

Artificial Intelligence adoption in corporate travel booking platforms: A case study analysis of a UK business travel SaaS provider

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Abstract

This paper examines the technological positioning of Ortharize, a UK-based business-travel booking Software-as-a-Service (SaaS) platform, relative to established competitors, and evaluates how artificial intelligence (AI) could be leveraged to strengthen its competitive position. Using a qualitative, desk-based research design, secondary data were gathered from company communications, industry reports, and peer-reviewed literature and analysed through comparative benchmarking, Porter's competitive positioning framework, and SWOT analysis. The findings indicate that Ortharize differentiates itself through a distinctive gamification and reward-based cost-saving model but lags competitors such as SAP Concur, TravelPerk, and Expensify on core functional features including third-party integrations, multi-currency and multi-language support, and audit management. Six AI applications are identified as offering the greatest potential value: dynamic pricing, conversational chatbots, neural machine translation, automated itinerary generation, recommender systems, and adaptive user-interface design. The paper concludes that a phased, ethically governed AI adoption roadmap, guided by the Technology Acceptance Model, would allow Ortharize to close its functional gap while preserving the differentiation advantage of its reward-based business model. Implications for practice, data governance, and future research are discussed.

Keywords: Artificial Intelligence; Travel Technology; SaaS; Technology Acceptance Model; Business Travel; Competitive Analysis

1. Introduction

Business travel management has become an increasingly technology-dependent function within organisations, with online booking platforms competing on price, automation, and user experience (Vries, 2019). Ortharize, a Software-as-a-Service (SaaS) start-up founded in 2019 and based in Swansea, Wales, targets the corporate travel segment with a self-service booking platform distinguished by a gamified reward system that incentivises employees to reduce travel expenditure (Business News Wales, 2021; UKT News, 2023). While this differentiation strategy is notable, the platform's broader technological maturity relative to established competitors, and its readiness to adopt artificial intelligence (AI), has not previously been examined in the academic literature.

This paper addresses that gap by (i) analysing the technological features of the Ortharize platform, (ii) benchmarking these features against three established competitors, (iii) identifying AI technologies with the greatest applicability to online travel booking, and (iv) proposing an AI adoption roadmap for the platform. The study is guided by two research questions: how can AI technologies be used to improve Ortharize's online booking process, and which specific AI technologies are best suited to this task?

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The remainder of the paper is structured as follows. Section 2 reviews the literature on technology acceptance and AI applications in travel booking. Section 3 outlines the qualitative, desk-based methodology. Section 4 presents comparative and thematic findings. Section 5 discusses the implications of these findings. Section 6 concludes, and Section 7 offers recommendations for practice and future research.

2. Literature Review

2.1. Technology Acceptance and Adoption

The Technology Acceptance Model (TAM), developed by Davis (1989), remains one of the most widely cited frameworks for explaining user adoption of information systems, proposing that perceived usefulness and perceived ease of use jointly determine behavioural intention to adopt a technology. TAM has since been extended and applied across e-commerce, chatbot, and AI-enabled service contexts (Sohn & Kwon, 2019; Wang et al., 2023). Holden and Karsh (2011) note, however, that the model underplays external organisational factors such as policy, training, and system compatibility, which are especially relevant when a SaaS platform introduces AI-driven features into an established corporate workflow. Complementing TAM, Shafiei et al. (2019) describe a technology life-cycle comprising consciousness, possession, adaptation, improvement, and potential rejection, offering a useful lens for tracking how a platform such as Ortharize might progress through successive stages of AI adoption.

2.2. Artificial Intelligence in Online Travel Booking

A growing body of literature documents the application of AI across the travel and tourism sector. Andriasyan (2022) argues that AI can reduce human error and personalise travel recommendations, while Hentschel (2021) identifies chatbots, virtual assistants, predictive analytics, and fraud detection as the AI capabilities most associated with improved operational efficiency and customer retention in travel platforms. Conversational AI is a particularly prominent theme: Lukanova and Ilieva (2019) find that AI-powered virtual assistants can deliver continuous, human-like customer engagement, though Tanween (2022) cautions that purely rule-based chatbots may lose valuable unstructured customer feedback, recommending hybrid human-AI service models instead.

Dynamic pricing is another widely studied application. Ban and Keskin (2021) show that machine-learning-based personalised pricing can improve responsiveness to demand fluctuations, a capability increasingly used by travel and hospitality providers. In the domain of language accessibility, Johnson et al. (2017) demonstrate that neural machine translation, including zero-shot translation across untrained language pairs, can support seamless multilingual interaction, a feature notably absent from Ortharize's current offering. Recommender systems, built on collaborative filtering, Bayesian classifiers, or artificial neural networks, are shown by Ramzan et al. (2019) and Chaudhari and Thakkar (2019) to reduce information overload in hotel and travel booking contexts by generating personalised suggestions from historical booking data. Itinerary automation using expert systems and reinforcement learning is similarly documented by Refanidis et al. (2014) as reducing planning effort for end users.

2.3. Competitive Positioning in the Travel SaaS Market

Porter's generic competitive strategy framework (as summarised by Scott & Williams, 2023) classifies firms according to cost leadership, differentiation, or focus strategies. Applied to the travel SaaS market, gamification-based cost-saving incentives represent a differentiation strategy distinct from the broader, generic booking and expense-management functionality offered by larger competitors. The UK corporate travel market itself remains substantial: it generated approximately £27.5 billion in gross value added in 2022, with roughly 47% of the workforce travelling for business purposes within or beyond the UK (Marshall, 2023; Vries, 2019), and the global business travel market is forecast to grow from approximately USD 695.9 billion in 2020 to USD 2,001.1 billion by 2028 (López, 2023), as shown in Table 1.

Table 1 Forecast Growth of the Global Business Travel Market (López, 2023)

Year	Global Business Travel Market Value (USD billion)
2020	695.9
2028 (forecast)	2,001.1

Despite this growth trajectory, comprehensive academic comparisons of AI readiness among corporate travel SaaS providers, including Ortharize, remain scarce, a gap partly attributable to the recency of both the AI field and the company's founding (Marikyan & Papagiannidis, 2023).

3. Methodology

This study adopted a qualitative, desk-based research design appropriate for in-depth, non-numerical analysis of a single organisation's technology features and competitive position (Chatfield, 2020; Creswell & Creswell, 2017). Desk-based research was selected because it enabled an extensive review of existing literature, market reports, and platform documentation without requiring primary data collection, consistent with the scope and resource constraints of the study (Chui et al., 2018).

Secondary data were drawn from three sources: (i) the Ortharize corporate website and press coverage (Business News Wales, 2021; UKT News, 2023); (ii) structured virtual meetings and email correspondence with the company's Head of Operations; and (iii) a competitor feature audit of SAP Concur, TravelPerk, and Expensify sourced from the GetApp comparison database (GetApp, n.d.). Comparative analysis was used to benchmark Ortharize against these three competitors across functional categories such as booking management, approval workflows, and financial integrations. Porter's competitive positioning framework and a SWOT analysis were then applied to interpret the platform's strategic position, followed by a thematic literature review to identify AI technologies appropriate for the identified functional gaps.

As with all secondary-data research, findings are subject to limitations around data currency, completeness, and interpretive judgement (Hox & Boeije, 2005; Tripathy, 2013); these limitations are discussed further in Section 5.4. The research was conducted under low-risk ethical approval granted by the Humanities and Social Sciences Research Ethics Committee at Swansea University, with data privacy and confidentiality safeguards applied throughout.

4. Findings

4.1. Technological Feature Comparison

Ortharize offers a self-service booking tool, customisable travel policies, a gamified reward system, a centralised travel-arranger function, automated approval routing, a trips management tool, activity reporting, consolidated billing, a website chat tool, and mobile app compatibility. Table 2 benchmarks these and other core features against SAP Concur, TravelPerk, and Expensify (GetApp, n.d.).

Table 2 Comparative Feature Analysis of Ortharize and Key Competitors

Feature	Ortharize	SAP Concur	TravelPerk	Expensify
Online Booking / Booking Management	Y	Y	Y	Y
Approval Workflow	-	Y	Y	Y
Third-Party API Integration	-	Y	Y	Y
Multi-Currency Support	-	Y	Y	Y
Multi-Language Support	-	Y	Y	-
Reward / Gamification System	Y	-	-	-
Expense Tracking	Y	Y	Y	Y
Real-Time Reporting	Y	Y	Y	Y
Audit Trail / Audit Management	-	Y	-	Y

The comparison indicates that Ortharize matches competitors on core booking, billing, and reporting functions, but lacks approval-workflow automation, third-party API integration, multi-currency and multi-language support, and formal audit management, all of which are present in at least two of the three benchmarked competitors.

4.2. Strategic Positioning: SWOT Analysis

Applying Porter's framework, Ortharize's use of gamification to reward cost-conscious employee behaviour positions the platform within a differentiation strategy rather than a cost-leadership or purely generic offering (Scott & Williams,

2023). Table 3 summarises the platform's strengths, weaknesses, opportunities, and threats identified through this analysis.

Table 3 SWOT Analysis of the Ortharize Platform

Strengths	Weaknesses	Opportunities	Threats
Reward-based gamification system	Poor third-party integration	Global market expansion	Economic uncertainty
Seamless self-service user experience	Limited scalability	AI-enhanced user experience	Intense competitive landscape
Cost-effective booking process	No multi-company functionality	NLP-based language translation	Rapid technological change
	No multi-language / multi-currency support	Regulatory compliance improvement	Data security risks

4.3. AI Technologies Applicable to the Platform

Building on the literature reviewed in Section 2.2, six AI applications were identified as most directly addressing Ortharize's functional gaps and strategic goals. These are summarised in Table 4.

Table 4 Recommended AI Applications for Ortharize's Booking Platform

AI Solution	Function	Expected Benefit
Dynamic pricing engine	Reinforcement learning adjusts fares/rates to real-time demand and supply signals	Competitive, responsive pricing
AI-powered chatbot	NLP and generative models provide 24/7 conversational support	Reduced wait times, higher engagement
Neural machine translation	Transformer-based translation across languages	Wider customer base, smoother communication
Itinerary generation system	Expert systems and reinforcement learning automate trip planning	Faster, more convenient booking
Recommender system	Collaborative filtering/ANN suggest personalised options	Reduced information overload, higher retention
Adaptive UI/UX	Interface adapts to user behaviour and preferences	Improved satisfaction and usability

4.4. Risk Considerations

Table 5 AI Implementation Risks and Mitigation Strategies

Identified Risk	Mitigation Strategy
Accuracy and availability of secondary data	Cross-reference multiple reputable sources; engage directly with company stakeholders
Data privacy and security	Align with GDPR; conduct periodic security audits
AI implementation complexity	Train in-house staff; engage specialist AI consultants
AI ethics (explainability, bias)	Adopt UNESCO and ICO ethical AI guidance; ensure transparent decision logic

Implementing these AI solutions introduces risks around data accuracy, privacy, technical capability, and ethics, each of which requires a corresponding mitigation strategy, summarised in Table 5 (Chui et al., 2022; Grennan et al., 2022; Hoofnagle et al., 2018; Schiff et al., 2020).

5. Discussion

5.1. Interpreting the Competitive Gap

The feature comparison in Table 2 suggests that Ortharize's absence of multi-currency, multi-language, and third-party integration functionality may constrain its appeal to organisations with international operations or complex financial-system requirements. Viewed through TAM (Davis, 1989), these gaps could reduce perceived usefulness for such customer segments, even where perceived ease of use remains high due to the platform's self-service design. At the same time, the differentiation created by the reward-based gamification system represents a genuine unique selling point not replicated by any of the three benchmarked competitors, consistent with Porter's differentiation strategy (Scott & Williams, 2023).

5.2. The Case for AI-Enabled Enhancement

Rather than competing solely on feature parity, the findings suggest Ortharize could use AI to extend its existing differentiation strategy. An AI-powered feedback loop applied to the gamification system, using sentiment analysis and reinforcement learning, could make the reward mechanism more adaptive and data-driven (Sjödín et al., 2021), reinforcing rather than diluting the platform's core differentiator. Simultaneously, dynamic pricing (Ban & Keskin, 2021), conversational chatbots (Lukanova & Ilieva, 2019), and neural machine translation (Johnson et al., 2017) would address specific functional gaps identified in Section 4.1, potentially improving customer satisfaction and retention (Lalicic & Weismayer, 2021).

5.3. Governance and Ethical Considerations

AI adoption is not without risk. Explainability and fairness must be addressed proactively, particularly where dynamic pricing or recommender systems could inadvertently disadvantage certain user groups (Grennan et al., 2022; Schiff et al., 2020). Given that AI systems in this context will process personal booking and travel-preference data, alignment with data-protection regulation, including GDPR-equivalent principles, and international ethical guidance such as the UNESCO Recommendation on the Ethics of Artificial Intelligence (UNESCO, 2021) and the UK Information Commissioner's Office guidance on AI (ICO, 2023), is essential to sustaining stakeholder trust.

5.4. Limitations

This study relies exclusively on secondary data and a small number of stakeholder exchanges; as such, findings regarding Ortharize's exact market share and internal technical architecture should be interpreted with caution (Hox & Boeijs, 2005). The competitor comparison also reflects a snapshot in time and may not capture subsequent feature releases by either Ortharize or its competitors.

6. Conclusion

This paper set out to evaluate the technological position of the Ortharize travel booking platform and to identify how artificial intelligence could be used to strengthen its competitiveness. The comparative analysis found that while Ortharize's gamified reward system offers a genuine point of differentiation within the UK corporate travel SaaS market, the platform lags competitors on foundational features such as third-party integration, multi-currency and multi-language support, and audit management. Six AI applications, dynamic pricing, conversational chatbots, neural machine translation, automated itinerary generation, recommender systems, and adaptive user-interface design, were identified as offering the greatest potential to close this gap while reinforcing the platform's existing differentiation strategy. Guided by the Technology Acceptance Model and supported by appropriate ethical and data-governance safeguards, a phased AI adoption approach offers a realistic pathway for Ortharize to enhance both operational efficiency and customer experience.

Recommendations

Based on the findings, the following recommendations are proposed for Ortharize and comparable travel SaaS providers:

- Prioritise an AI-powered feedback loop for the gamification and reward system, using sentiment analysis to keep the platform's core differentiator adaptive and data-driven.
- Introduce a dynamic, AI-based pricing engine to remain competitive on airfare, hotel, rail, and car-hire rates in response to real-time market conditions.
- Deploy a 24/7 AI-powered chatbot, supported by natural language processing, to reduce customer wait times and free staff for complex enquiries.
- Integrate neural-machine-translation capability to extend the platform's usability to non-English-speaking customers and international teams.
- Develop an AI-driven itinerary-generation and recommender system to reduce planning effort and improve personalisation for return users.
- Adopt adaptive, AI-informed user-interface design to improve usability and anticipate user needs based on booking history.
- Establish an AI governance framework, covering data privacy, explainability, and bias monitoring, aligned with UNESCO and ICO guidance, before large-scale deployment.
- Commission future research using primary data (e.g., customer surveys or platform usage analytics) to validate the feature gaps and AI priorities identified in this desk-based study.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Andriasyan, S. (2022). Benefits of artificial intelligence in travel. SmartClick. <https://smartclick.ai/articles/benefits-of-artificial-intelligence-in-travel/>
- [2] Ban, G., & Keskin, N. B. (2021). Personalized dynamic pricing with machine learning: High-dimensional features and heterogeneous elasticity. *Management Science*, 67(9), 5549. <https://doi.org/10.1287/mnsc.2020.3680>
- [3] Business News Wales. (2021, December 10). SMARTCymru funding to enable new mobile application with Covid-19 functionality. <https://businessnewswales.com/smartcymru-funding-to-enable-new-mobile-application-with-covid-19-functionality/>
- [4] Chatfield, S. L. (2020). Recommendations for secondary analysis of qualitative data. *The Qualitative Report*, 25(3), 833-842. <https://doi.org/10.46743/2160-3715/2020.4092>
- [5] Chaudhari, K., & Thakkar, A. (2019). A comprehensive survey on travel recommender systems. *Archives of Computational Methods in Engineering*, 27(5), 1545-1571. <https://doi.org/10.1007/s11831-019-09363-7>
- [6] Chui, M., Hall, B., Mayhew, H., Singla, A., & Sukharevsky, A. (2022, December 6). The state of AI in 2022 - and a half decade in review. McKinsey & Company.
- [7] Chui, M., Manyika, J., Miremadi, M., Henke, N., Chung, R., Nel, P., & Malhotra, S. (2018). Notes from the artificial intelligence frontier: Insights from hundreds of use cases. McKinsey Global Institute.
- [8] Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- [9] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340. <https://doi.org/10.2307/249008>
- [10] GetApp. (n.d.). Compare Ortharize, SAP Concur, TravelPerk and Expensify. GetApp.
- [11] Grennan, L., Kremer, A., Singla, A., & Zipparo, P. (2022, September 29). Why businesses need explainable AI - and how to deliver it. McKinsey & Company.
- [12] Hentschel, T. (2021, December 6). How AI solutions can improve the travel and hotel booking experience. Entrepreneur.

- [13] Holden, R. J., & Karsh, B. T. (2011). The technology acceptance model: Its past and its future in health care. *Journal of Biomedical Informatics*, 43(1), 159-172.
- [14] Hoofnagle, C. J., van der Sloot, B., & Zuiderveen Borgesius, F. (2018). The European Union general data protection regulation: What it is and what it means. *SSRN Electronic Journal*, 67. <https://doi.org/10.2139/ssrn.3254511>
- [15] Hox, J. J., & Boeijs, H. R. (2005). Data collection, primary versus secondary. <https://doi.org/10.1016/B0-12-369398-5/00041-4>
- [16] ICO. (2023, March 15). Guidance on AI and data protection. Information Commissioner's Office.
- [17] Johnson, M., Schuster, M., Le, Q. V., Krikun, M., Wu, Y., Chen, Z., Thorat, N., Viégas, F., Wattenberg, M., Corrado, G., Hughes, M., & Dean, J. (2017). Google's multilingual neural machine translation system: Enabling zero-shot translation. *Transactions of the Association for Computational Linguistics*, 5, 339-351. https://doi.org/10.1162/tacl_a_00065
- [18] Lalicic, L., & Weismayer, C. (2021). Consumers' reasons and perceived value co-creation of using artificial intelligence-enabled travel service agents. *Journal of Business Research*, 129, 891-901. <https://doi.org/10.1016/j.jbusres.2020.11.005>
- [19] López, A. M. (2023, June 30). Business travel in the UK - statistics & facts. Statista.
- [20] Lukanova, G., & Ilieva, G. (2019). Robots, artificial intelligence, and service automation in hotels. In S. Ivanov & C. Webster (Eds.), *Robots, artificial intelligence, and service automation in travel, tourism and hospitality* (pp. 7-32). Emerald Publishing.
- [21] Marikyan, D., & Papagiannidis, S. (2023). Technology acceptance model: A review. In S. Papagiannidis (Ed.), *TheoryHub Book*.
- [22] Marshall, E. (2023, April 18). The value of business travel in a post-pandemic world. CBI.
- [23] Ramzan, B., Bajwa, I. S., Jamil, N., Amin, R. U., Ramzan, S., Mirza, F., & Sarwar, N. (2019). An intelligent data analysis for recommendation systems using machine learning. *Scientific Programming*, 2019, 1-20. <https://doi.org/10.1155/2019/5941096>
- [24] Refanidis, I., Emmanouilidis, C., Sakellariou, I., Alexiadis, A., Koutsiamanis, R. A., Agnantis, K., & Efraimidis, P. S. (2014). myVisitPlanner GR: Personalized itinerary planning system for tourism. In *Artificial Intelligence: Methods and Applications* (pp. 615-629). Springer.
- [25] Schiff, D., Biddle, J., Borenstein, J., & Laas, K. (2020). What's next for AI ethics, policy, and governance? A global overview. *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*. <https://doi.org/10.1145/3375627.3375804>
- [26] Scott, G., & Williams, P. (2023). Porter's five forces explained and how to use the model. Investopedia.
- [27] Shafiei, S., Yazdani, S., Jadidfar, P., & Zafarmand, A. H. (2019). Measurement components of socioeconomic status in health-related studies in Iran. *BMC Research Notes*, 12. <https://doi.org/10.1186/s13104-019-4101-y>
- [28] Sjödin, D., Parida, V., Palmié, M., & Wincent, J. (2021). How AI capabilities enable business model innovation: Scaling AI through co-evolutionary processes and feedback loops. *Journal of Business Research*, 134, 574-587. <https://doi.org/10.1016/j.jbusres.2021.05.009>
- [29] Sohn, K., & Kwon, O. (2019). Technology acceptance theories and factors influencing artificial intelligence-based intelligent products. *Telematics and Informatics*, 47, 101324. <https://doi.org/10.1016/j.tele.2019.101324>
- [30] Tanween Agency. (2022). Breaking down the pros and cons of chatbots as a customer experience solution.
- [31] Tripathy, J. P. (2013). Secondary data analysis: Ethical issues and challenges. *Iranian Journal of Public Health*, 42(12), 1478-1479.
- [32] UKT News. (2023, March 22). Startup showcase: Ortharize - Revolutionizing business travel management. UKT News.
- [33] UNESCO. (2021, November 23). Recommendation on the ethics of artificial intelligence. UNESCO.org.
- [34] Vries, M. D. (2019, July). Business traveller - UK - July 2019. Mintel.
- [35] Wang, C., Ahmad, S. F., Bani Ahmad Ayassrah, A. Y. A., Awwad, E. M., Irshad, M., Ali, Y. A., Al-Razgan, M., Khan, Y., & Han, H. (2023). An empirical evaluation of technology acceptance model for artificial intelligence in e-commerce. *Heliyon*, 9(8). <https://doi.org/10.1016/j.heliyon.2023.e18349>