

European Journal of Business and Strategic Management (EJBSM)

**Emirates' AI Innovation Challenge: Enhancing Customer Experience through
Personalized In-Flight Services**

Maryam Alfalasi



Strategy

**Emirates' AI Innovation Challenge: Enhancing
Customer Experience through Personalized
In-Flight Services**



Maryam Alfalasi

Hamdan bin Mohammed Smart University
(HBMSU);

Article History

Received 4th March 2025

Received in Revised Form 9th April 2025

Accepted 6th May 2025



How to cite in APA format:

Alfalasi, M. (2025). Emirates' AI Innovation Challenge: Enhancing Customer Experience through Personalized In-Flight Services. *European Journal of Business and Strategic Management*, 10(3), 31–43. <https://doi.org/10.47604/ejbsm.3323>

Abstract

Purpose: This research explores the efforts of Emirates Airline in addressing a challenge to create personalized in flight amenities through an open artificial intelligence (AI) innovation. It is the central aim to investigate how AI can be strategically leveraged to raise the passenger experience in line with the airline's long term business goals.

Methodology: The way a study is framed is within a theoretical framework pertaining to Porter's (1990) Competitive Strategies framework and Schilling's (2005) Innovation Funnel model. These frameworks are utilized to examine the correspondence between AI-based offers and Emirates' pronounced goal, customer inclinations, along with its working adaptability.

Findings: Based on our implementation of the AI personal service package, it was revealed that there were three major advantages. The first was that it substantially increased the customer satisfaction because of its services they offer that caters to individual preferences. Secondly, the service delivery system improvement increased the operational performance of the airline by reducing inefficiency.

Unique Contribution to Theory, Practice and Policy: The research based on the findings recommends that airlines would increasingly adopt use of AI based personalization as a core part of their innovation strategy. With each new AI capability, the aviation sector has to realize AI as 'stuff to do better operations', but also 'fuel to extend markets and to build customer delight'..

Keywords: *Artificial Intelligence, Aviation Innovation, Customer Experience, Personalisation, OpenInnovation, Emirates Airlines, Strategic Management, Data Privacy, AI Ethics*

©2025 by the Authors. This Article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0>)

INTRODUCTION

As emerging AI systems increasingly allows airlines to personalize flight experiencing by tailoring meals according to dietary history or personal entertainment with predictive viewing analysis, personalizing flight experience will become more common and more of a ‘nice to have’ rather than a ‘nice to offer’. These innovations are changing the way that given industry shapes passenger and operational expectations. An international airline that is amongst the leading in the world, Emirates has been proactive in reacting to this change by launching a pioneering AI innovation initiative which seeks to set new flight experience standards. Instead of a one size fits all background, Emirates wants to offer individualised journeys by using artificial intelligence as a means of anticipating and fulfilling passengers’ individual preferences. With this initiative, the way to highly personalized air travel is closer than ever, where comfort, convenience and customer satisfaction are all being improved by technology.

Context and Importance

Digital disruption grows at rapid speed across multiple sectors and the aviation industry is using AI to achieve better market positions. Increasing operational expenses and changing customer demands and stronger competition requirements force airlines to combine enhanced customer service delivery methods with cost-effective solutions. AI offers vast potential—from predictive maintenance and baggage tracking to real-time passenger engagement (BR, 2022). The existing powerful global brand of Emirates becomes a solid base for AI deployment to transform flight experiences and boost customer retention while sustaining dominance in the market.

Problem Statement

Despite modern computer systems airlines experience problems providing standardized efficient and customized services within their organization. Customer expectations for convenience along with relevant and seamless experience remain unmet by classical in-flight services at present. Earthly operational inefficiencies have a negative effect on customer satisfaction particularly through service allocation problems and onboard resource planning breakdowns. The resolution of current issues demands an advanced strategy that links business aims and customer related expectations while enhancing their integration with emerging technologies.

Purpose of the Study

Emirates launched an open AI innovation challenge to source and evaluate cutting-edge solutions aimed at enhancing both operational performance and customer satisfaction. This study examines the structure and outcomes of the innovation challenge, particularly focusing on how it enabled stakeholder participation and led to the selection of a personalized in-flight service solution. The initiative addresses key service limitations rooted in legacy IT systems, fragmented data sources, and insufficient real-time integration across customer touchpoints. By inviting external innovators to solve these challenges, Emirates strategically leveraged AI to overcome organizational silos and create more dynamic, responsive, and tailored flight experiences. The research highlights this initiative as a model of how AI can be used not just for incremental improvements but for redefining the competitive edge through differentiated service offerings.

Research Approach

Emirates' innovation challenge was designed and evaluated using structured strategic frameworks to ensure that it was in line with the long term vision of the company. The application of Porter's (1990) Competitive Strategies model was used to determine the extent to which proposed AI-powered personalization services could increase Emirates' differentiation strategy through providing Emirates with a unique and superior passenger experience.

There were several stages of the funnel; the funnel included: idea generation, initial screen, concept development, and pilot testing – all of which had its evaluation criteria. These models were operationalized by placing submissions on scoring matrices consisting of technical viability, cost efficiency and the market appeal potential.

Significance

The challenge led to the development of a service system based on AI technology which adapted to individual customer needs in-flight. The solution uses integrated passenger data to customize meals as well as entertainment offerings and onboard support for passengers (Zabalawi & Al Jammal, 2021). The unique aspect of this initiative results from the collaboration which extends across Emirates' internal groups together with AI technology partners and regulatory bodies and customer insight divisions. Competing departments together delivered a technical solution which combined strength and usability.

Overview of Paper

This research examines the AI innovation challenge of Emirates through analysis of strategic components and operational framework and technological implementation details. The paper starts with explaining how the project used theoretical methods and approaches before delving into the steps of challenge design and stakeholder engagement and solution evaluation. The paper presents an evaluation of the solution selection along with risk considerations and sector-level implications for aviation while providing useful information for both practitioners and researchers examining AI-driven service innovation.

A. Background and Literature Context

Artificial Intelligence in Aviation

Artificial Intelligence emerged as a disruptive technology for the aviation sector to deliver solutions which combine operational enhancement with service optimization and safety security and cost minimization. Airline operations benefit from machine learning and data analytics solutions that help them observe passenger requirements and enhance both their land and air services as well as their decision-making process (Hassan *et al.*, 2023). Elaborate customer personalization demands form an exceptional business opportunity through which airlines can transform their passenger experiences with AI technology.

Strategic Frameworks: Porter (1990) and Schilling (2005)

Porter's (1990) Competitive Strategies model provides airlines with essential information for realizing competitive advantage through cost leadership or differentiation strategies. For Emirates, differentiation—is marked by enhanced service quality and innovation—is an integral component of its strategic emphasis. The personalized AI services enhance Emirates' competitive strategy of providing travel experiences that are difficult for its competitors to replicate. Schilling's (2005) systematic innovation assessment model provides a step-by-step analysis of the most valuable innovations. The funnel method pools a large number of ideas,

which upon passing through feasibility and business value tests, yield customized solutions ready for implementation (Gomez & Okhmatovskiy, 2023). The model provided the foundation for realizing the single AI application with maximum value out of several applications presented in the Emirates AI innovation challenge that participated in in-flight personalized service delivery.

Market Demands and Customer Expectations in Global Airlines

This shift in model towards the user is in line with a larger reorientation in consumer behaviour fed in by the requirements of the digital economy. For Ngadi (2024), increasing numbers of airline passengers desire services that allow them to choose their meal according to personal preferences, entertain themselves individually during flight, and receive personalized services that are oriented to their needs. Moving forward, if IATA turns out to be correct, this trend also, according to IATA (2023), 83% of passengers would like to turn over their personal data should it be in return for more personalized travel experiences. To survive, and in increasing competition around the globe, full service carriers need to distinguish themselves from just price point, continuing in service innovation and digital enhancers that respond to expectations. Therefore, airlines need to bring advanced technologies, such as AI, to their business to stay relevant and competitive in a market where personalization is now becoming a standard expectation and not a luxury anymore.

Emirates' Innovation Culture and Digital Transformation

Emirates consistently demonstrates innovative leadership in air travel with new planes and luxurious amenities, and investing in the latest technology for digital infrastructure. Emirates traverses the latest innovation culture by evolving with technological advancements from biometric boarding and AI services to app improvements (Machado, 2024). The open AI innovation challenge naturally belongs to this open innovation culture as it provides for outside ideas to enter a formal transformation process for scalability.

METHODOLOGY

Open Innovation Challenge Format

Emirates used an open innovation challenge format to initiate development of important AI solutions. The open innovation method allowed contributions from different sources that included workers throughout Emirates as well as AI startup entities, academic research institutions and technological equipment suppliers to present AI-based solutions for operational enhancement and customer satisfaction improvements (Dafri, 2024). By using an open innovation challenge format Emirates obtained a wide array of input from different contributors. Each step of the challenge included submission of ideas then technical evaluation and proof-of-concept development to determine final selection through real-life assessment.

Stakeholder Involvement

The innovation challenge achieved success because it required continuous involvement from different stakeholder communities.

The pilot solutions received direct feedback from passengers who also tested the applications.

The operational understanding of service delivery and resource management and workflow efficiency was delivered by Emirates cabin staff together with ground personnel.

AI partners comprising both startups along with data scientists and established technology firms existed to design and create AI models for the project (Faccia *et al.*, 2023).

The regulatory authorities made sure all proposed innovations met aviation safety requirements and data protection standards thus reinforcing their legal validity.

Through a connected system of partners the organization received solutions which demonstrated technical capabilities and operational fit along with regulatory adherence.

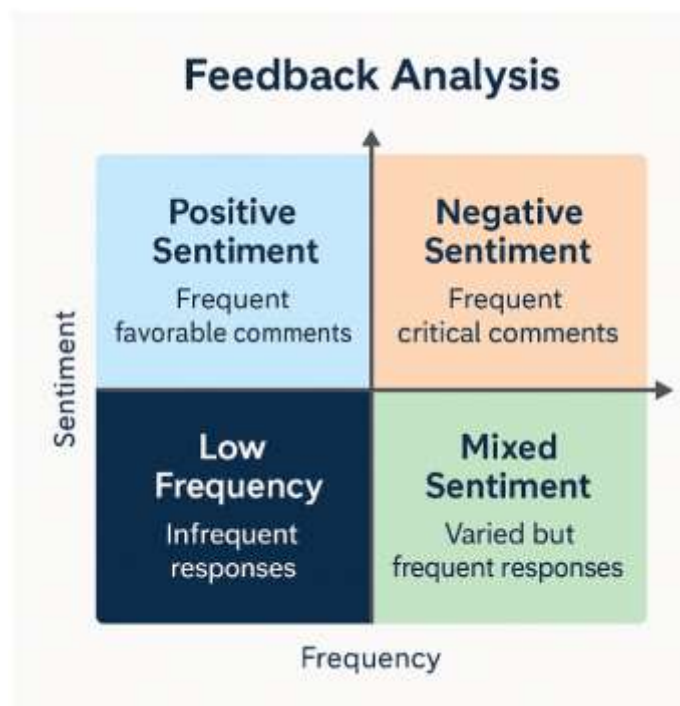


Figure 1: Feedback Analysis

Source: Canva

Evaluation Criteria

Submissions to the challenge were assessed using a multi-criteria framework based on both strategic and operational considerations. The primary criteria included:

- Market Demand – Alignment with passenger expectations and global trends
- Scalability – Potential for broad implementation across Emirates' fleet and service classes
- Cost Feasibility – Return on investment and resource requirements for deployment
- Customer Impact – Degree to which the solution could enhance passenger satisfaction
- Strategic Fit – Consistency with Emirates' long-term vision and brand positioning

Each idea was scored against these metrics by an expert panel comprising executives, technology leads, customer experience managers, and external advisors.

Data Collection Methods

The collected data used for this research included both qualitative and quantitative methodologies. The research employed three essential tools - customer surveys, staff

interviews as well as technical pilot test outputs. Selected routes for the customized flight service pilot operation allowed researchers to validate service adaptability as well as passenger interaction and system performance stability in actual flight conditions (Shamout & Ali, 2021). The selected solution received steady feedback integration from expert panels along with stakeholder participation for continuous improvement leading to its finalization.

Implementation of the Innovation Challenge

Design and Phases of the AI Innovation Challenge

Emirates created their AI innovation challenge with a purpose to obtain transformative scalable solutions which would improve both customer interactions and operational efficiencies. Multiple structured phases led the process to maintain an extensive and exclusive evaluation method for developing new ideas as well as their execution. The first step of the challenge accepted submissions made by internal staff members alongside outside AI developers while following Emirates' designated strategic objectives (Adelaja, 2024). Before advancing further candidates needed to pass through a review phase during which businesses checked proposed solutions against organizational goals and technical viability assessments. The selection process directed candidate ideas to development while testing and simulation happened in controlled conditions. The final test phase carried out live pilots for direct evaluation of ideas in actual conditions to perfect and verify their concepts.

Shortlisting and Testing of Ideas

The concepts focused on primary operational needs and operational experiences. The objective behind predictive maintenance was to use artificial intelligence-driven analysis for decreasing aircraft maintenance periods and enhancing safety levels. The system sought to boost end-to-end visibility and decrease mishandling problems by implementing real-time monitoring for baggage tracking. The program personalized in-flight services through entertainment and food choices as well as individual customer assistance by using customer data including behavior and preferences (Sharafi, 2022). The evaluation process included extensive simulations and pilot runs of all three solutions before professional reviewers judged their performance using Emirates' assessment criteria.

Reasons Behind Selecting Personalised In-Flight Service

The personalized in-flight service solution outshone other projects because it perfectly matched Emirates' brand commitment to customer service and flight luxury experience. The delivery system provided noticeable enhancements to passenger satisfaction by creating distinct experiences which passengers found meaningful (Li, 2023). The personalisation model allowed continuous advancement by machine learning so Emirates could establish long-term customer loyalty over time. Under Porter's framework the customized aircraft amenities played a strategic role to help Emirates implement its differentiation strategy.

Pilot Scope: Cost, Timeline, and Expected Outcomes

As part of their trial run the personalized air service debuted on certain long-distance flight paths designed specifically for first and business class customers to act as initial users of the program. The budget for this project stood between \$5–10 million to develop and integrate the system along with employee training and testing stages. Top management agreed the project would require between 12 to 18 months for completion. The program evaluation tracked three major performance indicators such as passenger contentment scores combined with personal option acceptance rates alongside live-flight system stability parameters. In addition to high

engagement, the collected initial data demonstrated that delays in service provisions were lower while customer interest remained strong enough to support the adoption expansion to the entire fleet.

Strategic Analysis

Application of Porter's Competitive Strategies

The strategic application of AI at Emirates can be evaluated through Porter's (1990) Competitive Strategies framework which demonstrates how the company uses AI to elevate customer value. Emirates has maintained a differentiation approach by establishing itself as a luxury travel service dedicated to outstanding service delivery. This strategic objective finds direct support through the personalised in-flight service which delivers customized quality experiences based on individual customer preferences. AI technology transforms Emirates into an aviation leader through its ability to customize dining options and entertainment content and anticipatory help services using past user data in an intensely competitive market characterised by standardised services. Emirates directs its approach towards business and first-class passengers who make up its focus markets under its strategy. These specific client segments deliver both substantial financial gains and conduct the majority of brand-related activities. Artificial intelligence personalization within premium cabin spaces provides concrete benefits to high-end customers which leads them to stay loyal while recommending the airline to others. The tested implementation acts as a demonstration model that can be expanded into economy class operations in future applications.

Use of Schilling's Innovation Funnel

Emirates utilized Schilling's (2005) Innovation Funnel to define and enhance their airport booking system that involved artificial intelligence (AI). Through the funnel mechanism the organization obtained many innovative ideas followed by systematic assessment through business and technical evaluation factors like feasibility combined with cost analysis and scalability assessment and customer impact evaluation. The systematic evaluation process made sure that valuable resources were allocated to projects which demonstrated most promise for success in authentic aviation operations (Alnaqbi & Yassin, 2021). Detailed analysis took place for the three selected ideas which included predictive maintenance with intelligent baggage tracking and personalized in-flight service by utilizing the funnel model. The evaluation process required checking each concept three times using expert assessments of stakeholders while implementing pilot data tests. The personalised in-flight service became the preferred choice because it brought significant strategic worth while fostering better customer encounters that matched Emirates' brand vision.

AI Innovation Funnel Used by Emirates (Adapted from Schilling, 2005)

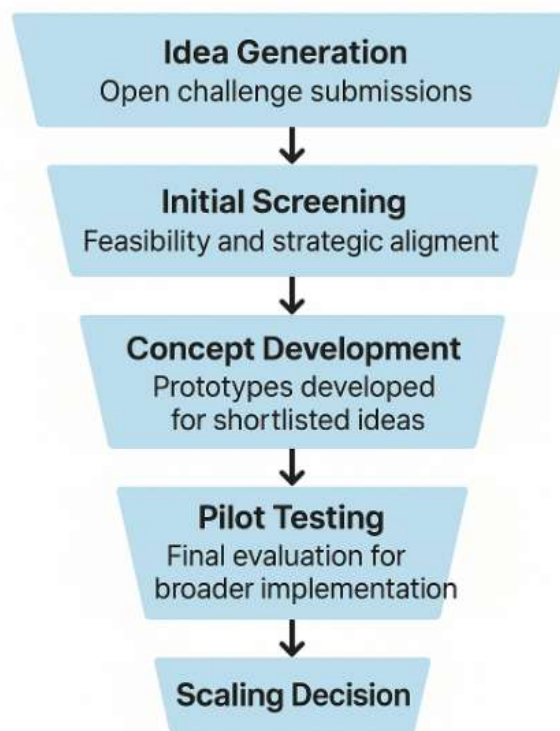


Figure 2: Innovation Funnel Process

Source: Canva

Internal Capabilities and External Partnerships as Strategic Assets

During the innovation challenge process Emirates demonstrated the essential role of developing internal capacity and forming strategic external relationships. Emirates employed its solid IT infrastructure together with its large pool of passenger data and culture of innovation as foundations to develop and test artificial intelligence concepts from within its organization. The airline facilitated rapid implementation of pilot projects which led to confirming the practicality and market worth of its selected solution. Through partnerships with AI developers as well as regulatory bodies and technology vendors Emirates gained the ability to integrate advanced systems which might have seemed inaccessible as a standalone operation. The airline made partnerships that enabled the integration of state-of-the-art AI expertise and safeguarded the personalized services against international privacy requirements and aviation security regulations. The strategic asset created through Emirates' partnership with other organizations combined innovation elements with operational excellence that allowed both parties to succeed.

The 6Cs Framework: A Holistic Strategic Lens

As per Dong (2022), the implementation of the AI-powered personalised in-flight service can also be assessed through the 6Cs framework—Collaboration, Context, Capabilities, Customer, Change, and Competition:

- Emirates demonstrated strong cross-sector collaboration with regulators, developers, and internal teams.
- The initiative was developed in the broader context of rising customer expectations, digital transformation, and competitive pressure in global aviation.
- Emirates drew on robust internal systems, skilled personnel, and an established innovation culture to enable rapid deployment.

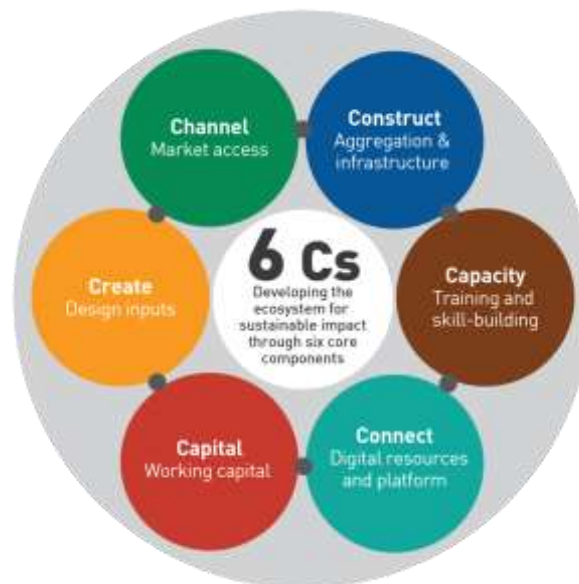


Figure 3: Concept of 6cs Framewrok

Source: <https://creative-million.org/2022/03/23/the-6c-model/>

Benefits and Impact of the Solution

Enhanced Customer Satisfaction and Loyalty

AI-driven personalized in-flight management provides maximum customer satisfaction as the key advantage. Emirates has transformed bare slate travel services into customized experiences by casting the individual preferences of every passenger in terms of food and entertainment and onboard assistance programs and by proactively providing a complete set of services based on traveller profiles. With such customer personalization, it comes as no surprise that it attracts high-value customers, i.e., business and first-class passengers, who possess a fastidious standard of service. The outcomes generate robust brand loyalty since passengers value airlines that manifest personal understanding in terms of their individual needs.

Operational Efficiency through Pre-Emptive Service Design

Pre-emptive service design allows Emirates to get ahead of passenger needs even before they board. By leveraging AI, they can tailor meals, entertainment, and assistance to each individual.

This forward-thinking strategy not only streamlines crew workflows and minimizes mistakes but also enhances how resources are allocated. Greater operational efficiency while ensuring top-notch service quality from start to finish in the passenger experience.

Real-Time Adaptability of Services Using AI

This solution really shines because it can adapt to changes almost instantly. Essentially, AI algorithms tap into ongoing interactions to adjust services based on shifts in flight preferences and sudden changes from passengers. For instance, the app can quickly update service instructions if a passenger decides to change their meal choice right before boarding the plane. The quicker the onboard services can adapt, the more accurate and relevant they become, making passengers feel valued from the moment they leave the ground until they reach their destination. Plus, since the system can analyze past customer behavior, it can consistently create and apply unique personalization models throughout the entire operation.

Competitive Positioning as a Global Innovation Leader

The successful implementation of AI through high-profile customer contact positions Emirates at the forefront of worldwide aviation innovation. Emirates stands out from other airlines through its passenger customer interaction approach which marks a new standard for premium travel because the airline utilizes AI technology differently. Emirates establishes leadership in digital transformation for the aviation industry by doing so which gives others cause to conform with similar approaches. The visible improvements in customer experience through AI duplicate Emirates' brand personality and help carry out its plan to remain distinctive in the industry.

Positive Feedback from Pilot and Stakeholder Validation

The airline gained positive customer feedback alongside increased customer satisfaction and personalized product use that enhanced customer recommendation rates. Multiple stakeholders evaluated the service validity along with operational effects to validate system integration simplicity and limited workflow disturbances for operational teams. The successful implementation of the service created essential backing from inside and outside stakeholders that lets the airline proceed with widespread deployment.



Figure 4: Pilot Metrics Dashboard

Source: Canva

Risk Management and Ethical Considerations

Emirates is all about using AI responsibly, focusing on key areas like data privacy, system reliability, regulatory compliance, and ethical oversight. By putting structured safeguards in place, they make sure that technology improves the customer experience without sacrificing trust or safety. They also keep a close eye on things and collaborate with various stakeholders to maintain the system's integrity, ensuring that innovation goes hand in hand with transparency and ethical standards.

Addressing Data Privacy Concerns

To keep passenger data safe, Emirates strictly follows global data protection laws like GDPR. They anonymize and encrypt information, collecting it only with user consent. Passengers have the choice to opt in or out of AI-driven services, which promotes transparency and gives them control while building trust in the personalization process.

System Dependability and Fallback Measures

The reliability of their systems is bolstered by redundancy protocols and manual override options for the crew. They rigorously test AI functionality to guarantee uninterrupted service. If any technical issues arise, fallback procedures are in place to ensure that service continues smoothly, maintaining operational stability and the quality of the passenger experience.

Regulatory Compliance and AI Transparency

Emirates collaborates closely with aviation authorities to ensure they meet regulatory requirements and maintain transparency in AI usage. Passengers are kept informed about how their data is used, and the AI decision-making processes are designed to be understandable. This commitment to openness promotes accountability and aligns with ethical AI principles in the aviation sector.

Ongoing Monitoring and Ethical Oversight

A dedicated oversight committee is always monitoring the performance, ethics, and fairness of the AI systems. They conduct regular audits to check compliance and spot any potential biases. This proactive governance approach ensures that Emirates stays aligned with ethical standards, meets customer expectations, and adapts to evolving regulations, reinforcing their commitment to responsible and sustainable AI implementation.

Conclusion

In conclusuion, it can be said that it's important to note that this study has its limitations. It primarily examines one company Emirates which, while significant, operates in a distinct environment that may not be easily replicated by others. We still lack clarity on how AI personalization will influence factors like long-term customer loyalty, brand perception, or the actual costs of maintaining these systems at scale. These are critical areas that warrant further investigation, especially as the technology becomes more widespread. Looking forward, future research could delve into how AI personalization affects various customer demographics, service tiers, and even cultural contexts. It would be beneficial to compare airlines that implement similar technologies with those that don't, to gain a clearer understanding of what strategies are effective—and which ones fall short. Long-term studies could also shed light on how these systems perform over time, particularly as market dynamics shift and customer expectations evolve.

REFERENCES

- Adelaja, A. A. (2024). The Impact of Harnessing Innovation on Solving AI Issues by using AI. *International Journal of Theory of Organization and Practice (IJTOP)*, 4(1), 83-92. <https://journals.gaftim.com/index.php/ijtop/article/download/340/207> [Retrieved on 19th April]
- Alnaqbi, A. M. A., & Yassin, A. M. (2021). Current status, challenges and strategies of artificial intelligence and e-learning the UAE military education system. *International journal of sustainable construction engineering and technology*, 12(3), 352-361. <https://publisher.uthm.edu.my/ojs/index.php/IJSCET/article/download/10346/4679> [Retrieved on 19th April]
- BR, S. R. (2022). Information and Communication Technology Application in the Asian Tourism Industry. In *Handbook of Technology Application in Tourism in Asia* (pp. 19-48). Singapore: Springer Nature Singapore. https://www.researchgate.net/profile/Krishnan-Umachandran/publication/362003429_The_Internet_Influences_Asian_Tourism/links/62d0b4c328bd252b39f72afa/The-Internet-Influences-Asian-Tourism.pdf#page=94 [Retrieved on 19th April]
- Dafri, W. 2024. Countries' Strategies in Implementing Artificial Intelligence in Government Institutions: A Case Study of the United Arab Emirates. *Available at SSRN 4575622*. <https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=4575622> [Retrieved on 19th April]
- Dong, W. (2022). Building 6C's (Critical Thinking, Collaboration, Communication, Creativity, Culture, Connectivity) in the Chinese Learning Classroom. <https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=2689&context=gradreports> [Retrieved on 19th April]
- Faccia, A., Le Roux, C. L., & Pandey, V. (2023). Innovation and E-commerce models, the technology catalysts for sustainable development: the emirate of Dubai case study. *Sustainability*, 15(4), 3419. <https://www.mdpi.com/2071-1050/15/4/3419/pdf> [Retrieved on 19th April]
- Gomez, R. D., & Okhmatovskiy, I. 2023. Strategic Optimization of the European Full-Service Network Carrier Business Model: How Airlines Can Adapt to Ensure Long-Term Competitiveness. https://run.unl.pt/bitstream/10362/181845/1/2024_25_Fall_58289.pdf [Retrieved on 19th April]
- Hassan, A., Azizul/Abdul Rahman Hassan (Nor Aid), & Nur, N. M. (2023). *Air Travel Industry*. <https://api.taylorfrancis.com/content/books/mono/download?identifierName=doi&identifierValue=10.4324/9781003379461&type=googlepdf> [Retrieved on 19th April]
- Li, P., Bastone, A., Mohamad, T. A., & Schiavone, F. (2023). How does artificial intelligence impact human resources performance. evidence from a healthcare institution in the United Arab Emirates. *Journal of Innovation & Knowledge*, 8(2), 100340. <https://www.sciencedirect.com/science/article/pii/S2444569X23000367> [Retrieved on 19th April]

- Machado, C. B. (2024). Human Interaction and Emerging Technologies (IHiet-AI 2024), Vol. 120, 2024, 114-122. *Human Interaction & Emerging Technologies (IHiet-AI 2024)*, 114.
https://books.google.com/books?hl=en&lr=&id=wm36EAAAQBAJ&oi=fnd&pg=PA114&dq=Emirates%27+AI+Innovation+Challenge:+Enhancing+Customer+Experience+Through+Personalized+In-Flight+Services&ots=RRXwGZvHE8&sig=wvO7r33cAM_9VC7KX6q1Ai3M1s0 [Retrieved on 19th April]
- Ngadi, H. (2024). Disrupting Demand Migration: Finnair Response in the European Market. https://www.theseus.fi/bitstream/handle/10024/858288/Ngadi_Hasilah.pdf?sequence=2 [Retrieved on 19th April]
- Shamout, F. E., & Ali, D. A. (2021). The strategic pursuit of artificial intelligence in the United Arab Emirates. *Communications of the ACM*, 64(4), 57-58.
<https://dl.acm.org/doi/pdf/10.1145/3447723> [Retrieved on 19th April]
- Sharafi, A. (2022). A survey of the innovation ecosystem in the United Arab Emirates. *Journal of economic and social thought*, 9(3), 163-177. <https://journals.econsciences.com/index.php/JEST/article/download/2353/2359> [Retrieved on 19th April]
- Zabalawi, E., & Al Jammal, A. (2021). Innovation Analytics. In *Data Analytics in Marketing, Entrepreneurship, and Innovation* (pp. 15-30). Auerbach Publications.
<https://www.taylorfrancis.com/chapters/edit/10.1201/9780429196614-2/innovation-analytics-eman-zabalawi-alia-al-jammal> [Retrieved on 19th April]