‘Business-case for a new start-up airline in India – Great Owl Airlines

Individual Course Work – Aviation Market Analysis and Forecasting

Contents

1. Introduction

The Indian aviation landscape has evolved through decades of deregulation, consolidation and finally to the emergence of one of the fastest growing aviation markets in the world with stable passenger growth rate of 7.8% (DGCA, 2024) . After the privatization of Air India (subsequently merged with Vistara) in 2022, the domestic traffic shifted towards a market where Air India and IndiGo commands a duopoly position, while the international operations are still open to disruption.

Considering the evolving dynamics within India's international aviation sector, this report investigates the feasibility of establishing a new start-up airline called “Great Owl Airlines” with Jaipur International Airport (JAI) designated as its primary operational hub. The airline is proposed to serve currently unconnected international city pairs from Jaipur, thereby contributing to improved international air connectivity.

From a consultant’s perspective, this report culminates in an evidence-based recommendation regarding the feasibility and strategic merit of establishing the carrier over the operational period from 2026 to 2027. The evaluation includes a comprehensive market analysis, manual demand forecasting and a performance assessment through the ‘Airline Online’ simulation platform. With clearly defined objectives including the enhancement of international connectivity and the achievement of financial sustainability, the proposed airline also seeks to integrate environmentally responsible practices, with particular emphasis on minimising carbon emissions.

2. Market Analysis

Establishing an airline entails high costs, intense competition, and significant risks. Thus, prospective carriers must assess market viability thoroughly (Schlumberger & Weisskopf, 2014). A detailed evaluation of Jaipur International Airport's market dynamics such as demographics, competition, and demand can reveal route potential, integration prospects, and sustainability, while also helping mitigate financial and operational risks in an increasingly volatile global aviation environment.

This section utilizes SWOT analysis to contextualize opportunities and risks, while grounding conclusions in empirical data from government reports, aviation authorities, and economic surveys.

2.1 Catchment Area and Competitive Landscape

Jaipur's catchment area represented in figure 1 spans across Rajasthan, western Uttar Pradesh, and southern Haryana. However, its proximity to Delhi's Indira Gandhi International Airport (DEL), as seen in figure 2, a global hub located 270 km away creates significant overlap, as 38% of Rajasthan's outbound international travellers opt for DEL due to superior connectivity (DGCA, 2025). Competition is further intensified by Air India's post-merger dominance on trunk routes (e.g., DEL–Dubai, DEL–Singapore), which limits pricing power for new entrants.

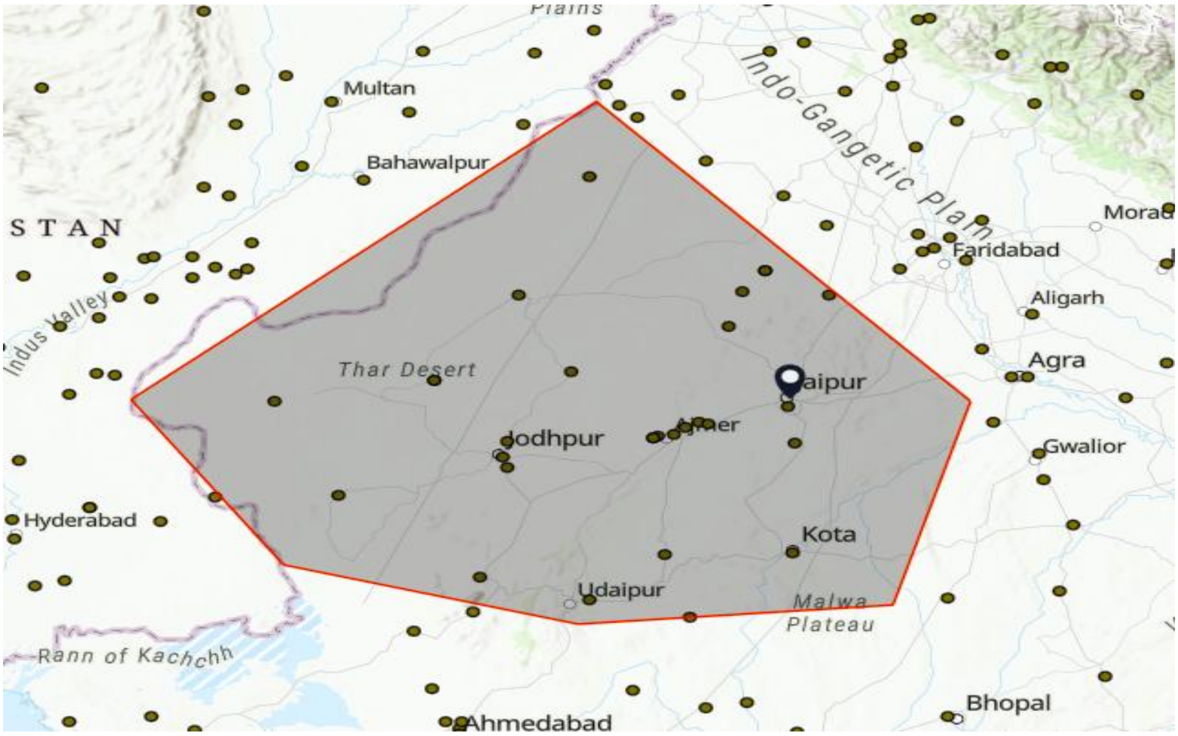

Figure 1 The catchment area of Jaipur Airport. Source: ArcGIS (n.d.)

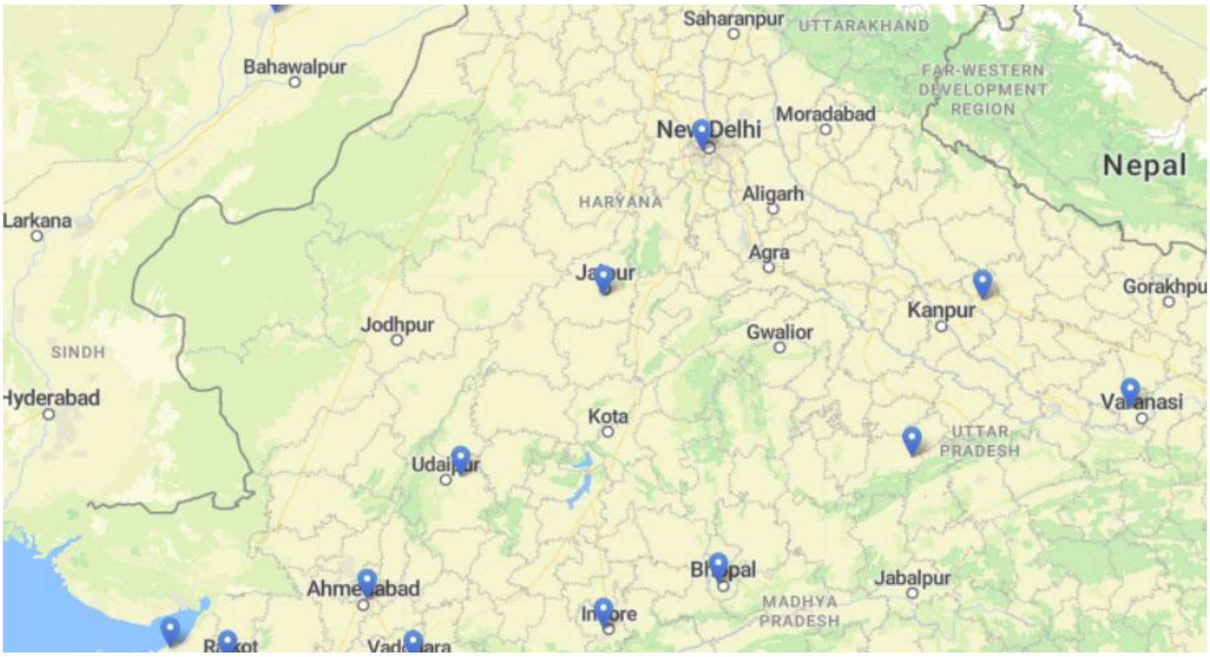

Figure 2 Indicating the nearby airports around Jaipur. Source: Airline Online (2025)

2.2 Jaipur’s Strategic and Economic Landscape

Situated in the state of Rajasthan, Jaipur, renowned for its rich cultural heritage and increasingly dynamic economy is propelled by two sectors:

1. Tourism: A critical driver of Rajasthan’s economy, contributing approximately 14% to the state’s Gross Domestic Product in 2023 (Rising Rajasthan, n.d.). Jaipur attracted an estimated 2.3 million international tourists annually, underscoring its significance as a key destination within India’s inbound tourism market (Economic Times, 2025).
2. Manufacturing and IT: Jaipur's emergence as a developing commercial centre is further evidenced by the presence of global conglomerates that have established operational hubs in the city. Notable examples include automotive manufacturers such as JCB and Hero MotoCorp (M, 2016; MotorIndia, 2014), as well as leading IT firms like Infosys, Wipro (Rumage, 2024).

In addition, Jaipur maintains a strong industrial base in traditional sectors such as textiles and gemstone exports, signifying its growing economy and potential for sustained international connectivity.

2.3 Operational and Strategic Overview of Jaipur International Airport

2.4 Historical Traffic Trends

2.4.1 Passenger

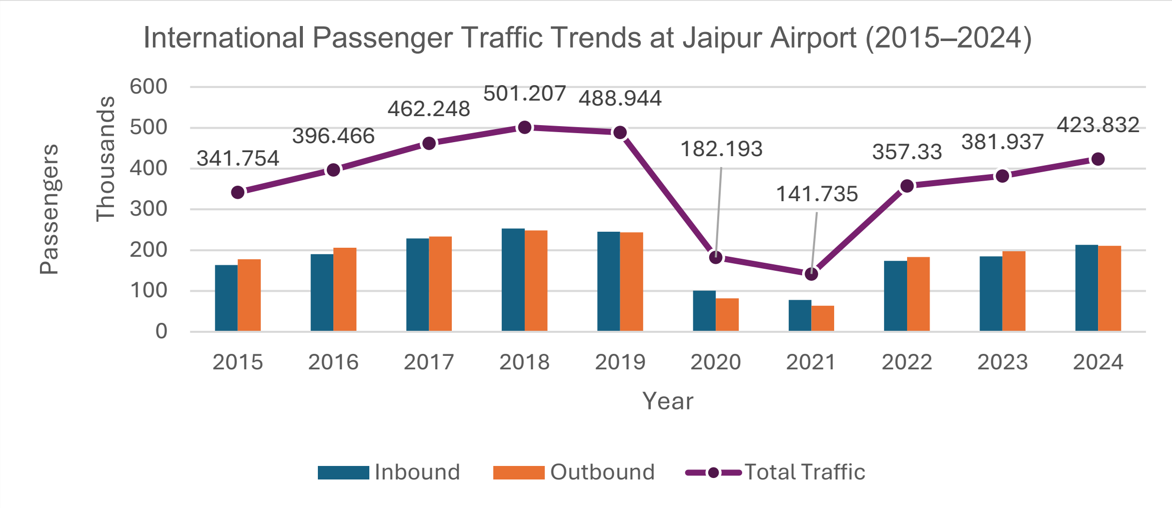

Chart 1 International passenger traffic at Jaipur Airport (2015–2024).

Jaipur Airport, the primary international gateway for Rajasthan, has experienced steady growth in passenger traffic as indicated in chart 1 obtained from DGCA (2025) , highlighting inbound, outbound, and total passenger volumes, peaking in 2018–2019. A sharp decline followed in 2020–2021, corresponding to the COVID-19 pandemic's impact on global travel. However, a gradual recovery is evident from 2022 onwards, with total traffic in 2024 nearing pre-pandemic levels. This trend reflects broader patterns observed across the global aviation sector, where the pandemic precipitated a historic downturn (Bouwer et al., 2022).

Data from DGCA (2024) indicates, geographically, over half of India's inbound and outbound international traffic in 2023–24 was concentrated in the Africa & Middle East region (approximately 54%), followed by Asia Pacific (27–28%) and Europe (13.2%). In FY 2023–24, foreign airlines continue to dominate India's international passenger traffic and accounted for 55.6% of total international passenger traffic, compared to 44.4% for Indian carriers. While this marks a modest recovery for Indian airlines from the pandemic-induced low of 38.2% in FY 2020–21, the trend underscores a persistent imbalance in international market share.

2.4.2 Routes

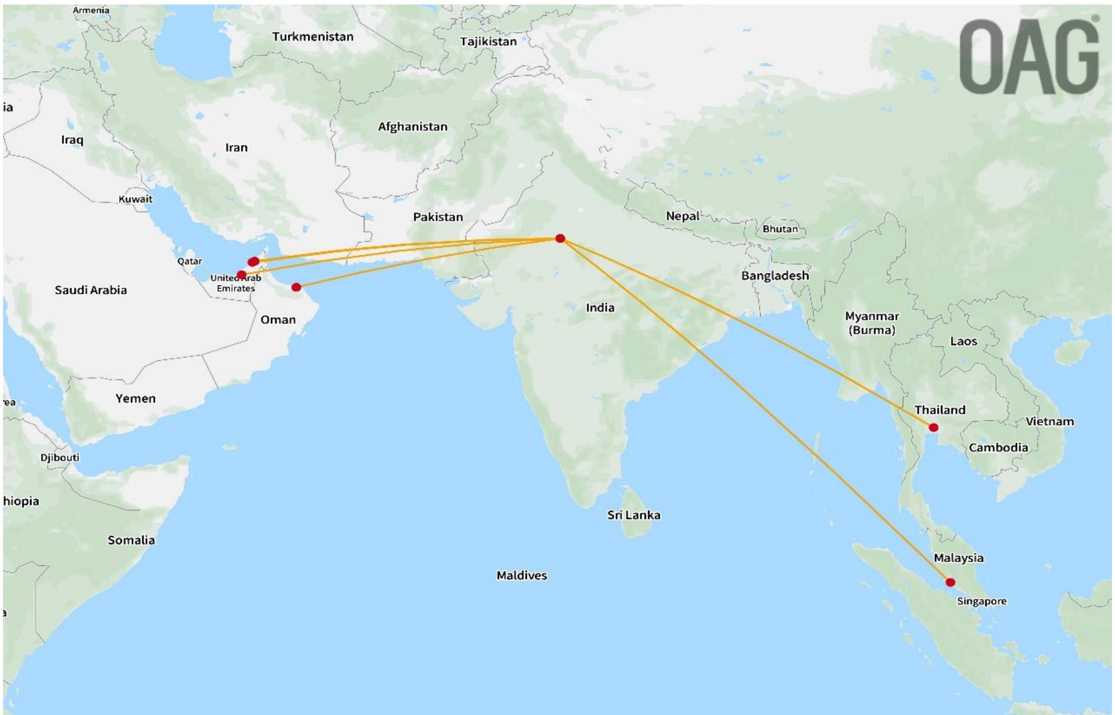

Figure 3 Routes served from Jaipur International Airport. Source: OAG (2025)

As illustrated in the figure 3, international traffic at Jaipur International Airport has historically been narrow in scope, with direct connections largely concentrated in the Gulf and Southeast Asia regions. Existing international services primarily link Jaipur to destinations such as Dubai, Sharjah, Muscat, Kuala Lumpur, and Bangkok.

These routes reflect the dominance of labour migration corridors and VFR (Visiting Friends and Relatives) traffic, alongside leisure travel. The positive influence of migration on tourism can be largely attributed to the mobility associated with VFR travel, which is intrinsically linked to established migration patterns. The presence of strong migration networks facilitates repeat travel and sustained connectivity between origin and destination countries, thereby enhancing tourism flows (Provenzano & Baggio, 2017). However, these connections often experience seasonal variability and are typically characterised by low frequencies and limited competition.

2.5 SWOT Analysis of Jaipur International Airport

Strengths	Weaknesses
• Only international airport in Rajasthan (AAI, n.d.) • Growing passenger traffic (DGCA, 2025) • Active government supports under PPP mode through Adani Airports (AAI, 2021) • Strategic location for tourist destinations in Rajasthan	• Single Runway Airport (Routes, n.d.) • Limited number of flight options (OAG, 2025) • Last mile connectivity to Jaipur City is primarily reliant on cab services
Opportunities	**Threats**
• Increased international and domestic tourism (OAG, 2025). • Potential for direct routes (e.g., Middle East, Southeast Asia, Europe) (OAG, 2025) • Opportunity to market Jaipur as a global tourist and business destination	• Intense competition from Delhi, Ahmedabad and the upcoming Jewar airport (Jha, 2024). • Fluctuations in travel due to seasonality

3. Manual Route Forecasting of Jaipur International Airport

This section employs two manual demand forecasting methodologies to estimate demand on potential international routes from Jaipur for the years 2026 and 2027.

1. The Gravity Model
2. Time-Series Analysis

The initial proposed international route from Jaipur is to Jeddah, selected based on its high potential demand. Jeddah serves as a key gateway for religious tourism, particularly for Umrah and Hajj pilgrims, which constitutes a significant portion of outbound travel from India.

Additionally, the city hosts a substantial population of Indian expatriate workers, further reinforcing consistent traffic on this route. Given Jeddah's economic importance and its role as a major urban centre in Saudi Arabia, the route presents a strategically sound choice for Jaipur's first international air service expansion.

3.1 The Gravity Model

According to Grosche et al. (2007), the Gravity Model serves as a foundational framework in transportation planning and air travel demand forecasting, particularly effective when assessing potential routes in the absence of comprehensive historical traffic data. The model posits that the volume of air traffic between two cities is directly proportional to the product of their respective populations and economic output (GDP), and inversely proportional to the square of the distance between them.

This makes it particularly suitable for evaluating unserved or under-served international routes, where conventional metrics such as airfare, frequency, or existing demand are not available.

The formula for the gravity model is

$$T_{ij} = \mathrm{K} \frac{(P_i \times P_j)}{{D_{ij}}^b}$$

Where T_{ij} = Predicted passenger traffic between city *i* and city *j*

K = Economic coefficient based on GDP or GDP per capita ratios

P_i , P_j = Populations of cities *i* and *j*, respectively

D_{ij} = Distance between the two cities (in kilometres)

b = Distance decay exponent (commonly assumed to be 2)

This formulation aligns with Grosche et al. (2007), who demonstrated the model's efficacy in evaluating unserved international air routes using geo-economic parameters rather than service-specific ones like airfare or frequency.

Subsequent calculations are done to evaluate the potential viability of the Jaipur–Jeddah route, with the Delhi–Jeddah route serving as a benchmark for comparison. The actual traffic data from the Delhi–Jeddah route was utilized to calculate the penetration rate, which was subsequently applied to adjust the passenger traffic forecast for the Jaipur–Jeddah route.

City	Population	GDP [USD]	GDP per capita [USD]
Jaipur	4,309,000	24,690,116,279	5,729
Delhi	33,807,400	167,000,000,000	5,360
Jeddah	4,943,000	162,530,783,000	32,881

Data source: DNA(India), 2024; IMF, 2024; Macro Trends, n.d.; Metroverse, n.d.; World Population Review, n.d.-a, n.d.-b

Jaipur – Jeddah route analysis (Distance: 3,753 km source: Great Circle Map (2025))

To evaluate the potential viability of an unserved international route between Jaipur (JAI) and Jeddah (JED), the gravity model was applied using both GDP and GDP per capita to derive the constant K.

Using GDP as constant K

K = Lower GDP ÷ Higher GDP

K = 24,690,116,279 ÷ 162,530,783,000 = 0.15

$$T_{ij} = 0.15 \frac{(4{,}309{,}000 \times 4{,}943{,}000)}{(3{,}753)^2}$$

= 226,830 passengers

Using GDP/Capita as constant K

K = Lower GDP/Capita ÷ Higher GDP/capita

K = 5,729 ÷ 32,881 = 0.17

$$T_{ij} = 0.17 \frac{(4{,}309{,}000 \times 4{,}943{,}000)}{(3{,}753)^2}$$

= 257,074 passengers

Delhi to Jeddah (Benchmarking) (Distance: 3,886 km source: Great Circle Map (2025))

Using GDP as constant K

K = Lower GDP ÷ Higher GDP

K = 162,530,783,000 ÷ 167,000,000,000 = 0.97

$$T_{ij} = 0.97 \frac{(33{,}807{,}400 \times 4{,}943{,}000)}{(3{,}886)^2}$$

= 10,734,171 passengers

Using GDP/Capita as constant K

K = Lower GDP/Capita ÷ Higher GDP/Capita

K = 5,360 ÷ 32,881 = 0.16

$$T_{ij} = 0.16 \frac{(33{,}807{,}400 \times 4{,}943{,}000)}{(3{,}886)^2}$$

= 1,770,584 passengers

Penetration Rate and Forecast Adjustment

According to DGCA (2025), the actual recorded traffic between Delhi and Jeddah during the year was 497,639 passengers. This allows us to estimate the penetration rate by comparing actual figures to the gravity model's output:

- **GDP-based model**: 497,639 / 10,734,171 = 4.60%
- **GDP per Capita model**: 497,639 / 1,770,584 = 28.10%

Applying these penetration rates to the gravity model estimations for Jaipur–Jeddah:

- **GDP-based forecast**: 226,830 × 4.60% = 10,434 passengers
- **GDP per Capita-based forecast**: 257,074 × 28.10% = 72,237 passengers

Based on the gravity model analysis and adjusted penetration benchmarks, the expected passenger traffic between Jaipur and Jeddah ranges from **10,434** to **72,237** passengers annually.

3.2 Time Series Analysis

Time-series analysis complements the Gravity Model to forecast passenger demand on future international routes from Jaipur. It examines historical data to detect trends, seasonality, and fluctuations, enabling reliable projections for 2026 and 2027. This method identifies seasonal spikes, such as pilgrimage-related or summer travel peaks—especially relevant for destinations like Jeddah. When combined with geo-economic insights from the Gravity Model, it provides a robust, data-driven foundation for strategic route planning and airline decision-making.

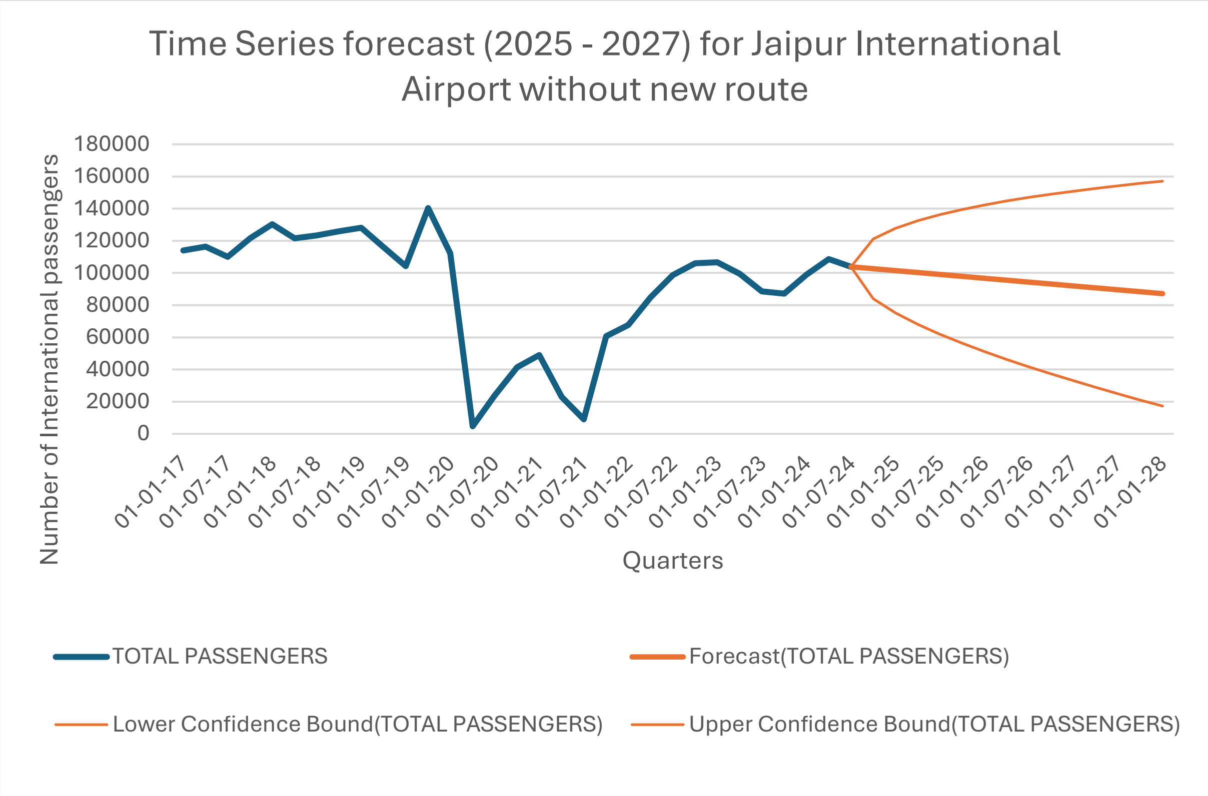

Chart 2 Indicating the forecast without the new route

The time series forecasts for Jaipur International Airport offer valuable insights into international passenger traffic trends and the potential strategic benefits of route expansion. The initial forecast, constructed from historical data spanning January 2015 to October 2024 and extending through December 2027, represents a baseline scenario wherein no new international routes are introduced.

This model reveals a relatively stable passenger volume prior to 2020, followed by a pronounced decline attributed to the COVID-19 pandemic. Although a partial recovery is observed in subsequent years, the forecast from late 2024 onwards indicates a gradual but persistent decline in international passenger numbers. Notably, the upper confidence bound peaks near 160,000 passengers by 2027, while the lower bound falls sharply to approximately 20,000. This broad confidence interval reflects a high degree of uncertainty and highlights the airport's vulnerability to stagnation in the absence of strategic intervention.

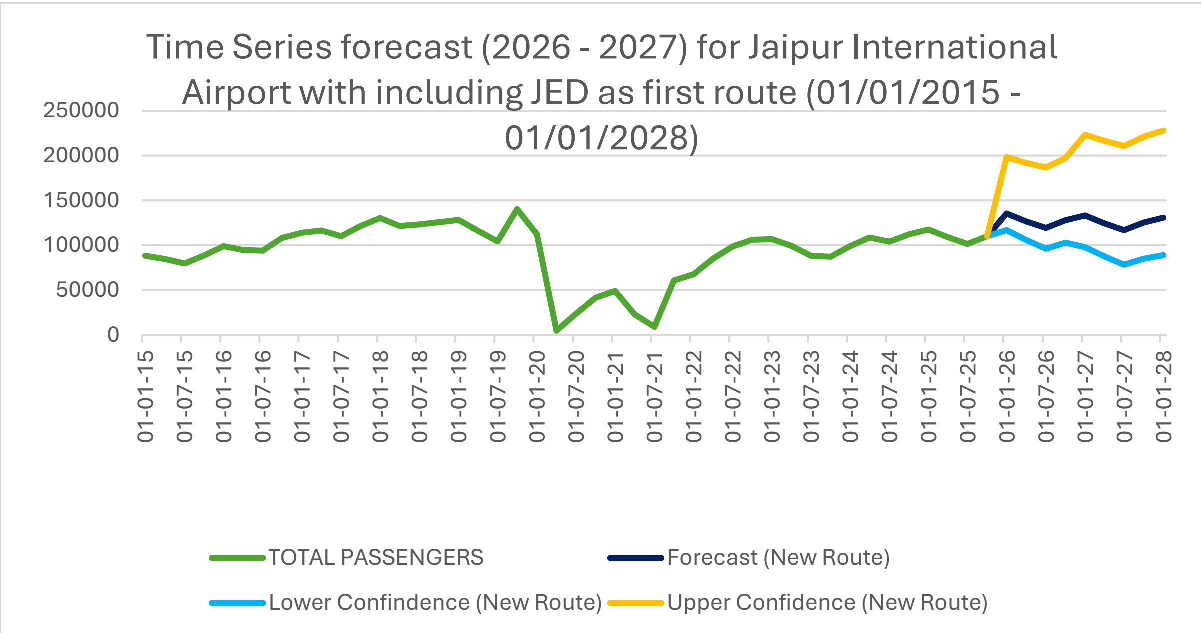

Chart 3 Indicating the forecast with the inclusion of new route

In contrast, the second forecast integrates the projected impact of introducing Jaipur Airport's first international route to Jeddah (JED) via Great Owl Airlines, scheduled to commence in early 2026. Utilizing the same historical dataset, this enhanced model demonstrates a markedly improved outlook. Beginning in the first quarter of 2026, the forecasted passenger volume exhibits a notable increase, with the central projection consistently exceeding 100,000 passengers and displaying a growth trajectory. Furthermore, the upper confidence bound surpasses 230,000 passengers by the end of 2027, and the lower bound remains higher than the upper estimate of the base model. These findings suggest that the implementation of the JED route has the potential to significantly reshape the airport's international traffic profile, fostering resilience and promoting substantial growth.

The comparative analysis of these two forecasting models underscores the strategic importance of international route expansion. While the baseline scenario implies potential stagnation and risk, the introduction of the JED route provides a more favourable and robust outlook. The reduced variance and elevated confidence intervals in the second model emphasize the stabilizing and growth-inducing effects of international connectivity. The data serves as a critical resource for Great Owl Airlines aiming to enhance Jaipur's role as a competitive and expanding node in the global aviation network.

4. Airline Online Simulation

4.1 Route Network and QSI

Figure 4 Destinations operated by Great Owl Airlines during Q4 2027. Source: (Airline Online, 2025)

By the fourth quarter of 2027, Great Owl Airlines had established a global network encompassing 13 international destinations spanning Asia, the Middle East, and Europe. In the eastern sector, the airline operated flights to Tokyo (Narita and Haneda), Osaka, Seoul, Taipei, Hong Kong, Guangzhou, and Singapore. Western destinations included London (Heathrow and Gatwick), Tel Aviv, Riyadh, and Istanbul. While most of these routes were served via direct flights, select services such as LHR–JAI–NRT, RUH–JAI–NRT, and HND–JAI–LHR were operated as connecting flights through Jaipur. The subsequent table presents the Quality-of-Service Index (QSI) values corresponding to each of these routes.

Destination	Frequency	Aircraft Used	Capacity	No. of stops	QSI
TOKYO HANEDA	7	A321-200 Neo	0.8	2	11.2
LONDON HEATHROW	7	A321-200 Neo	0.8	2	11.2
SINGAPORE CHANGI	7	A321-200 Neo/ B737-8 Max	0.8	2	11.2
OSAKA KANSAI INTERNATIONAL	7	B737-8 Max	0.8	2	11.2
TEL AVIV-YAFO BEN GURION	6	B737-8 Max	0.8	2	9.6
TAIPEI SHEK	5	A319-100 Neo	0.8	2	8
GUANGZHOU BAIYUN	5	B737-8 Max	0.8	2	8
HONG KONG CHEK LAP KOK	5	B737-8 Max	0.8	2	8
LONDON GATWICK	2	A321-200 Neo	0.8	2	3.2
ISTANBUL	3	B737-8 Max	0.8	2	4.8
TOKYO NARITA	3	A319-100 Neo/ B737-8 Max	0.8	2	4.8
SEOUL INCHEON	2	B737-8 Max	0.8	2	3.2
RIYADH K. KHALED	3	B737-8 Max	0.8	2	4.8
					99.2

Table 1 QSI of different direct destinations operated by Great Owl Airlines by Q4 2027

For connecting flights,

Destination	Frequency	Aircraft Used	Capacity	No. of stops (Coefficient)	QSI
LHR – JAI - NRT	2	Narrow body	0.8	0.25	0.4
RUH - JAI - NRT	1	Narrow body	0.8	0.25	0.2
HND - JAI - LHR	6	Narrow body	0.8	0.25	1.2
					1.8

Table 2 QSI of different connecting destinations operated by Great Owl Airlines by Q4 2027

Quality of Service Index (QSI) is a metric used in aviation planning to evaluate the relative attractiveness of a route by combining frequency, capacity, aircraft type, and number of stops into a single measure (US CAB, n.d.).

QSI = Qi x Qti x Si (based on CAB QSI Market Share)

where,

Qi = number of weekly flights

Qti = Aircraft type (narrow body = 0.8, 0.25)

Si = Stops enroute (Non-stop = 2)

A higher QSI indicates better service quality and stronger competitive positioning. In this case, Tokyo Haneda, London Heathrow, Singapore Changi, and Osaka Kansai each achieve a QSI of 11.2—driven by daily service (7 flights/week), consistent use of modern narrow-body aircraft like the A321-200 Neo and B737-8 Max, and minimal stops (2). Lower QSI values are seen for destinations with fewer frequencies, such as London Gatwick (QSI 3.2 with only 2 weekly flights) and Seoul Incheon (QSI 3.2 with 2 flights), making them less competitive. Connecting routes such as HND–JAI–LHR contribute marginally (QSI 1.2), given their low frequency and stop penalties. Overall, the total QSI from direct services is 99.2, while connecting services add 1.8, emphasizing the dominance of direct flights in overall service quality.

4.2 Performance of Initial Route Based on Manual Forecasting

The Jaipur–Jeddah route's initial demand of 1,706 passengers weekly, totalling 88,712 passengers annually, surpassed the gravity model's forecast of 10,434 to 72,237 passengers. Despite this, the route underperformed with a 39.72% load factor, yielding profits of $76,595.62 (JAI–JED) and $126,894.70 (JED–JAI).

This poor performance in Q1 2026 can be attributed to several factors. The Boeing 737 MAX 8, with 120 seats, was oversized for the route, leading to underutilization. Additionally, the airline's online simulation failed to account for real-time events, and the mismatch between Jaipur's tourism peak and Jeddah-bound traffic contributed to subdued demand. The gravity model's failure to account for lower Q1 demand and operational inefficiencies, including underutilized business-class seats, further compounded the issue.

4.3 Comparative Analysis of Financial Outcomes of Q4 2026 and Q4 2027

By the end of Q4 2026 (Batch 4), Great Owl Airlines successfully achieved break-even and entered profitability, recording a net annual profit of $10.9 million. Total income for the year amounted to $65.5 million, surpassing total expenditures of $54.5 million. While financial losses were incurred in the first and third quarters, stronger performance in Q2 and a particularly robust Q4 enabled the airline to recover, highlighting effective cost management and the capacity for adaptive financial planning. These results marked a positive first year of operations, establishing a sound financial foundation for future growth.

However, by the end of Q4 2027, the airline failed to meet its key financial objectives. Despite a significant turnover of $133 million, the year ended with a net loss of $16 million, equivalent to approximately -12.55% of turnover, falling short of the targeted profit margin exceeding 5%. Additionally, the airline’s liquidated value stood at $48.59 million, narrowly missing the $50 million benchmark. These outcomes underscore the need for improved cost efficiency, demand forecasting, and sustainable revenue strategies in subsequent fiscal periods.

4.4 Strengths and Weaknesses Impacting Financial and Operational Performance

Financial Performance

Great Owl Airlines' financial performance in 2026 and 2027 was influenced by a mix of strengths and weaknesses. The airline’s high-performing routes, such as Tokyo Haneda (HND), Singapore Changi (SIN), and London Heathrow (LHR), made significant contributions to profitability, with each route generating substantial profits. Tokyo Haneda recorded a 94.29% inbound load factor, resulting in a $5.2 million profit. The airline’s diversified revenue streams, including ancillary income from luggage fees ($1.2 million) and advertising space ($811k), helped supplement ticket sales.

Despite these positive aspects, the airline faced significant cost overruns that impacted its financial outcomes. Maintenance costs, including C-check and B-check expenses, amounted to $47.8 million, draining liquidity. Additionally, aggressive advertising campaigns totalling $22.8 million did not lead to a proportional increase in market share, which remained at a modest 4.58%. Cash flow volatility also proved problematic, with high operating costs, such as fuel ($34.5 million) and leases ($18.5 million), contributing to a net loss of $16 million in 2027 despite $118.9 million in ticket sales.

Operational Performance

Operationally, Great Owl Airlines demonstrated both strengths and areas for improvement. The airline's commitment to sustainability, exemplified by its achievement of carbon neutrality by 2027 through carbon offsetting ($1 million) and the operation of a modern fleet (average age of 4.53 years), reflected a strong operational strategy.

However, inefficiencies in fleet utilization negatively impacted operational performance. Maintenance played a significant role in this, as flights scheduled for C-check maintenance were taken out of service. These were particularly critical connecting flights, linking the West to the East like LHR-JAI-NRT, further disrupting operational efficiency.

For instance, narrow-body jets were underused on low-demand routes like Seoul Incheon, which suppressed profitability. Additionally, certain routes underperformed. Tokyo Narita (NRT) reported losses on JAI–NRT due to a low inbound load factor of 56.01%, while Riyadh (RUH), despite showing high load factors (66.94–75.56%), only generated modest profits, indicating potential issues with pricing or cost management. These operational challenges limited its ability to optimize its operational capacity and hindered growth prospects.

4.5 Emissions of Great Owl Airlines

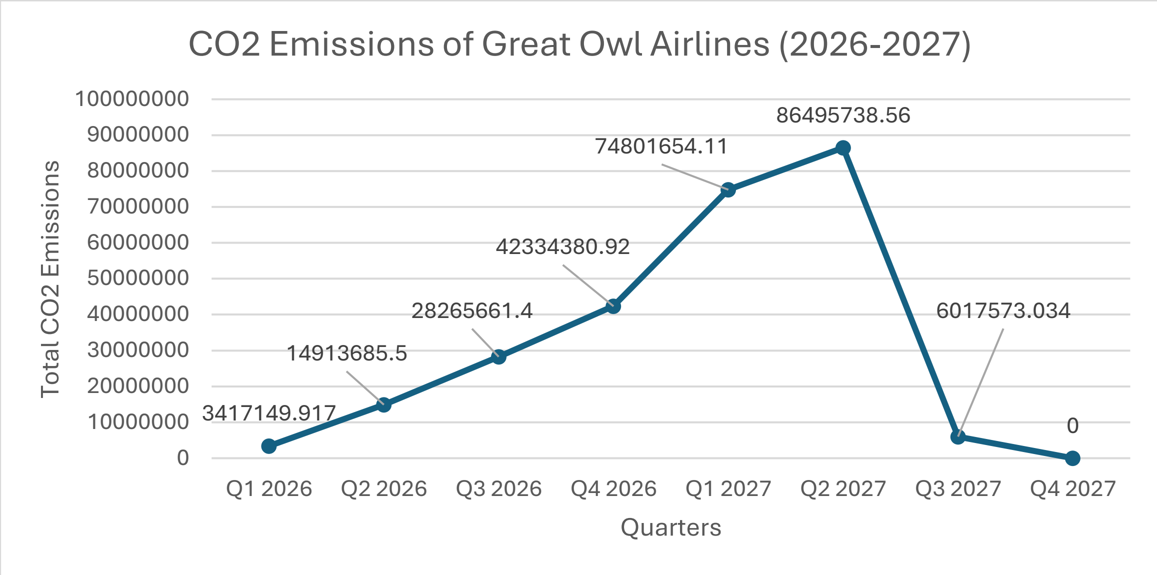

Chart 4 CO2 emissions across different quarters of 2026 and 2027.

Great Owl Airlines has adopted a multi-faceted approach to enhance environmental sustainability, focusing on carbon offsetting and fleet modernization. We invested in certified offset programs to balance emissions from flight operations and optimized our network by reducing underperforming routes, thus lowering fuel consumption and carbon output.

A key factor in our emissions reduction is the composition of our fleet, with an average age of 4.53 years. Our fleet mainly consists of newer, fuel-efficient aircraft like the Boeing 737-8 MAX and Airbus A321 Neo. These models contribute to reduced fuel consumption, improved operational efficiency, and lower greenhouse gas emissions per flight. By maintaining a young fleet, we are at the forefront of reducing the environmental impact of air travel, complementing our offsetting and route optimization efforts.

Despite financial constraints limiting the adoption of Sustainable Aviation Fuels (SAFs) during the simulation period, we achieved significant progress. By Quarter 8 (Q8), we reached a 100% reduction in per-passenger carbon emissions, making us a carbon-neutral airline. This accomplishment greatly enhanced our sustainability credentials, aligning with global aviation climate goals and strengthening our reputation among environmentally conscious stakeholders.

4.6 Business Plan Revisions Post-Simulation

The simulation significantly altered our original business plan across multiple dimensions, including the business model, route selection, and aircraft deployment.

- At the business model level, the initial strategy focused exclusively on direct flights; however, market dynamics necessitated a shift towards connecting services to enhance revenue generation.
- At the route level, demand for Far East destinations—such as Japan (Narita, Haneda, Osaka), Singapore, and Taipei—exceeded expectations, while anticipated high-performing routes from London (Heathrow and Gatwick) underperformed.
- In terms of aircraft deployment, mismatch between aircraft size and market demand led to modest profits, lower load factors, and higher operational costs, as more efficient aircraft could not be utilized to optimize capacity and reduce expenses.

5. Conclusion

Great Owl Airlines demonstrated initial promise with a profitable first year (2026), achieving a $10.9 million net profit through strategic route expansion. Despite achieving high QSI, vulnerabilities revealed a $16 million net loss, route underperformance (e.g., London), and operational inefficiencies like oversized aircraft on the Jaipur-Jeddah route (39.72% load factor). Strengths include carbon neutrality by Q4 2027 via a modern fleet and offset programs, alongside strong demand for Asian routes. Weaknesses stem from inconsistent demand forecasting, seasonal misalignment, and cost management gaps.

Recommendation: Fly, subject to conditions.

Investors should proceed with revised strategies:

1. Optimize aircraft deployment (right-sizing, fuel efficiency).
2. Prioritize high-demand Asian routes (Tokyo, Singapore) over underperforming European sectors.
3. Enhance demand forecasting and seasonal scheduling, particularly for pilgrimage traffic.

Appendix

Peer Review

Jomin Joji Sam’s Feedback (Rating: 4):

Jomin was a reliable and collaborative member of the team. They actively participated in meetings and consistently contributed quality ideas, especially during strategic discussions. Jomin also volunteered for extra tasks when needed and delivered them on time, showing strong commitment. Their positive attitude helped keep team morale high.

Belal Gendy’s Feedback (Rating: 4):

While Belal did contribute regularly, there were moments where their engagement felt more reactive than proactive. They tended to wait for direction rather than take initiative, especially during the early phases of the project. However, they improved over time and were dependable once responsibilities were clearly defined.

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