because guests seek experiences that bring them joy, delight, and emotional fulfilment (Shahid & Paul, 2022). For example, AI-driven hospitality includes heading to the main restaurant through virtual paths in augmented reality apps and experiencing robotic room service and chatbot apps. However, utilitarian demands are goal-oriented and centered on accomplishing a particular activity (Scarpi, 2020). As a result, guests frequently have various requirements and reasons for their AI-driven hospitality experiences, and hedonic and utilitarian demands are relevant in the hospitality domain.

Accordingly, EPT has much potential as a proposed framework in the hospitality context because it provides a broad perspective that may capture the complexities and diversity of guest experiences. EPT has the potential to provide a more holistic understanding of guest behavior and experience design (Chen et al., 2021) by emphasizing experience portfolio diversifications and the inclusion of hedonic and utilitarian purposes. According to EPT, hospitality professionals can design distinctive and memorable experiences that satisfy guest interests by categorizing interactions into core, balanced, enriching, and changing ones. Even though EPT is still in its theoretical stages and requires empirical confirmation, it offers a workable framework for hospitality academics to investigate.

Implementing EPT principles may enhance our knowledge of how to apply them to guest behaviors (Islam et al., 2024), leading to more pleasurable and environmentally conscious AI-driven hospitality experiences (Tan et al., 2024). Therefore, EPT may stand out due to its diverse and dynamic nature of guest experiences in AI hotel contexts, focus on customization and personalization, and meaningful experiences through a portfolio approach. These components contribute to EPT sustainability (Papathanassis, 2020) by understanding guest

behaviors and enabling tailored and inclusive experiences that optimize resource utilization and enhance guest engagement (Soto-Vásquez, 2022).

Furthermore, EPT can be helpful in our teleological era, when guest psyches are evolving. There are greater demands for AI-driven, one-of-a-kind, customized accommodations (Papathanassis, 2020). Therefore, EPT is a theoretical basis for helping hospitality employees adapt to guest demands—unique and encompassing views of hospitality encounters (Soto-Vásquez, 2022). This theory reflects the diversity of hospitality experiences by integrating hedonic and utilitarian ones and viewing them as portfolios (Papathanassis, 2020).

3. Methodology

This paper employs an interpretive conceptual research technique (Polkinghorne & Given, 2021) to examine existing literature and propose EPT within AI-driven hospitality businesses. We adopt a narrative approach (Chandra et al., 2022), allowing authors to selectively integrate critical studies based on our expertise in AI and hospitality (Bulchand-Gidumal et al., 2024; Zaman et al., 2024). Thus, this method is particularly suited to conceptual research, whose objective is not to catalogue all literature exhaustively but to architect insights that inform and advance theoretical development (Freeman et al., 2024; Baker et al., 2020). We conducted a targeted search for relevant studies on guest experiences, AI applications, and theoretical foundations pertinent to the development of EPT without adhering to rigid review protocols (Buhalis et al., 2022; Shahid & Paul, 2022). We aimed to build coherent and contextually relevant arguments aligned with the conceptual nature of this paper (Bulchand-Gidumal et al., 2024).

On the other hand, our methodology draws upon comparative research on guest experiences, as it facilitates the exploration of diverse perspectives and the identification of common patterns and unique differences (Freeman et al., 2024; Tan et al., 2024). Comparative research is particularly well-suited to AI-driven hospitality, where guest experiences vary significantly due to individual, cultural, and technological factors (Buhalis et al., 2022). Hence, this methodology emphasizes the subjective nature of human experiences (Islam et al., 2024), which is critical for understanding the complexities of AI-driven hospitality encounters (Zaman et al., 2024).

Our ontological stance is relativist, acknowledging that AI-driven experiences are context-dependent and shaped by each guest's unique background and circumstances (Freeman et al., 2024; Kainthola & Singh Kaurav, 2024). This perspective is vital, as AI systems interact with guests in highly individualized ways, resulting in varied, personal experiences (Tan et al., 2024). The constructionist epistemology we adopt emphasizes that these experiences are actively constructed through guests' perceptions and interpretations rather than passively delivered by AI systems (Islam et al., 2024). This interpretive research paradigm allows us to explore guest behaviors' subjective realities in AI-driven hospitality settings.

Our methodology offers a nuanced comprehension of how experiences vary across contexts and how AI-driven tools are customized to accommodate these variations (Selem et al., 2023) by analyzing guest experience portfolios. This approach enhances current theoretical knowledge by introducing the EPT framework and opens new avenues for academic investigation. It emphasizes the importance of personalizing AI-driven hospitality services to meet guests' diverse expectations, offering practical implications for improving guest satisfaction and hospitality business outcomes (Buhalis et al., 2022; Islam & Kirillova, 2021).

4. Discussion

4.1. Proposed framework of EPT

EPT proposes a ground-breaking approach that provides a more holistic and integrated view of guest encounters (Back et al., 2020). While traditional models have greatly improved our understanding of guest

behaviors, they inadequately reflect guest encounters' rich and diverse characters in AI-driven hospitality settings. EPT provides a new perspective by recognizing guest experiences in AI-driven hospitality settings. It presents an all-encompassing technique for determining how various aspects of AI-driven hospitality experiences interact with guests' hedonic and utilitarian desires (Buhalis et al., 2022). It emphasizes the importance of understanding and meeting guest needs. Hence, this is essential for crafting meaningful and memorable encounters (Shahid & Paul, 2022; Tan et al., 2024). Consequently, the suggested framework (see Figure 1), which consists of four components, provides a thorough knowledge of guest experiences as follows:

Guest needs, the first component, understand that guests have hedonic and utilitarian demands. Hedonic needs are pleasure and happiness from experiences (Scarpi, 2020), which include heading to main restaurants through virtual paths in augmented reality apps and experiencing robotic room service and chatbot apps. Otherwise, utilitarian needs include finding accommodations that are situated and meet basic needs like cleanliness or looking for sights that provide cultural values using virtual concierge apps (Shahid & Paul, 2022; Tan et al., 2024). By recognizing these distinct demands, the EPT framework provides a comprehensive view of guest motives and needs, creating more personalized and satisfying AI-driven hospitality experiences.

The second component, experience domains, delves into many facets of guest experiences. Accommodations include hotels, resorts, motels, and tourism villages (Barač–Miftarević, 2023; Shahid & Paul, 2022). These places have a distinct appeal and add to AI-driven hospitality experiences that include AR-based lodging choices, using voice assistants to wake guests, and searching smart mirrors from within guest rooms. The third component, experience portfolios, represents enjoyable and practical activities guests participate in throughout their stay (Soto-Vásquez, 2022). These portfolios highlight experiences that define complete and gratifying guest experiences for AI-driven hospitality businesses (Tan et al., 2024). EPT emphasizes the need to curate a well-rounded portfolio catering to guest preferences and desires by capturing the breadth of activities. For example, guest experience portfolios might include taking virtual tours, inquiring about information using chatbots, and opening rooms using QR codes.

By incorporating multiple activities into their accommodations, the concept of experience portfolios guarantees that guests enjoy memorable experiences (Soto-Vásquez, 2022). The fourth component, experience categories, categorizes the experiences inside guest portfolios. The must-use AI tools considered crucial to hospitality organizations or overall guest experiences are core experiences. These encounters are frequently key motivators for selecting specific guest experiences. Balance experiences create a sense of relaxation and well-being during guest experiences (Agapito et al., 2021). Enhancing experiences are extra activities that enrich values and overall experiences, making them more exciting and delightful in this digital era.

Lastly, transformative experiences can result in personal growth, self-reflection, or substantial life changes, leaving guests with lasting impressions. This framework respects several experiences guests may encounter by categorizing them in this way, providing diversified and enjoyable accommodations (Agapito et al., 2021). EPT is a valuable tool for understanding the intricacies of guest interactions. This framework enables a more thorough study of guest requirements (Tan et al., 2024), compiling several activities inside their portfolios and categorizing AI-driven hospitality experiences encountered.

4.2. Theoretical implications

The proposed EPT paradigm offers significant theoretical implications that enhance our comprehension of guest experiences in AI-driven hospitality environments. Fjesme (2020) noted that guests should diversify their activities while away to get the most out of their AI-driven hospitality experiences. Based on the experienced utility theory in behavioral economics, Chang (2018) also acknowledges that users' service decision-making framework should consider balancing the losses and gains of received and generated values. Many scholars have realized the typological compartmentalization's static approach to studying customer behaviors. This

paper proposes EPT, which reckons that guests' decision choices are more complicated than mere segmentation can offer and involves making decisions like financial portfolios. In other words, guests carefully decide on service activities' portfolios. The AI capability further recognizes that decision processes are dynamic and individualized and evolve based on personal and contextual circumstances.

Having treated guest experiences as portfolios, which aligns with the concept of guests making risk and ROI assessments of their experience investments, EPT aligns well with the futuristic portfolio outlook. Hence, this implies that guests have experiences that can produce significant, long-term changes (van Halem et al., 2024). Besides, one's portfolio of investment in experiences will continue to evolve dynamically due to changes and diversities of personal, societal, and environmental factors. EPT transcends static states, allowing it to metamorphose with societal and technological changes. In doing so, EPT offers a theoretical framework that attunes to guest experience requirements, leading to their satisfaction and loyalty.

Many theories can exploit EPT to enrich their theoretical implications. First, service-dominant logic (SDL) fits well with EPT because it emphasizes how service delivery is a collaborative process that involves guests and service providers working together to create value and experience portfolios. For instance, service providers can reckon that guests who value education experience type will prefer portfolios of services and experiences. Hence, this reflects their desire for enrichment, integrating experiences that foster knowledge and skills. Furthermore, guests motivated by escapism will include spa treatments in their portfolios, catering to their needs for relaxation and adventure.

On the other hand, when guests prioritize hedonic needs, they are motivated by experience types that can deliver emotional fulfilment and joy. Thus, integrating EPT into SDL shifts the priority of value creation to customers and co-partnering with AI, making it a feasible theoretical framework for re-institutionalizing marketing disciplines (Fjesme, 2020). Furthermore, there is a self-determination theory that can provide insights into motivations behind guests' experience choices, such as guests' needs for autonomy (e.g., choosing personalized experiences), competence (e.g., learning new skills), and relatedness (e.g., social interactions) in portfolio choices of experience types.

4.3. Practical implications

Hospitality researchers and specialists can employ EPT to understand guest expectations, allowing them to develop more pleasant and memorable AI-driven hospitality experiences. The proposed framework recognizes numerous dimensions that influence experience, emphasizes the importance of experience portfolios, and categorizes experiences based on their impact. This comprehensive approach ensures that EPT is more sustainable in the long term by accounting for changing guest demands and preferences, considering several experiences, and allowing for tailored and memorable AI-driven hospitality experiences that meet guest needs. EPT has far-reaching consequences for hospitality practitioners and stakeholders, providing a more comprehensive knowledge of guest behavior and demands. First, hospitality experts should use AI-driven market research tools to understand guest demands. Second, hotel chains could invest in improving hospitality aspects with AI tools. Third, hospitality businesses can work together to develop AI-driven comprehensive packages that cater to a wide range of guest interests.

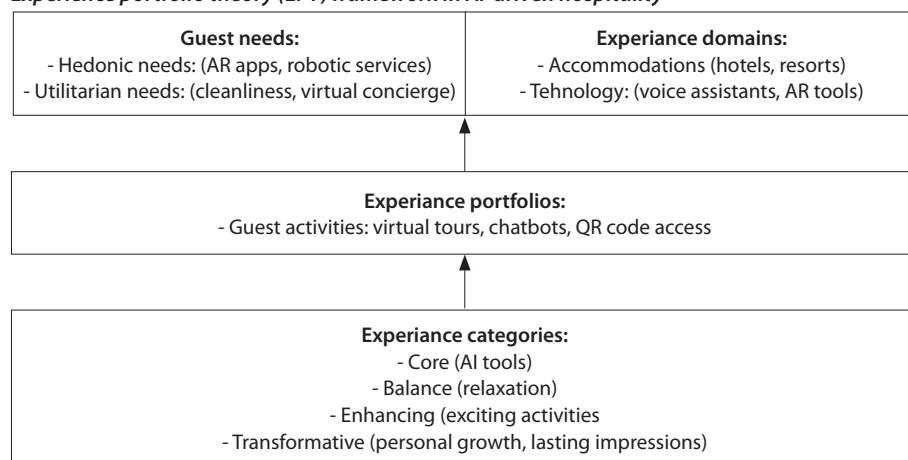
Fourth, hotel chains may deploy AI-driven chatbots to provide real-time feedback throughout guests' stays, allowing immediate adjustments and increasing guest happiness. Fifth, EPT can guide technological infrastructure development by local governments and hotel management when planning sustainable development. Sixth, AI-driven businesses can promote sustainable and responsible hospitality by incorporating transformative experiences focusing on hotel sustainability. For example, AI-driven hospitality settings might allow guests to assist in conservation initiatives, presenting them with a profound, life-changing experience while promoting responsible hospitality.

Seventh, understanding many sorts of guest encounters can help influence employee training programs. Lastly, hospitality-focused technology companies might provide platforms that ease the discovery of various experiences. For example, AI-driven hospitality apps may provide customized itineraries based on their prior choices, promoting a variety of core, balancing, enhancing, and transforming experiences. By embracing these practical techniques, the EPT framework may enable stakeholders to improve hospitality experiences, respond to different requirements, and establish resilient and long-lasting businesses.

4.4. Limitations and future research

Although the EPT framework offers substantial contributions, this paper has some limitations. Initially, EPT is predominantly a theoretical framework, necessitating empirical validation to evaluate its efficacy in diverse hospitality settings. Further research can exploit the core concepts advocated in EPT, and the components depicted in Figure 1 for survey-based validations. Integrating EPT with SDL can help researchers reinforce the pivotal roles of guests and AI tools in value co-creation by treating portfolios of experiences as the central source of values. Furthermore, further research can adapt experienced utility theory in behavioral economics to elucidate tourism portfolio selections (Bashir et al., 2022; Bustamante-Martínez et al., 2024).

Figure 1
Experience portfolio theory (EPT) framework in AI-driven hospitality



Although the EPT framework offers an extensive comprehension of guest experiences, it is crucial to recognize that it may not encompass personal and external elements affecting guest behaviors. These elements encompass individual and contextual influences, as delineated by van Halem et al. (2024). Ying (2024) utilized big data analytics to discern Chinese inclinations for upscale lifestyle accommodations that integrate business and leisure within settings characterized by authentic culture, thought-provoking design, and revolutionary architecture. Van Halem et al. (2024) identified fundamental socio-psychological reasons that attract individuals towards hedonic or eudaimonic motives, such as pursuing activities that feel good and contribute to psychological functioning concerning achieving goals, personal growth, and meaning in life. These factors and preferences need to be gauged when designing service activities.

Though this paper is limited to experience portfolios and EPT components, further research focuses on EPT's amalgamation with alternative theoretical frameworks. Hence, this will enhance and broaden the understanding of the conceptual EPT stage to a more concrete level with broader generalizations. For instance, EPT moves to guest and AI capability as main value co-creators by integrating with SDL. In this way, EPT expands SDL beyond merely balancing customer and service provider perspectives. Instead, EPT actively involves cybernetic employees (e.g., robotic tools) interacting with hospitality guests to achieve optimum values (Song, 2024).

While the EPT framework underscores the importance of curating diverse experience portfolios, this gap focuses on understanding how guests perceive and prioritize these experiences. This gap necessitates their decision-making processes for constructing their experience portfolios. Jung et al. (2021) stressed the importance of design features that create a sense of presence and improve cognitive understanding of location-based AR navigation systems to facilitate new idea adoption. This paper advises researchers to investigate interrelationships among portfolio components to understand decision-making. Further research can examine various experiences that affect decision-making on experience portfolio choices. For instance, when guests prioritize entertainment experience type, guest experience portfolios become richer with activities that cater to their emotional states.

5. Conclusion

EPT offers a helpful framework for understanding the complex nature of guest interactions in AI-driven hospitality settings. EPT knows guests want their AI-driven experiences to be hedonistic and utilitarian. Successful hospitality businesses need to achieve these distinct but related objectives. The EPT framework can direct guest creation of accommodation offerings that provide guests with what they are looking for financially sound experiences. As such, hospitality businesses must recognize and meet guest needs for pleasurable activities. By acknowledging the heterogeneous character of guest encounters and welcoming hedonic and utilitarian aspects, EPT provides a more all-encompassing and balanced perspective for hospitality professionals to craft enjoyable and memorable accommodations for their guests. Hence, this helps the hospitality industry cater to its guest's requirements in this digital era.

References

- Agapito, D., Pinto, P., Ascensão, M.P., & Tuominen, P. (2021). Designing compelling accommodations capes: Testing a framework in a rural context. *Tourism and Hospitality Research*, 21(3), 259-274. <https://doi.org/10.1177/1467358420972753>
- Ahmad, M. (2024). The role of recognition-based heuristics in investment management activities: Are expert investors immune? – A systematic literature review. *Qualitative Research in Financial Markets*, 16(3), 401-422. <https://doi.org/10.1108/QRFM-07-2021-0109>
- Back, R.M., Tasci, A.D., & Milman, A. (2020). Experiential consumption of a South African wine farm destination as an agritourism attraction. *Journal of Vacation Marketing*, 26(1), 57-72. <https://doi.org/10.1177/1356766719858642>
- Baker, H.K., Nofsinger, J.R., & Spieler, A.C. (2020). Designing your portfolio: The role of asset allocation, diversification, and rebalancing. In *The savvy investor's guide to building wealth through traditional investments* (pp. 89-123). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83909-608-220201005>
- Barač-Miftarević, S. (2023). Undertourism vs. over-tourism: A systematic literature review. *Tourism: An International Interdisciplinary Journal*, 71(1), 178-192. <https://doi.org/10.37741/t.71.1.11>
- Bashir, A., Singh, R., & PS, S. (2022). Mapping the foundation and trends in tourism research: A bibliometric review of literature in tourism: An international interdisciplinary journal. *Tourism: An International Interdisciplinary Journal*, 70(3), 480-492. <https://doi.org/10.37741/t.70.3.10>
- Buhalis, D., Papathanassis, A., & Vafeidou, M. (2022). Smart cruising: Smart technology applications and their diffusion in cruise tourism. *Journal of Hospitality and Tourism Technology*, 13(4), 626-649. <https://doi.org/10.1108/JHTT-05-2021-0155>
- Bulchand-Gidumal, J., William Secin, E., O'Connor, P., & Buhalis, D. (2024). Artificial intelligence's impact on hospitality and tourism marketing: Exploring key themes and addressing challenges. *Current Issues in Tourism*, 27(14), 2345-2362. <https://doi.org/10.1080/13683500.2023.2229480>
- Bustamante-Martínez, A., Galvis Lista, E.A., & Gonzalez Zabala, M.P. (2024). Research profile on data science in the field of tourism. *Tourism: An International Interdisciplinary Journal*, 72(4), 673-686. <https://doi.org/10.37741/t.72.4.13>

- Chandra, S., Ranjan, A., & Chowdhary, N. (2022). Online hospitality and tourism education: Issues and challenges. *Tourism: An International Interdisciplinary Journal*, 70(2), 298-316. <https://doi.org/10.37741/t.70.2.10>
- Chang, S. (2018). Experience economy in hospitality and tourism: Gain and loss values for service and experience. *Tourism Management*, 64, 55-63. <https://doi.org/10.1016/j.tourman.2017.08.004>
- Chen, S.H., Tzeng, S.Y., Tham, A., & Chu, P.X. (2021). Hospitality services in the post-COVID-19 era: Are we ready for high-tech and no touch service delivery in smart hotels? *Journal of Hospitality Marketing and Management*, 30(8), 905-928. <https://doi.org/10.1080/19368623.2021.1916669>
- Deb, M., & Lomo-David, E. (2020). On the hedonic versus utilitarian message appeal in building buying intention in the luxury hotel industry. *Journal of Hospitality and Tourism Management*, 45, 615-621. <https://doi.org/10.1016/j.jhtm.2020.10.015>
- Fjesme, S.L. (2020). Retail investor experience, asset learning, and portfolio risk-adjusted returns. *Finance Research Letters*, 36, Article 101315. <https://doi.org/10.1016/j.frl.2019.101315>
- Freeman, P.A., Ellis, G.D., Hill, B. J., Agate, S.T., & Cook, A.S. (2024). Creating guest experience value: An empirical analysis of journey, motif, and story themes. *International Journal of Hospitality and Tourism Administration*. Advance online publication. <https://doi.org/10.1080/15256480.2024.2342479>
- Gupta, S., Modgil, S., Lee, C.K., Cho, M., & Park, Y. (2022). Artificial intelligence driven robots for stay experience in the hospitality industry in a smart city. *Industrial Management and Data Systems*, 122(10), 2331-2350. <https://doi.org/10.1108/IMDS-10-2021-0621>
- Islam, M.S., & Kirillova, K. (2021). Nonverbal communication in hotels as a medium of experience co-creation. *Tourism Management*, 87, Article 104363. <https://doi.org/10.1016/j.tourman.2021.104363>
- Islam, M.S., Tan, C.C., Sinha, R., & Selem, K.M. (2024). Gaps between customer compatibility and usage intentions: The moderation function of subjective norms towards chatbot-powered hotel apps. *International Journal of Hospitality Management*, 123, Article 103910. <https://doi.org/10.1016/j.ijhm.2024.103910>
- Jung, T.H., Bae, S., Moorhouse, N., & Kwon, O. (2021). The impact of user perceptions of AR on purchase intention of location-based AR navigation systems. *Journal of Retailing and Consumer Services*, 61, Article 102575. <https://doi.org/10.1016/j.jretconser.2021.102575>
- Kainthola, S., & Singh Kaurav, R.P. (2024). Research at the crowding and tourism: Insights. *Tourism: An International Interdisciplinary Journal*, 72(4), 648-653. <https://doi.org/10.37741/t.72.4.10>
- Lončarić, D., Popović, P., & Kapeš, J. (2022). Impact of the COVID-19 pandemic on tourism: A systematic literature review. *Tourism: An International Interdisciplinary Journal*, 70(3), 512-526. <https://doi.org/10.37741/t.70.3.12>
- Papathanassis, A. (2020). The growth and development of the cruise sector: A perspective article. *Tourism Review*, 75(1), 130-135. <https://doi.org/10.1108/TR-02-2019-0037>
- Polkinghorne, S., & Given, L.M. (2021). Holistic information research: From rhetoric to paradigm. *Journal of the Association for Information Science and Technology*, 72(10), 1261-1271. <https://doi.org/10.1002/asi.24450>
- Scarpi, D. (2020). *Hedonism, utilitarianism, and consumer behavior: Exploring the consequences of customer orientation*. Springer Nature. <https://doi.org/10.1007/978-3-030-43876-0>
- Selem, K.M., Khalid, R., Raza, M., & Islam, M.S. (2023). We need digital inquiries before arrival! Key drivers of hotel customers' willingness to pay premium. *Journal of Quality Assurance in Hospitality & Tourism*. Advance online publication. <https://doi.org/10.1080/1528008X.2023.2280117>
- Shahid, S., & Paul, J. (2022). Examining guests' experience in luxury hotels: Evidence from an emerging market. *Journal of Marketing Management*, 38(13-14), 1278-1306. <https://doi.org/10.1080/0267257X.2022.2085768>
- Shefrin, H., & Statman, M. (2000). Behavioral portfolio theory. *Journal of Financial and Quantitative Analysis*, 35(2), 127-151. <https://doi.org/10.2307/2676187>
- Song, C.S. (2024). Prescriptive multi-group networks: Humanoid service robots' value co-creation and co-destruction potentials in apparel stores. *Journal of Business Research*, 183, Article 114823. <https://doi.org/10.1016/j.jbusres.2024.114823>

- Soto-Vásquez, A.D. (2022). YouTube and TikTok as platforms for learning about others: The case of non-Chinese travel videos in Shanghai Disneyland. *Online Media and Global Communication*, 1(2), 315-338. <https://doi.org/10.1515/omgc-2022-0012>
- Tan, C.C., Islam, M.S., Sinha, R., Shehata, A.E., & Selem, K.M. (2024). Compatibility as a pivotal design factor for digital concierge apps: Exploring hotel guests' socio-psychological dynamics. *Kybernetes*. Advance online publication. <https://doi.org/10.1108/K-12-2023-2658>
- van Halem, S., van Roekel, E., & Denissen, J. (2024). Personality and individual differences in the relationship between hedonic and eudaimonic motives and well-being in daily life. *Journal of Research in Personality*, 110, Article 104497. <https://doi.org/10.1016/j.jrp.2024.104497>
- Wang, Y.C., & Uysal, M. (2024). Artificial intelligence-assisted mindfulness in tourism, hospitality, and events. *International Journal of Contemporary Hospitality Management*, 36(4), 1262-1278. <https://doi.org/10.1108/IJCHM-11-2022-1444>
- Ying, S. (2024). Guests' aesthetic experience with lifestyle hotels: An application of LDA topic modelling analysis. *Heliyon*, 10(16), Article e35894. <https://doi.org/10.1016/j.heliyon.2024.e35894>
- Zaman, M., Tan, C.C., Islam, M.S., & Selem, K.M. (2024). Hospitality customer intentions to write fake online reviews: A cross-cultural approach. *International Journal of Hospitality Management*, 120, Article 103775. <https://doi.org/10.1016/j.ijhm.2024.103775>
- Zhao, S., Kang, C., Cheng, J., & Yu, K. (2024). A design approach of education for the seniors supported by digital technology. In R. Huang, R., D. Liu, M.A. Adarkwah, H. Wang, & B. Shehata (Eds.) *Envisioning the future of education through design* (pp. 365-383). Springer Singapore. https://doi.org/10.1007/978-981-97-0076-9_16

Submitted: July 05, 2024

Revised: December 20, 2024

Accepted: January 07, 2025