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A Study on the Shift of Tourist Demand Towards Low-Cost Carriers

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I. GLOBAL AVIATION

The aviation industry plays a vital role in connecting nations, promoting global trade, and driving the growth of tourism. Over time, the structure of the airline industry has been divided into two main business models, Full service carriers (FSCs) and Low cost carriers (LCCs), each catering to different market segments and passenger expectations. Full service carriers operate on a traditional model that emphasises comfort, quality service, and extensive connectivity providing a range of in-flight amenities. In contrast, Low-Cost Carriers adopt a simplified, cost-efficient operational approach aimed at minimising expenses and offering significantly lower ticket prices. This approach allows them to attract price-sensitive travellers and first-time flyers.

II. FURTHER STUDY

A. Tourism and LCCs

Low cost carriers have reshaped global aviation by offering affordable travel through simplified, cost-efficient business models. Their expansion, especially in the Asia-Pacific region, has improved regional connectivity and stimulated tourism growth.[1] However, most LCC research focuses on developed markets, examining cost structures, operational efficiencies, and customer satisfaction. Emerging destinations remain understudied, particularly Sri Lanka, which is rebuilding its tourism sector after recent economic and social crises.[2] Several international LCCs currently operate in Sri Lanka, and the launch of Fits Air in 2022 marked an important milestone for the local budget aviation market. This study is carried out with two objectives as follows:

- To evaluate the extent to which total tourist passenger demand exceeds the BIA's designed handling capacity.
- To identify tourist demand patterns and growth trends based on airline preference, with a focus on Low cost carriers.

Accordingly, the research questions of the study are as follows:

- What is the excess tourist demand at the airport when comparing the total passenger demand with the designed capacity?
- What patterns and growth trends can we observe, given their preference for LCCs over full service carriers?

B. Literature review

Several related themes regarding the evolution of Low cost carriers are highlighted by international researchers. LCC business models are based on flexibility and cost-optimisation, which allow airlines to continually provide reduced fares, according to foundational work like[2] .These operational principles translate into measurable socio-economic effects, like how LCC expansion has increased wider economic activity and made tourism more accessible in the Asia-Pacific area.[1] Pricing and vital service quality are the main factors influencing customer preferences across low-cost airlines, according to consumer-driven studies [3].

Competitive studies of the market show that LCC entry frequently modifies market conditions rather than only competing with Full-service carriers, going beyond customer behaviour. While long-term sustainability depends on sustaining robust tourism flows, the South Korean scenario studied shows that LCCs can increase total market demand, benefiting both LCCs and FSCs[3] .Like this, demonstrates how fleet design and capital structure influence the sustainability of LCC operations, with improper scale causing market instability. [4]The fare-comparison study in Europe demonstrates the importance of regulation in maintaining competitive advantages by confirming that LCCs drastically lower prices when they start new routes, but fare advantages erode when they become dominant.[5]

However, there is a gap in how LCC-driven growth affects developing aviation markets because these global findings have rarely been analysed within rising tourism destinations. Local research in Sri Lanka shows that tourism and air travel are closely related and both support future economic growth. However, rather than operational or capacity-related implications, these national evaluations have mostly concentrated on macroeconomic links.[6] An analysis of how Sri Lanka's growing LCC presence impacts airport infrastructure, traffic, and visitor demand trends is still lacking. Given the nation's growing reliance on low-cost carriers and its continuous efforts to restore tourism competitiveness, this disparity is crucial.

C. Materials and Methods

This study uses a quantitative research approach based on secondary data to assess tourist demand pressures and airline preference trends at BIA. To address the first objective evaluating the extent to which total tourist passenger demand exceeds BIA's designed handling capacity,annual passenger movement data from 2014 to 2024 were obtained from Airport and Aviation Services (Sri Lanka) Ltd Annual Reports. These figures were compared against the airport's designed capacity of 6 million passengers per year to calculate excess demand and identify capacity stress over time. For the second objective examining tourist demand patterns and growth based on airline preference,yearly arrival data for Low cost carrier and Full service carrier passengers from 2014 to 2024 were extracted from Sri Lanka Tourism Development Authority (SLTDA) Year in Review reports. Trend analysis and comparative growth assessments were conducted to identify shifts in tourist airline preferences and the contribution of LCCs to overall demand growth.

D. Results and Discussion

For Objective 01, total passenger movements at BIA from 2014 to 2024 were compared against the airport's designed capacity of 6 million passengers, using data extracted from AASL Annual Reports. The analysis showed that in most years, demand exceeded capacity, with 2024 recording a total of 8.88 million passengers, resulting in an excess of 2.88 million. To estimate the portion of excess demand attributable to tourists, the study applied the assumption that the tourist share of total passengers also applies proportionally to excess passengers. This assumes that excess demand is created by the same composition of passengers already using the airport, not by a new or different passenger segment. Using this assumption, the tourist-related excess demand for 2024 was calculated as 1.33 million, based on a 46% tourist share. Based on these findings, the decision is that BIA's current infrastructure is insufficient to handle existing and projected demand, and capacity enhancement or demand management measures are required to prevent future congestion.

As the second objective suggests, this excess demand is further reinforced by shifting tourist arrival patterns: while Full-Service Carrier (FSC) share shows a long-term decline ($y = -0.0172x + 0.9051$), Low-Cost Carrier (LCC) share demonstrates a steady upward trend ($y = 0.01x + 0.0753$). This structural shift toward LCC-driven tourism suggests that not only is the airport experiencing volume-based overcapacity, but the very nature of incoming traffic is evolving toward higher-frequency, cost-sensitive passenger flows. Together, these findings highlight that BIA's existing infrastructure is misaligned with both the magnitude and type of emerging demand, underscoring the need for capacity expansion and facilities tailored to LCC operational requirements.

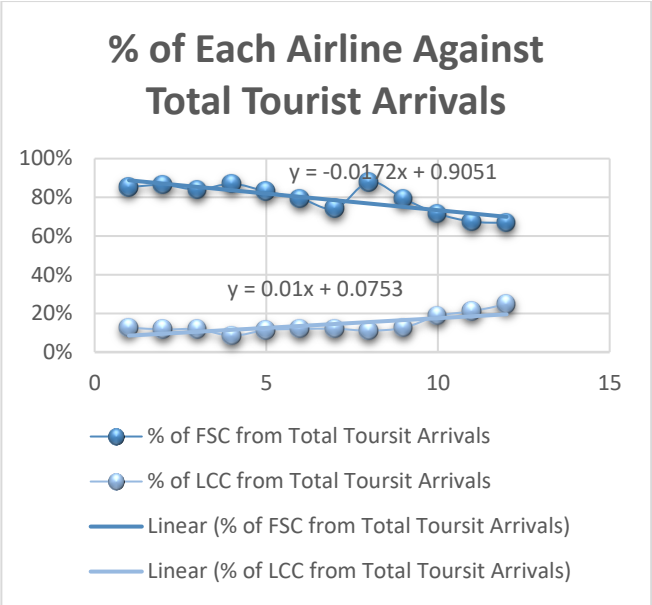

Fig. 1. FSC vs LCC Passenger Arrivals

E. Conclusion

The study concludes that BIA is experiencing a sustained rise in tourist passenger demand that has exceeded its designed handling capacity of 6 million passengers in several recent years. This growing pressure on infrastructure is further intensified by a clear shift in the composition of tourist arrivals: Full service carrier market share shows a long-term decline, while Low cost carriers display a steady upward trend, indicating that a significant portion of future growth will be driven by LCC passengers. These findings highlight the urgent need for policy decisions and infrastructure planning that specifically account for LCC operational characteristics. Finally, it is acknowledged that the results depend on assumptions made during data analysis which may introduce minor variations in the exact magnitude of demand but do not alter the overall direction or validity of the conclusions.

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