

STUDY OF CRITICAL SUCCESS FACTORS OF LOW-COST CARRIER BUSINESS MODEL TO SUSTAIN IN INDIAN MARKET

**A thesis submitted to the
University of Petroleum and Energy Studies (UPES)**

**For the Award of
Doctor of Philosophy
in
*Aviation Management***

**BY
Manish Yadav**

January, 2020

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DECLARATION

I declare that the thesis entitled “**Study of Critical Success Factors of Low Cost Carrier (LCC) Business Model to Sustain in Indian Market**” has been prepared by me under the guidance of Dr. Tarun Dhingra, Professor of Strategic Management, Department of General Management, University of Petroleum and Energy Studies (UPES). No part of this thesis has formed the basis for the award of any degree or fellowship previously.



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I certify that Mr. Manish Yadav has prepared his thesis entitled “**Study of Critical Success Factors of Low-Cost Carrier (LCC) Business Model to Sustain in Indian Market**”, for the award of PhD degree of the University of Petroleum & Energy Studies, under my guidance. He has carried out the work at the Department of Transportation Management, University of Petroleum & Energy Studies.



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ABSTRACT

The civil aviation industry in India has emerged as one of the fastest growing industries in the country during the last couple of years. India is currently considered the third largest domestic civil aviation market in the world as per the IATA records, India will become the world's 3rd biggest market in terms of passengers by 2025, leaving behind United Kingdom. The domestic aviation share in India has risen as one of the quickest developing ventures in national amid the most recent years.

The Indian market is rapidly growing due to the growth of FDI in domestic carriers and best in class new air terminals. Additionally, this growth is well supported by the emergence of low cost carries in the market. Asia Pacific County, with its increasing populace, will also push this development due to the rising household cash flow and youthful populace.

India's traveler circulation raises at 16.52 percent each year and toughed 308.75 million in the year 2018 with a CAGR of 12.72 percent. Domestic traveler circulation raised each year by 18.28 percent to touch 243 million in FY18 and anticipated to reach 293.28 million in FY20E. Intercontinental traveler increased each year by 10.43 percent to touch 65.48 million in FY18 and the circulation is anticipated to reach 76 million in FY20E. In FY18, the domestic air cargo reached 1213.06 million tones', whereas the global air cargo circulation was 2143.97 million tonnes.

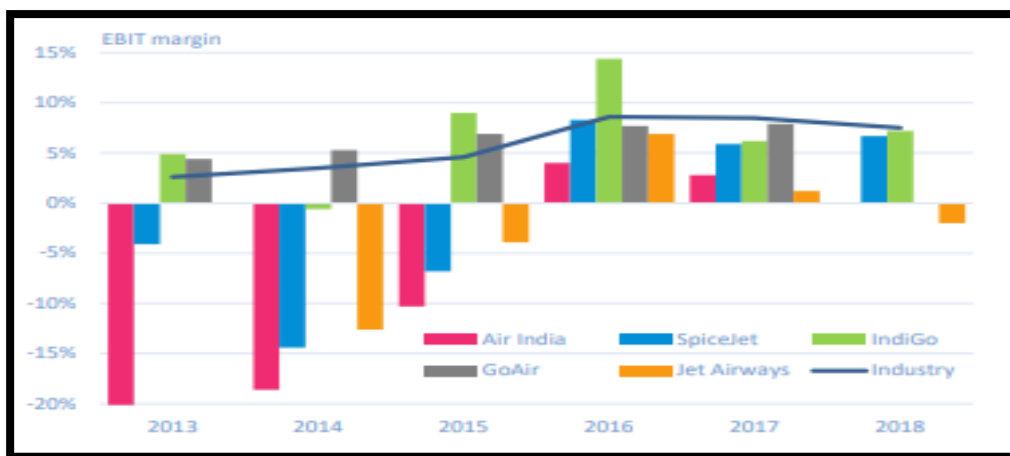


Figure 1.3: Indian Carriers Financial Performance

India has 102 operative air terminals since December 2018. In India, there are almost 588 operative marketable airplanes as of May 2018. *CAPA* estimates that Indian carriers other than IndiGo will require \$1.6 billion of funding this year to stabilize their operations, not including any investment in aircraft. *CAPA* gauges that Indian airline service provider, other than IndiGo, will need \$1.6 billion of subsidizing this year to balance out their tasks, excluding any interest in the airplane. India is at present the ninth biggest flight bazaar on the planet by absolute seat limit yet could ascend to turn into the third biggest in under 10 years. Right now, 62% of that limit is domestic and 38% global.

According to the Directorate General of Civil Aviation (DGCA), the country's aviation regulator, the Indian carriers flew 11.3 million passengers domestically in April 2019, which is down about 2% from 11.5 million in the same month last year. The last time traffic declined was in June 2013 with 3% to 4.86 million passengers, after Vijay Malia's Kingfisher Airlines NSE -11.11 % shut its shop. Local traffic in March 2019 increased a tad to 11.60 million from 11.58 million as compared to the same month the previous year. At the end of the March 2019, India's best five domestic carriers suffered from a combined loss of INR 9,737 crore, a growth of 85% in comparison of INR 5,276 crore loss occurred during 2018. However, GoAir and IndiGo have a combined net profit of INR 323 crores or else the overall losses for the Indian aviation industry would have reached INR 10,060 crores. Out of these combined losses, more than half were informed by Air India.

A 14%-16% annually domestic traffic growth has been predicted by *CAPA* from FY20. At the same time, international traffic is forecasted to grow 10-12% as local carriers add around 90 planes to their fleet. The government's regional connectivity scheme—Ude Desh ka Aam Naagarik (UDAN) will also contribute in boosting regional growth significantly. Meanwhile, IndiGo (InterGlobe Aviation Ltd) is expected to launch a new route (medium-haul) connecting Delhi to Istanbul establishing highest market share in Indian airline industry. Meanwhile, budget airline SpiceJet Ltd, plans to expand fleet size by adding 20 Boeing 737 MAX and between 5 to 10 Q 400 aircraft by this year-

end eyeing at international markets like China, Middle East, Singapore and Kuala Lumpur.

Given the above background, the business problem at an organization level in the airline industry can be defined as: -

- *Since inception of Low-cost Carrier (LCC) in 2003, the airline industry is not making regular profits that lead to business losses to various stakeholders in Indian market*

The above business problem motivates the researcher to perform this study. a detailed literature review was carried out. A review on low-cost carrier critical success factors including low-cost airline strategy planning and implementation, role of airport in LCC airline sustainability, regulatory framework impact on airline and airline various strategies linkage with LCC business model. Further, authors have developed framework related to LCC success factors and strategy management i.e. airline strategy formulation, operational and business strategies selection and implementation of selected strategy along with airport and regulatory framework impact on LCC business model but not in combined manner integrating all success factors for LCC airline. Based on these inferences, it is evident that there is a need in industry to develop a holistic model which combines LCC success factors including airline strategy formulation, selection and implementation along with regulatory framework, airport correlation and strategic linkages with business model.

It is also evident from the literature review that there are various airline strategies practiced by LCC airlines to sustain but they failed to explain airline strategy formulation and implementation process and how are these interlinked with business model. As explanation is essential for building theory and for improving practice, there is a need for process study of airline strategies formulation and practices at an organization level. Further, extensive literature searches for airline strategies and formulation and practices study using qualitative research approach at firm level in dynamic operational market like airline industry found no references in India.

Business problem is further narrowed down to problem statement based on outcomes of detailed literature review and it is presented below: -

Although in the existing literature, various low-cost carrier business model strategies applicable for different type of operation in airline industry are known but the process of LCC business model, strategy formulation and implementation at an organizational level to sustain, has not been described in details. Further, there is lack of holistic process model for critical success factors of low-cost airline in Indian context.

The research questions and research objectives formulated for this research study are presented as given under: -

Central Research Question: What are the critical success factors of low-cost carrier (LCC) business model to sustain in Indian market.

Additional RQ 1: How the low-cost carrier (LCC) airline plan and practice its multi-level strategies to ensure sustainable airline business model?

Additional RQ 2: What is the crucial role of airports in sustainability of low-cost airline ?

Additional RQ 3: What is the impact of aviation regulatory framework /structure of India in low-cost carrier (LCC) sustainability?

Additional RQ 4: What are the common and different low-cost strategies of low-cost airliners and how it is linked with business model?

RESEARCH OBJECTIVES:

- 1) To study the critical success factors of low-cost carrier (LCC) business model to sustain in Indian context
- 2) To understand the formulation and implementation of strategies and business model of LCC.
- 3) To understand the role of an airport in low-cost airline sustainability.
- 4) To understand the impact of Indian aviation regulatory framework of India in low-cost carrier (LCC) sustainability

- 5) To describe the common and different low-cost strategies of LCC and its linkage with business model.

In airline functioning, the contained & explicit knowledge of finest practices in low-cost carrier business model sustainability are available with airline managers and professionals working in the airline industry. We need to gather an in-depth understanding of this knowledge in sustainability of low-cost carrier business model in Indian context along with formulation and practices of airline various strategies at firm level.

Therefore, qualitative research method is appropriate method to record the tacit and elite knowledge of best practices and functions in low-cost carrier business model sustainability at the organisation studied. For this research, to study on airline strategic management related processes at organisation level in an Indian context; Indian prominent LCC carriers has been selected for this study

Therefore, the focus of this research study is to understand and describe the critical success factors of low-cost carrier along with airline strategies formulations, planning and execution at an organization level i.e. low-cost carrier in an Indian context. It is also to understand the strategy formulation process and strategy pursuance in airline business model. Also, focus of the study is to understand the role of airport airline relationship in boosting the airline sustainability along with regulatory framework impact on same. A case study approach chosen for the study as “the central tendency among all types of case study, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result” (Yin, 2003).

Two prominent low-cost carrier in India i.e. IndiGo Airlines and SpiceJet has been chosen for the study on LCC critical success factors and airline strategy practices based on market share in Indian industry. The top two airlines on domestic routes in March 2018, IndiGo has achieved the “Benchmark” status while SpiceJet is scaling it’s position. In a very short span of months, SpiceJet has emerged as pure low-cost and competing with IndiGo which is only profitable low-cost carrier in Indian market.

To start with the case, data collection activities primarily contain conducting site visits for the case studies, collection of data before and after a visit based on requirement. The empirical investigation in this research study included collecting data from the different department's heads and aviation experts. Data collection was done through semi structured interviews from airline managers/aviation experts through structured Case Study Protocol (CSP), participant observation, collection of evidences, and informal discussions with the maintenance personnel in the company. Recording of all the interviews were done followed by transcription.

Followed by completion of the interview's transcription , interviewees' comments were assembled on the transcripts for a month. Interview scripts coding was done through Qualitative Analysis Software Atlas-Ti. This software enabled the data analysis process by helping with coding, linking codes, and text segments, creating memos, searching, editing and reorganizing, and for visual display of data and findings. Data analysis is performed by applying Modified grounded theory approach (Charmaz, 2006). Within case analysis was carried out keeping research questions in mind.

Data analysis is aimed to identify i) The critical success factors of low-cost carrier along with airline strategies formulations, planning and implementation at firm level in an Indian context (Sustainable Low-cost carrier). ii) To understand the strategy formulation process and how these formulated strategies are being practiced in airline business model. Iii) To understand the role of airport airline relationship in boosting the airline sustainability along with regulatory framework impact on same. Two major steps were adopted in data analysis for this research study: within case analysis and cross case analysis. Within case analysis approach is to understand the case individually and documenting it thoroughly. In cross case analysis, similarities and differences across cases were explored. Based on case comparison, the relative findings and contextual factors across the cases are brought out. Based on the literature, five major empirical categories were identified and same were evident by cross case study analysis. the empirical categories i.e. *LCC airline strategic planning and implementation, airline airport relationship, regulatory*

framework impacts on airlines sustainability, LCC strategies linkage with business model and critical success factors are confirmed through the analysis along with 2 new sub categories are developed out from this investigation.

Two types of sub construct are emerged from the study i.e. governmental outlook and Simplicity in business which is crucial for critical success factors. Further, a process model for critical success factors of sustainable business model has established. This study delivers intense explanation of LCC airline strategy implementation and practices at an organizational level in a dynamic industry such as airline industry.

Further, 20 propositions are drafted from the analysis of cross case. Finally, a model on critical success factors including strategic management process of low-cost carrier business model has been developed and presented. This model holistically explains the key critical success factors for an LCC to sustain in Indian context including formulation of airline strategies, selection of business and functional strategies, and implementation of strategies with other contributory factors like airport correlation in airline sustainability, regulatory framework impact and various strategic linkage with LCC business model.

This research showed that to sustain in Indian market, LCC airlines are building strategies to get competitive advantage through lower operating cost, innovative marketing and sales strategies along with strong stakeholder management which increase the revenue potential in terms of sales and services hence crucial for the sustainability. LCC airlines are taking millions of decisions in a day i.e. Network decision, product decision, revenue and pricing decisions. Airlines sustainability is highly dependent on the right decision at right time hence crucial for the airline. The transparency, communication and decisions in business model is key to communicate business vision to end users. LCC airliners has very suitable business model to sustain in future with the government support.

This research study showed that LCC airlines strategy formulation is dependent on current market forces, competition, financial buffer and resources. LCC airlines implement the strategies having been discussed in executive committee meeting. Airlines use competency mapping and goal

sheet regarding same. LCC airlines do monitor the strategy implementation, though by automated tracking system and strategy renewal /course correction is done by Airline Strategic Committee based on stakeholder meetings and departmental meetings outcome.

Airport operations and infrastructure plays an important role in LCC airline profitability in terms of lowering operating cost, enhancing customer travel experience and market connectivity. The study also pointed out that airport operational efficiency is crucial in terms of airline efficiency. Indian regulatory framework has huge correlation in terms of sustainability. Low-cost airlines are being benefited by boosted regional connectivity in terms of launching new routes and more frequencies in domestic sectors. LCC Airlines financial performance is affected by bilateral agreements in terms of supplying seats. LCC airlines has very strong industry partners helping airlines to sustain and building their sustainability on key resources LCC airlines are using strong sales communication and distribution channels i.e. GDS, Web Based and Skyscanner. LCC airlines low-cost strategies oriented towards Single Fleet Type, higher aircraft utilization. LCC airlines major revenue come from pax sales and aircraft sale and lease out along with cargo and diversified businesses related with aviation.

This research study provides rich description of LCC airline strategy. Conducted research study could provide guidelines and parameters for LCC success factors, strategy formulation, strategy selection and application. Therefore, this research would support the airline professionals to benchmark the critical success factors and implement in their airline and the professionals to have good orientation of the strategic growth. Evidences were also found through this investigation to monitor and course correction of the strategy implementation and helps in understanding the airline and airport correlation ship to enhance the operational efficiency under regulatory environment to support the LCC critical success factors of LCC airlines to sustain in Indian market.

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LIST OF ABBREVIATIONS

AAI	-	Airport Authority of India
AERA	-	Airport Economic Regulatory Authority
ASM	-	Available Seat Mile
AUH	-	Aircraft Utilization Hour
CASM	-	Cost Available Seat Mile
CAPA	-	Centre For Asia Pacific Aviation
CIO	-	Chief Information Officer
COO	-	Chief Operating Officer
DGCA	-	Directorate General Civil Aviation
EXCOM	-	Executive Committee Meeting
LCC	-	Low Cost Carrier
MoCA	-	Ministry of Civil Aviation
OCC	-	Operation Control Centre
PAX	-	Passenger
RASM	-	Revenue Available Seat Mile
Rand N	-	Route and Network
RM	-	Revenue Management
RPM	-	Revenue Passenger Miles
SOP	-	Standard Operation Procedures
SARP	-	Standard and Recommended Practices
SMS	-	Safety Management System
SeMS	-	Security Management System
UDAN	-	Udde Desh ka Aam Nagrik

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CHAPTER 1

INTRODUCTION

The chapter provides ephemeral background about the aviation sector in India and low-cost carrier contribution in the national airline industry. It highlights the essence of significant attains factors for low-cost carrier trade paradigm viability in the Indian context. The crucial and complex role of low-cost airline operations is discussed in detail. Additionally, the research problem dialogue highlights and reflects the impression of strategic planning at a firm level in the airline industry within operational intensive industry. After that, it is narrowed down to present the problem formulation of this research study. The latent implication of this research is also reflected in this chapter. In the last section, the thesis deposition is presented in order to explain the complete thesis chapters of this research report.

1.1 BACKGROUND

An airline which offers its services at a low cost with fewer comforts is termed as a low-cost airline. It is also known as the low-cost carrier abbreviated as LCC. Other names of such services are discount or budget airline or carrier, ultra-low-cost flight, and no-frills. Such airlines impose some bucks on extra services, namely baggage, preferable seat allocation, priority boarding, food, etc. so that they could devise their revenue loss in cheap ticket tariffs. The term ‘LCC’ has been coined within the airline business representing the service provider having reduced operative cost models than their rivals. Irrespective of their operative structures, the LCC is regularly used for any service provider having low-ticket tariffs and restricted facilities, the term should not be mixed up with provincial

carriers that run short trips without service or with full-service offered at cheap tariffs.

The LCC offers low tariffs and eradicate all luxury facilities, namely complimentary snacks, drinks, on-board entertainment, corporate category seats, etc. These carriers usually cut their overheads by flying from isolated airfields (at reduced admission costs) and by utilizing a distinct kind of aeroplane. The interiors of the aeroplane's compartment may be built-in with the least luxuries namely video screens at the back of the seat, reclining seats with visors, etc. A few carriers advertise inside the compartment to upsurge profits.

Table 1.1: Features of LCC

Standard Fleet	Secondary Airports
Constricted seats (larger capacity)	Little maintenance rate, cockpit training, and stand-in aircrews as a result of the regular fleet
No seat reservation; free-seating	Extraordinary resource output: little ground pauses as a result of secure on-board procedures
No frequent-flyer programs	No air-cargo and little cleanup intervals
Noncommercial travelers, tariff sensible commercial travellers	Resource Utilization
Dynamic Promotions	Point to Point Network Design
No air freight and little cleaning times	Dynamic Pricing and Fare Bundling

Source: Self Compilation

The first LCC in India was Air Deccan by Gorur Ramaswamy Iyengar Gopinath, a retired Indian Army captain. Headquartered at Bangalore, the carrier commenced its actions on 25 August 2003 with a trip from Bangalore to Hubli. It was prominently referred to as the ordinary people's carrier with a logo

demonstrating two palms consolidated to mean a winged creature flying. The slogan of the carrier was "Simplify," implying that it was presently feasible for a common man to fly. The vision of Captain Gopinath was to empower "each Indian to fly at a minimum one time in their lifespan." Air Deccan was pioneered to operate tier 2 & 3 cities like Hubli, Mangalore, Madurai and so forth.

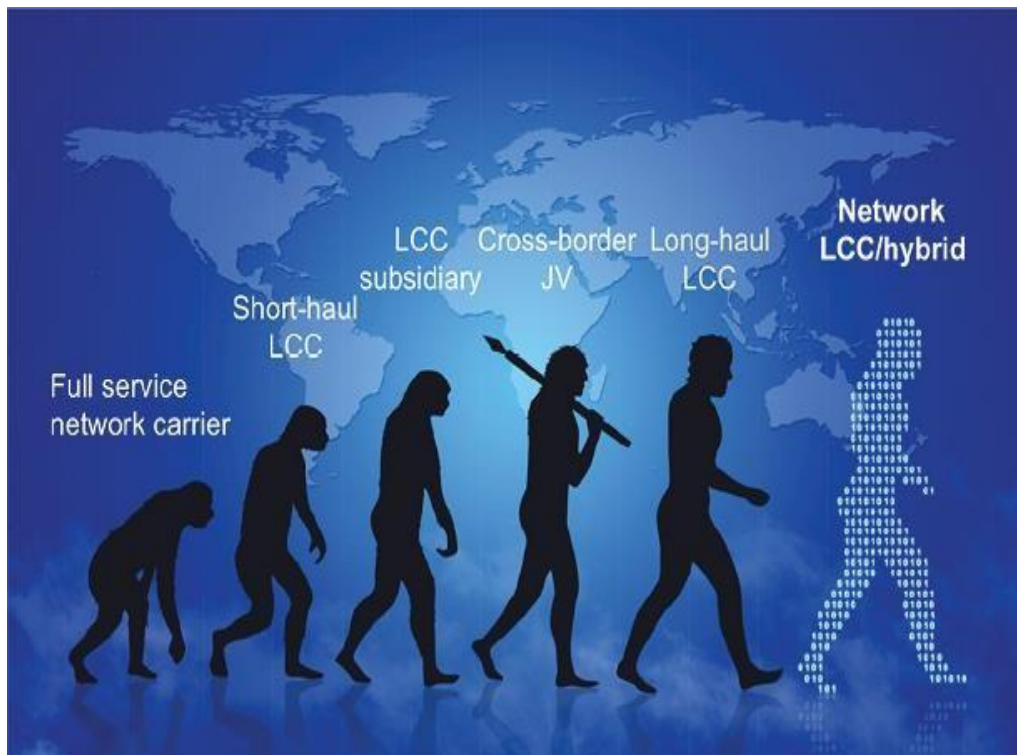
Relentlessly expanding business misfortunes dissolved the total assets of carriers, compelling monetarily frail organisations to sell out or converge with sturdier organisations. This prompted amalgamation in the trade where Jet Airways and Kingfisher acquired Jetlite (formerly Air Sahara) and Air Deccan respectively. The Indian government also decided to amalgamate Indian Airlines and national carrier Air India merged together to the National Aviation Company of India Limited (NACIL). This amalgamation was done because of the increasingly rising losses of Indian Airlines and Air India. Due to such unification, the trade share of the overall industry of the leading 3 players, (NACIL, Jet and Kingfisher airlines) raised about seventy per cent toward the closure of 2008-09.

Rising trade stake of LCCs: During 2009-10, several LCCs like SpiceJet, IndiGo, and Go Air kept on increasing their trade stake by broadening their armada. Consequently, the stake of the leading three service providers (NACIL, Kingfisher, and Jet Airways) fallen about 60 per cent in 2009-10. To withstand and enlarge their business stake, Kingfisher and Jet Airways announced their low tariff operations under a brand-new name of Kingfisher Red and Jet Konnect respectively.

LCC model from the FSC (Full-Service Carrier) Model:

In 2010-11, Passenger Load Factors (PLF) reached the highest levels. Several factors such as solid fiscal evolution, extraordinary domestic revenue, flooding vacationer inflow, expanded air payload development, continuous trade development, the passage of LCCs, and benevolent government strategies played a significant role in the progression of local aviation trade. Amid the year, PLFs

touched a new peak because of confined fleet expansion and substantial interest from commercial and vacationist voyagers. With strong financial books and operational efficiency ,a handful airlines made some money in market . Barely any active carrier with a superior functioning budget structure turned lucrative. The business stake of leading three service providers was sixty one percentage with seventy two load factor.



Source: AMADEUS Airline Report,2013

Figure 1.1: Evolution of LCC Business Model

Present Market Scenario:

The Indian domestic aviation sector has risen as one of the quickest developing ventures in India amid the most recent 3 years. Presently, India has turned into the 3rd biggest domestic air travel bazaar across the globe and required to surpass the UK to turn into the third-biggest air traveller sector by 2024.

Market size:

As per the IATA report, India will upscale to global third-biggest aviation market by 2025, leaving behind the United Kingdom. The Indian market is rapidly growing due to the growth of FDI in domestic carriers and best in class new air terminals. Additionally, this growth is well supported by the appearance of lcc carries in the marketplace. Asia Pacific County, with its increasing populace, will also push this development due to the rising household cash flow and youth populace.

Domestic traveller circulation raised 16.52 % YoY and touched three hundred eight millions in 2018 with a cumulative growth rate of nearly thirteen percentage. Domestic traveller circulation upscaled yearly by 18.28 % to touch two hundred thirty million in 2018 and expected to reach 3000 million by 2020 as forecasted by ministry. Intercontinental traveller upscale by 10.43 per cent to 65.48 million in FY18, and the circulation is anticipated to reach 76 million in FY20E. In FY18, the domestic air cargo reached 1213.06 million tonnes, whereas the global air cargo circulation was 2143.97 million tonnes.

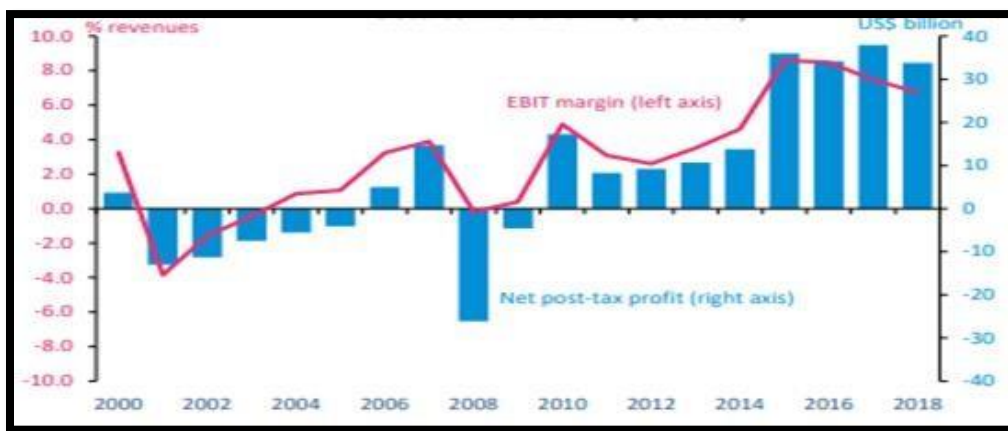


Figure 1.2: Global Commercial Airline Profitability

India has 102 operative air terminals since December 2018. In India, there are almost 588 operative marketable aeroplanes as of May 2018. Centre for Asia

Pacific Aviation (CAPA) estimates that Indian carriers other than IndiGo will require USD1.6 billion of funding this year to stabilize their operations, not including any investment in aircraft. The decrease in IndiGo's turnover was regardless of the carrier enlisting a 17.5 per cent growth in revenue of INR 11,117 crore. During FY16, the carrier had noted a net turnover of INR 787 crore with the total income of INR 9,458 crore. Net Turnover of an airline is calculated by total airline revenue divided by Average Net PPE (Property, Plant and Equipment as tangible assets).

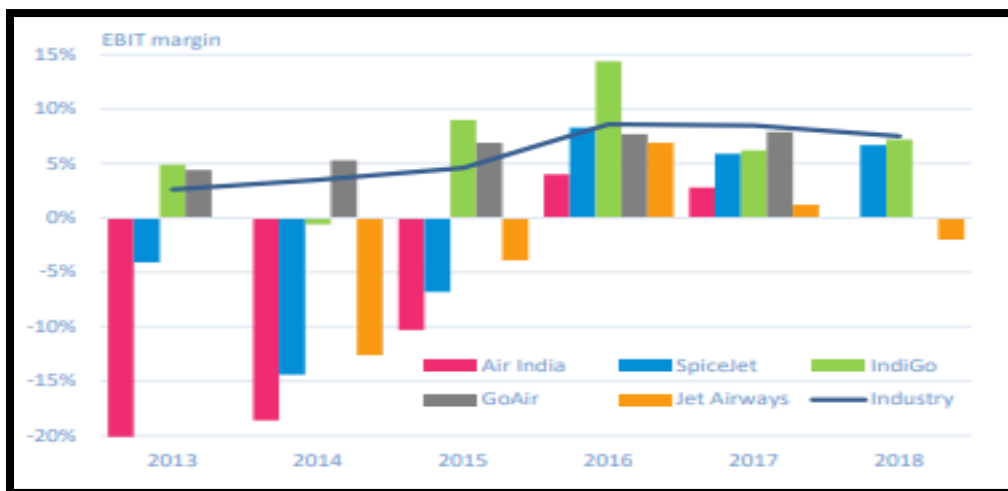
to balance out their tasks, excluding any interest in the aeroplane. India is at present the ninth biggest flight bazaar on the planet by absolute seat limit yet could ascend to turn into the third biggest in upcoming ten years. Right now, 62% of that limit is domestic and 38% global.

In FY18, local load traffic remained at 1,213.06 million tons, while worldwide payload traffic was at 2,143.97 million tons. India's household and global aeroplane developments became 7.93 per cent YoY and 6.36 per cent YoY to 2,153 thousand and 453.61 thousand during 2018-19, separately.

In FY19, traveller traffic in India remained at 344.70 million including local traveller traffic remained at 275.22 million while global traffic remained at 69.48 million. Total cargo traffic took care of in India remained at 3.56 million tons during a similar time. In FY19, household aeroplane development remained at 2.15 million while global airship development remained at 0.45 million.

Government has taken initiatives to invest in infrastructure and building airport terminals. As of March 2019, India has more than hundred airports. Which will be upscaled by 4 times to 400 plus airports by 2040. Likewise, number of aircraft presently 634 to 1150 commercial aircrafts will be on Indian registration will be taking off from nation by 2027. The Government of India plans to make air travel increasingly reasonable for the public and hoping to expand the domestic network through UDAN (Ude Desh Ka Aam Nagrik) scheme which is oriented to build up

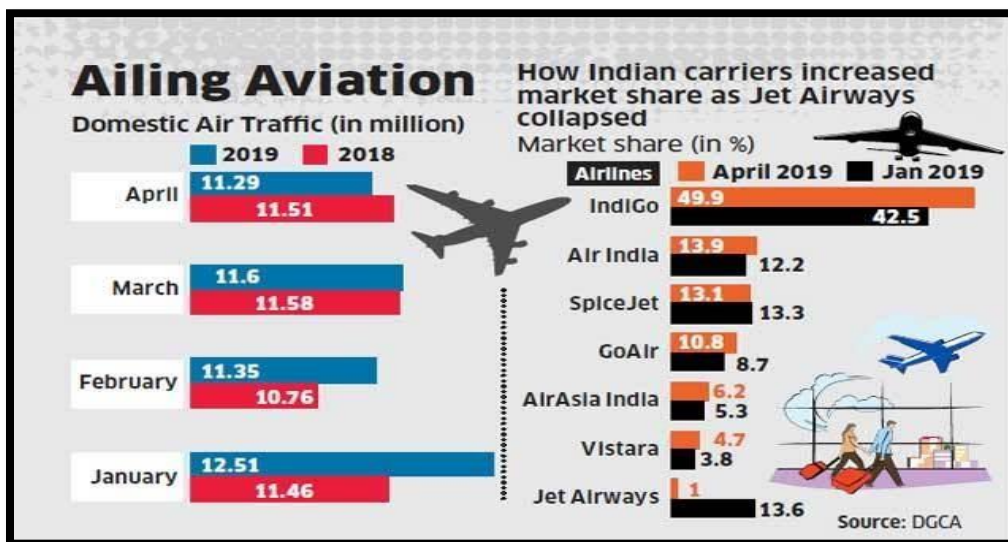
regional connectivity. The regulatory framework on the country is playing a crucial role in terms of new civil aviation policy initiatives and regional connectivity scheme. Airports benefit quite substantially from low-cost airlines in terms of non-aero & aero revenue. Indian government likewise spread out its aims of expanding 124 air terminals by right around multiple times with a point of encouraging the air terminals to deal with up to one billion outings per year. Keeping the role of airport as a focal point, the government is also boosting airport infrastructure, and most of the secondary airport projects are building up in India. Airports are contributing to customer buildup perceptions, service and comfort level also contributing to the airline operating cost structure. It has been anticipated that throughout the following two decades, over and above, 39,600 planes will be required all around. Though near 40% of this interest will originate from Europe and North America, 38% will originate from the Asia locale. The rest of the interest is anticipated to originate from Latin America, Africa, the CIS, and the Middle East. Single-aisle aircraft will shape a lump of this interest accompanied by wide-body aircraft.



Source: Ministry of Civil Aviation (MoCA)

Figure 1.3: Indian Carriers Financial Performance

At the closure of FY2014, the Center for Asia Pacific Aviation (CAPA) gauged that Indian airlines jointly had INR32.5 billion (USD585 million) of cash flow. With yearly trade revenue is an overabundance of USD10 billion, this speaks to what might be compared to less than three weeks of income. In the meantime, just two airlines, Jet Airways, and IndiGo accounted for nearly 80% of the cash flow, the circumstances of a few airlines were much increasingly unstable. Few more prominent carriers like Kingfisher have collected credits of INR950 billion (USD15.83 billion) with vendor obligations. In FY2014, the industry's interest and devaluation costs were proportional to roughly 85% of overall deficits and added USD7.4 billion of losses in recent years. The public sector carrier's overall deficit was reported as INR 5,388 crore in FY14, a little less from the past budgetary year of INR 5,490 crore. Jet Airways' overall deficit ascended around seven-time and was reported as INR 3,668 crore. As per Aviation Ministry, Wadia group-owned GoAir observed its net turnover declined to INR 5.44 crore from INR 104 crore in FY13. For GoAir, as well, the severe decline in the net turnover was observed despite its operative returns with growth at 26.7 per cent of INR 2,435 crore in FY14 from INR 1,921 crore in FY13.



Source: DGCA

Figure 1.4: Aviation Industry Performance In India

A year ago, the aviation segment in India recorded a tremendous hike in ATF (Aviation Turbine Fuel) cost and the severe downfall of Indian currency contrary to the dollar. These two factors are the prime reason for the loss of lucrativeness. The carrier's income, due to the bank's interest, income tax, devaluation, and repayment, reduced to INR 129 crore, indicating a rise in operative costs. During FY14, the sector observed a pre-tax benefit of INR 8.37 crore, contrary to INR 147 crore in the preceding fiscal year.

Spice Jet and Go Air's benefit depends upon them as they have the option to monitor and regulate their losses in the second and fourth quarters, which have given them a chance to down before. Concerning Spice Jet, which is now a somewhat massive carrier, the fluctuations between strong and weak quarters may majorly affect the financial condition of the firm.

FINANCIAL ITEM	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
OPERATING REVENUE						
Sub-Total Scheduled Services	502,440.50	552,707.30	616,702.90	661,106.40	721,188.30	852,354.90
Non-Scheduled Services	11,094.00	11,636.20	11,765.50	12,447.60	13,252.00	14,705.40
Other Operating Revenue	32,445.10	45,329.40	46,763.00	46,095.70	61,173.50	54,397.20
Total Operating Revenue	545,979.60	609,672.90	675,231.40	719,649.70	795,613.80	921,457.50
OPERATING EXPENSES						
Flight Operations	334,089.90	386,420.30	372,808.00	311,291.60	382,182.20	464,991.60
Flight Equipment Maintenance & Depreciation & Amortization	32,706.10	51,398.50	61,290.40	68,069.20	74,340.50	92,351.80
User Charges	37,665.10	46,833.40	50,590.60	60,764.80	73,436.40	88,171.60
Station Expenses	4,101.90	2,078.30	2,485.50	2,348.40	2,717.00	3,258.90
Passenger Services	15,821.60	18,752.00	22,505.30	23,018.10	25,958.20	27,813.70
Ticketing, Sales & Promotion	29,001.00	30,818.20	40,502.30	42,717.70	47,023.10	50,374.90
General & Administrative	69,364.00	79,563.10	89,623.20	80,840.70	88,627.40	94,136.20
Other Operating Expenses	27,189.70	32,402.50	36,645.70	48,939.40	42,065.00	58,616.60
Total Operating Expenses	581,188.90	683,148.30	710,919.70	676,315.50	771,112.10	912,324.80
OPERATING RESULT	-35,209.30	-73,475.40	-35,688.30	43,334.10	24,501.70	9,132.70
TOTAL NON-OPERATING ITEMS(BA	-35,920.30	-45,548.30	-35,910.70	-41,811.80	-49,203.70	-39,087.10
NET PROFIT OR LOSS(-) (Before In	-68,557.60	-121,629.50	-74,948.10	1,522.30	-24,702.00	-29,954.40
Provision for Income Tax	1,297.40	1,639.80	2,050.70	-8,808.70	-5,872.90	-10,543.90
Profit or loss after Income Tax	-69,855.00	-123,269.30	-76,998.70	-7,286.50	-30,574.90	-40,498.30

Source: Directorate General of Civil Aviation – DGCA

Figure 1.5: Financial Performance of Indian Carriers from 2012-2018

April 2019, the fastest growing market stepped down after six year with a dip in passenger traffic in 2019. Jet Airways, India's oldest airline, shut down its operations. The demise of Jet Airways, however, helped bigger rivals such as IndiGo's National Stock Exchange (NSE) 2.06 % leading to have 50% control of the domestic aviation bazaar with Air India on list.

According to the Indian regulatory body Directorate General of Civil Aviation (DGCA, 11.3 million passengers took domestic flight in April 2019.

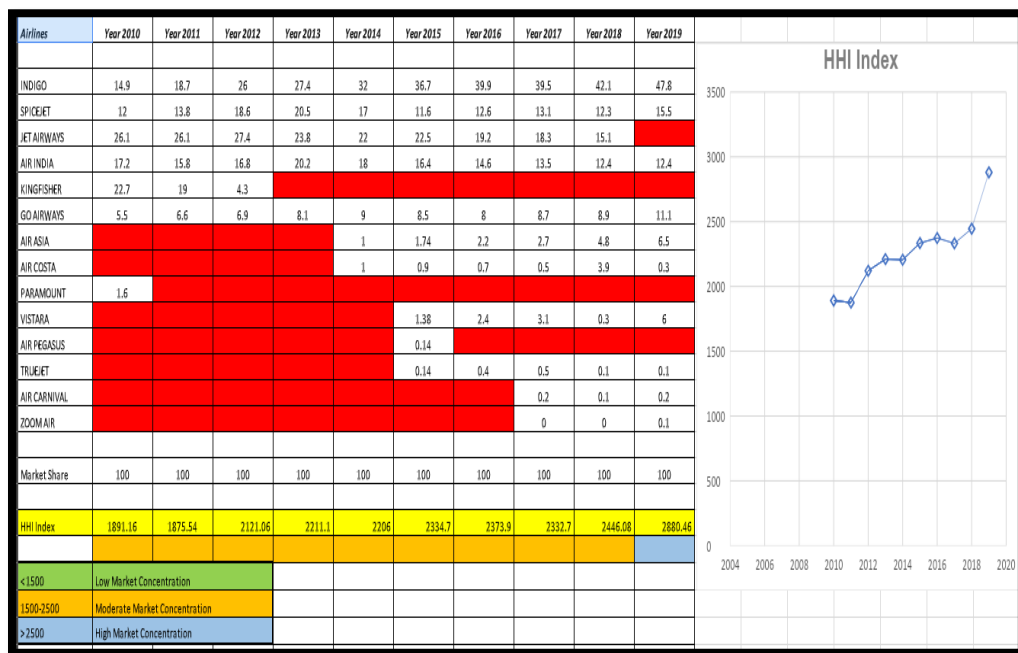


Figure 1.6: HHI index – Indian Carriers: Self Compilation

At the end of March 2019, India's best five domestic carriers suffered from a combined loss of INR 9,737 crore, a growth of 85% in comparison of INR 5,276 crore loss occurred during 2018. However, GoAir and IndiGo have a combined net profit of INR 323 crores or else the overall losses for the Indian aviation industry would have reached INR 10,060 crores. Out of these combined losses, more than half were informed by Air India.

It is clear from the above figure representing the concentration of the market using HHI index as a standard method that despite the rising concentration in the oligopolistic market, the airlines in India are not making regular profits. At present, IndiGo, Air India and SpiceJet are highest market share oriented airlines and represents the significant share in the highly competitive market.

After the grounding of Jet Airways due to financial drains, the capacity in Indian market dipped down as more than eight hundred flights were nonoperational from Jet roster which ultimate resulted in capacity cutting in Indian market. Indigo and SpiceJet has acquired most of the slots of Jet airways. Competition with FSC in growing market is major issue in airline industry (Oliveira, 2008).

Concerning Jet Etihad unsuccessful partnership, Literature confirms that airline strategy planning is crucial for an airline, i.e. airline expands internationally through merger and code sharing by choosing either domestic or international partner under semi or traditional, complementary alliances (Bilotkach, 2007). Inter-temporal price discrimination is a prominent feature of airline pricing strategies to have a competitive edge over other airlines (Alderighi, Cento, and Piga, 2011).

Meanwhile, the budget carrier and largest LCC of Indian market IndiGo operates almost half of the market share followed by Air India and SpiceJet with 14 % and 13.1% respectively. Due to the flight cancellation, Jet got the highest passenger complaints around 0.53 on every 100 passengers. IndiGo's revenue grew 35.5(%) to 8,259.81 crores from 6,097.68 crores a year ago in Q3. Fuel cost during the quarter rose 19(%) to 2,781.28 crores. IndiGo total debt at the end of the March

quarter stood at 2,429.2 crores. The airline reported a profit of 157.25 crores compared with 2,242.32 crores in the previous year.

Business Problem:

- *Since the inception of Low-Cost Carrier (LCC) in 2003, the airline industry is not making regular profits that lead losses to various stakeholders in the Indian market.*

The business above problem motivates the researcher to perform this study. With the mentioned background, this research study undertakes the essential success factors of LCC airline sustainability to have more thick descriptions of critical success factors for a low-cost carrier to sustain in the Indian aviation market.

1.2 TOPIC AND PURPOSE

To explore the business problem, intense review on low-cost carrier crucial success factors including LCC strategy planning and implementation, the role of the airport in LCC airline sustainability, regulatory framework impact on airline and airline various strategies linkage with LCC business model is presented in this section. A detailed literature review is presented in chapter 2

1.2.1 LCC Airline Strategic Planning and Practices

The airline strategy formulation and implementation process is not well defined in the literature. Airline strategy is defined in terms of dynamic pricing, route and network planning, Hub and hub network designs, Product differentiation, Fare DE bundling and dynamic pricing. Also, various authors in terms of the extension policy, promotion policy, active policy, a carrier within carrier policy etc., define

the concept. Issues namely carrier growth, setup policy, dynamic tariff scheme, Internationalization scheme, amalgam trade paradigm, tariff route and setup, etc. have been broadly discussed beneath the concept.

Airline expansion as airline strategy is defined in terms of airline planned agreements and code sharing (Bilotkach, Gaggero, and Piga, 2015; Lenartowicz, Mason, and Foster, 2013; and Bilotkach, 2007). Product proliferation is also listed under airline strategy (Fageda et al., 2015; Barbot et al., 2008). As an integral part of airline strategy, internationalisation is also identified as a pivot tool to expand (Ramón-Rodríguez, Moreno-Izquierdo, and Perles-Ribes, 2011).

Dynamic pricing has been pen downed as airline strategy in terms of yield management, fare bundling, revenue management, market segmentation, and network development (Dobruszkes, 2009; Bilotkach et al., 2012; Belobaba, 2011; Gillen and Mantin, 2009; Alderighi et al., 2012; Suau-Sanchez et al., 2014). Carrier strategy is defined by various authors in terms of hybrid business model covering the main concept which includes airline pricing, tariff unbundling and network (Homsombat et al., 2014; Chang and Lee, 2010; Suau-Sanchez et al., 2015).

Marketing and Internationalisation strategy is discussed by authors through fleet diversity and ownership structure along with fares fluctuations (Albers et al. 2010; Berghöfer and Lucey, 2014; Suau-Sanchez et al., 2014). Also, armada scheduling, economic regulations and strategic alliances, and code sharing have been identified as core strategies for the carrier by authors (Graham and Shaw, 2008; Lenartowicz et al., 2013; Merkert and Hensher, 2011; Bilotkach, 2007).

Airline strategy has also been defined by various authors under sustainability, throwing light on major concepts like armada planning, economic regulations and fares dynamics within the airline business.

1.2.2 Airport and Regulatory role in LCC sustainability

Airport airline connectivity has been studied by various authors in different connections and relevance like air terminal decision aspects, air terminal rivalry, air terminal foundation, air terminal functioning, air terminal privatisation along with air terminal assessment and upright agreement. Air terminal decision aspects have been identified and linked to LCC in terms of air terminal choice preferences, air traveller's choice of airport, and basis of airline operations (Malighetti et al., 2011; Pantazis and Liefner, 2006). Authors have discussed that airport charges contribute around 10-13% of airline operating cost resulting in fluctuations in air tariffs.

Airport infrastructure contributes in reduction of airline operational cost and strengthens the corporatise operations (Warnock-Smith and Potter, 2005; Barbot 2006; Ishii et al. 2009; Hanaoka and Saraswati, 2011; Ariffin and Yahaya 2013). Airline infrastructure is crucial in defining networks like hubs, passengers' transfers, low-cost terminal for reducing LCC cost, final design for passenger service, and lower airport charges (De Neufville, 2008; Castillo-Manzano et al., 2012; Redondi et al., 2012; Graham 2013; Lin, 2015).

Literature as well shows that competitive structure is a broadly investigated field and comprehends carrier rivalry, carrier's demand-supply market control, networking plan, valuing, tariff, and so on. Aircraft rivalry includes asset usage (Low and Lee, 2014), valuation conduct (Aydemir, 2012), infrastructure venture, startup plan, operative expenses, and trade voyage. Carrier admittance, quality of the service, and networking rivalry are comprehended in bazaar control (Pels et al., 2009). The literature approves that the market configuration of a nation characterises the service quality degree of carriers and the priority factors between low coast and full-service airlines. Intra style of conveyance, rivalry, revenue level, and populace size are the chief elements of the market control (Low and

Lee, 2014; Yetiskul and Kanafani, 2010; Fageda and Fernández-Villadangos, 2009; Zhang et al., 2014).

The literature review also reveals that the airport operations contributes in low-cost traffic, flight characteristics, passenger behaviour, and airport planning and design philosophy (Castillo-Manzano, 2010; Pai, 2010; Sainz-González et al., 2011; Barbot et al., 2013). Airport ownership in terms of privatisation, PPP, and other stakeholder structures was identified by authors to analyse the impact on airline operations, hub and spoke networks, vertical collusion and value determinants (Ariffin and Yahaya 2013; Lian and Rønnevik 2011; Pyrialakou et al. 2012, Czerny and Zhang 2014).

1.2.3 LCC Airline Business Model Sustainability

The Business Model (BM) idea is the fundamental way to deal with depicting and assess an organisation at a given point in time (M Morris, 2005) (Shafer, 2005) (Zu Knyphausen-Aufsess, 2007). Firmly connected to the ascent and fall of the new economy, scientists broadly got the BM idea despite serious investigate of its convenience and division from the first system term (Doganova, 2009) (Porter, 2001).

In any case, a generally acknowledged meaning of a Business Model and its essential segments is missing uniquely in the airliner industry (Zott, 2011). The concept of LCC model includes numerous interventions like the range of services, free allowances, maximisation of their factors of production, turnaround time calculations along with Revenue Management, Common aircraft utilisation and maximisation of complementary revenues from additional services (Button, 2006). LCC business model also includes uses of innovations that offer better technology at a lesser cost, differentiated optimal use of products, bulk market division and innovative products presented at intensely lesser prices, offering middle-class segment with bulk business (Gibson, 2008)

Defining Business model on the aspect of customers, segmentation, buyers-selling of specified services and product, benefit and solution analysis- avail through the distribution channel, value chain configuration, core process and activities, suppliers and partners value addition in the system, delivery tools-incorporate business sense through cost analysis, product pricing, pricing models-core USPs' and differentiation from competitors, sustainability studies (Skarzynski, 2008). Strategic management domain defines sustainability in light of the thought that proficient and successful utilising of quirky assets and abilities brings about effective firm execution (Grant, 2010).

Business methodologies that equally unite toward the standard centre will in general show lower execution than "unadulterated" key directions (Thornhill, 2007), the conjunction of strategies and assemblies ("Business Models") can be demonstrated in the airline industry (Bell, 2009). The authors identified airline sustainability area concerning the system and planning, minimum operational cost, the travel industry growth, carrier supply, and carrier workforce supervision as significant accomplishment aspects of LCC.

Studies demonstrate that the carriers must review some tariff advantages to travellers to fascinate more of them (Malighetti et al., 2014). In the case of any carriers, the elementary itinerary tariff brings up the demand for carriers in the bazaar (Delaplace and Dobruszkes, 2015). The minimum operational budget includes hubs and spokes, point-to-point model, and carrier rivalry. De-hubbing is an exceptionally vital aspect of the functioning of a carrier (Bilotkach et al., 2014).

Deregulation has additionally created fundamental changes inside holiday enterprises across the globe (Wu and Hayashi, 2014). Itinerary usage, hubs and spokes expansion, and lease activities are particularly significant aspects of the effective functioning of the airline services (Yetiskul et al., 2005). The growth of the leisure industry likewise a significant impetus for the development of LCC. A

significant part of the literature exhibits the impact of the travel industry for outfitting the LCC activities (Graham and Dennis, 2010).

Literature could not explain the process of strategic planning and management in terms of low-cost airlines. Also, there is scanty literature explaining how low-cost airline managers are ensuring the smooth operation of the low-cost airline by effective use of strategic planning and execution at an organisation level. Further, no literature could reveal why the particular plan is designated for a specified action and how these operational strategies are different in different airline functions/departments.

Therefore, airline strategies related processes study is to be carried out to incorporate existing practices of an airline so that low-cost airline strategies and practices can be described holistically.

Further, the study is an attempt to define the correlation of airport and airline along with the regulatory impact on airline sustainability with clear identification of key critical success factors for the LCC business model to sustain in the Indian market. Extensive literature searches on LCC's critical success factors, strategic implementation process, airport airline relationship, and regulatory framework impact on the LCC airline business model provide a detailed description.

It is based on implicit and implied acquaintance available with airline managers in the airline industry. However, in the Indian context, it finds no references as per research. (As on 02-06)-2019, the literature has been found in a few databases like Science Direct, IEEE Online, EBSCO (Business Source Premier & Business Source Elite+), ACM Digital Library, Emerald. The keywords used in the literature search are Low-Cost Carrier, Low-Cost Airline, Airline Business Model, Airline Operations, Airline Strategies, Airline Airport Correlation, Airline Regulatory Framework, LCC Operations, Sustainable LCC Model, and Indian Low-Cost Carrier leading to research problem, as stated in the next section.

1.3 PROBLEM STATEMENT

Although in the existing literature, various low-cost carrier business model strategies applicable for a different type of operations in the airline industry are known, but there is a lack of a holistic process model for critical success factors of the low-cost airline in the Indian context. Further, the process of LCC business model, strategy formulation and implementation at an organisational level to sustain, has not been described in detail.

1.4 POTENTIAL SIGNIFICANCE

There is a need to describe the critical success factors of low-cost airline business models to sustain in the Indian market along with the LCC airline strategic planning, formulation and implementation practices along with regulatory impact and airport correlation in the dynamic operational industry like the Indian airline industry. Various strategies of the airline are defined by authors (as discussed in previous sections). However, low-cost carrier strategy formulation, selection and implementation are still uncovered and found no reference in the existing literature. There is a need to understand the low-cost airline strategic planning process and airline practices at an organisational level.

Scary literature has covered airline airport correlation in terms of airline cost, airline operations, networks, Hub and spoke, terminal design, etc. (As discussed in previous sections) but there is a need to describe the airport's role in airline sustainability in terms of passenger services and infrastructural support to reduce the airline operating cost. Also, there is no holistic literature on regulatory framework impact on low-cost airline operating business model. Also, there are various known airline strategies, but how various airline strategies are linked with the business model of the low-cost airline, this needs to be defined. Based on these inferences from literature, it is evident that an immense requirement to understand the critical success factors of a low cost carrier, on airline plan

preparation, an assortment of airline policies, execution and inspection practices from the skills of airline personnel in the business at an organisation level and this type of learning will certainly be advantageous to realise the breach between the general plans deliberated and offered in the literature and industry policies being essentially implemented and accomplished by airline personnel in the business.

Academicians and industry professionals will be benefited from this research work.. This study illustrates a full description on the theoretical domain, empirical research practice and detailed description of LCC airline strategy implementation and practices at the department level and firm level in the competitive airline industry and in general. Especially in the Indian context, there is no holistic study at all, which provides the core airline strategic management process thus the research would be efficient knowledge tool for the academicians.

For practitioners such as airline executives and managers involved with strategic planning and operations, the study showcase innovative ways of crafting airline policy design, choice, and practices in market testing the drivers for the sustianability of LCC model in real time. Therefore, this work would assist the administrators in standardising the critical success factors and applying in their organisations to comprehend the policy's preparation.

1.5 THESIS DISPOSITION

This investigating study carries Introduction, Literature Review followed by Research Methodology chapter.After having the theoretical methology aspect, within case analysis and cross case analysis was performed providing conclusion at the end.

This section discussed the background and circumstantial of the research investigation. Intense literature review and conceptual framework used in this research and related literature is presented in chapetr -2. In Chapter 2, theoretical foundations of a low-cost carrier, a literature survey on the low-cost carrier are discussed in detail. Then literature has been categorised and presented on key

themes based on low-cost carrier critical success factors. An extensive review of literature outlined Initial - Conceptual Constructs (ICC) and was discussed after that. Chapter 2 outlines the conceptual lens and ICC derivation by analytically categorising literature and analysing, logically synthesising the literature to arrive at literature gaps.

Research design and methodology is explained in Chapter -3 of the research study. Research objectives and research questions are presented in this section, The research rationale and case study proposal, assortment method, data analysis and empirical research's quality is discussed in section. Finally, Case Study Protocol (CSP), and complete CSP document is provided for the reference towards the end of the chapter.

In Chapter 4 and Chapter 5 depicts the individual case study analysis (Case Study 1 – IndiGo and Case Study 2- SpiceJet) on LCC strategies and practices of a prominent low-cost airline company in India. These chapters include the following sections: Introduction followed by the data collection is presented followed by data analysis and findings with concluding remarks in conclusion section of the chapter.

Chapter Six (6) elucidates cross case analysis and the ultimate results in terms of findings of the study. The chapter designates the resemblances and variations between the two cases IndiGo Airline and SpiceJet Airline. Cross-case analysis post cross case analysis in intense form are presented with the clear forefront of both the airlines. Further, twentyone propositions are developed out of analysis & mentioned propositions are presented and discussed in detail.

The last chapter, i.e. Chapter 7 concludes with the discussion covering implication of the outcomes of this study with its limitation. A model for airline critical success factors has been established grounded on data analysis. The model is presented and well explained in detail. Further, the scope for future research in the domain of the low-cost carrier is also presented in the last chapter.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

A detail literature review has been carried out to understand about low-cost carrier business model and its critical success factors including strategic management process, the role of the airport in airline sustainability, the role of the regulatory framework in the sustainability of Low-Cost Carrier (LCC) airline Business model and various similar and different strategies that rooted for the sustainability of LCC airline business model. Based on the literature review, the definition of a low-cost carrier is explained in section 2.2. Theoretical foundations of the low-cost airline business model are discussed in section 2.3.

Literature related to the low-cost carrier has been reviewed, analysed, synthesised and presented in Section 2.4. These literatures are further categorised into key themes like LCC Strategy Planning and Implementation, Regulatory Impact on LCC business model sustainability, Airport Airline Relationship, LCC various strategies and correlation with the business model and LCC critical success factors. The key themes which are discussed along with literature under section 2.5.

The outcome of this extensive literature review is the initial conceptual constructs. The constructs conceptualised from the literature review are LCC Strategy Planning and Implementation, Regulatory Framework, Airport Airline Relationship, LCC Strategies and Business Model and LCC critical success

factors. These initial conceptual constructs and sub-constructs are discussed thoroughly in section 2.6.

Various concepts on LCC, critical success factors and strategic management have been explained in section 2.7 along with their gaps. It can be used as a foundation of knowledge within the area of the low-cost carrier business model to develop a holistic and integrated model for LCC airline strategy formulation and implementation. Section 2.8 consist of the concluding remarks.

2.2 LOW-COST CARRIER

Internationally, the air transport sector has always been considered as a very distinct industry. It helps in the improvement of global social and economic growth by increasing international and domestic trade and tourism (Hardy, 2009). In the process of the globalisation, growth in the air transport sector plays a crucial role. This is due to the market deregulation and open skies agreement. The process of deregulation allows the emergence of LCC in the local marketplace (Hannon, 2009).

The LCC business model was firstly adapted in the US marketplace to some extent before the deregulation of the aviation sector in the late 1970s, which opened an innovative era of airline services in a global context (Uittenbogaard, 2009). These airline industries upgraded their management processes and organisational structures to develop a more economical environment in the process of deregulation. Low airfares have been considered as one of the critical attributes of the liberalisation of the airline sector due to the ever-growing competition among the several airline service providers (Button et al., 1998; Goetz and Vowles, 2009).

Since the 1960s, Southwest Airlines had established the low-cost carrier concept firstly in the US market. In recent years, the foremost strategy of the establishment of the low-cost airlines (Uittenbogaard, 2009), is to deliver fewer facilities to cut down the cost of operations so that fare should be reasonable. LCC is also undertaking a variety of working practices that offer cost benefits to these airline companies as contrasting to full-service airlines (Schlumberger and Weisskopf, 2014). In the European Union (EU), the progression of the aviation sector established after a decade compares to the US market.

The development of LCCs started after the evolution of the liberalisation process in the EU market, and it was in the form of several stages beginning from the late 1980s up to the mid-1990s. Firstly, the RYANAIR became the first Ireland-based European LCC. It has entirely changed its business model from functioning as a regional carrier to LCC implementing the Southwest low-cost model adopted from the US market (Dobruszkes, 2006; Reichmuth et al., 2008). Secondly, the UK-based easyJet established its operations in the European market. Subsequently, Hungary-based LCC Wizz Air has started its operations primarily to connect CEE to the rest of Europe in 2003. Generally, the European aviation sector progressed together with the economic and political development of the European Union. From the last two decades, more airlines have appeared as LCCs.

The emergence of the LCC model in Asia focuses on the sustainability model of an airline in terms of cost. It defines the concept like Split Egg, Fire Fighting and thinking on feet in terms of cross-functional flexibility (Poon, 2010). LCC existence is not tweaking towards full-service carrier but restricts to a basic model of the low-cost carrier. LCC main parameter of success is its operating cost and LCC need to more focus on practices like outsourcing to reduce the operating cost. LCC's sustainability and profitability are more dependent on cost and product differentiation strategy (Md Atiqur Rahman Sarker, 2012). In 1990, the new operating model of airline emerged known as a low-cost airline that provides

imminent competition to the major carriers. The key feature that defines low-cost carriers is the lower cost of its operations and comparatively lower average price in the aviation market where they serve (Reynolds-Feighan A., 2001).

Three main factors are associated with the emergence of LCC, i.e., the high fixed cost of the airline business, declining returns, and cyclical demand of airline business (Dobruszkes, 2006; Gillen D. and Lall A., 2004). The price is still a limiting factor for the majority of air travellers and the creation of new airlines through deregulation (Pasari, 2006). LCC model is *low operating cost, positioning in the industry and no-frills*. (Source: Mercer Management consulting-2002).

The concept of LCC model includes numerous interventions like the range of services, free allowances, maximisation of their factors of production, turnaround time calculations along with Revenue Management, common aircraft utilisation and maximisation of complementary revenues from additional services (Button, 2006). LCC business model also includes uses of innovations that offer better technology at a lesser cost, differentiated optimal use of products, bulk market division and innovative products presented at intensely lesser prices, offering middle-class segment with bulk business (Gibson, 2008).

As on 02-12-2019, literature in databases has been found namely EBSCO (Business Source Premier and Business Source Elite+), Emerald, Elsevier's Business Management and Accounting Collection (Science Direct), Blackwell's HSS Collection, IEEE Online, ACM Digital Library. The literature keywords include the words like Low-Cost Carrier, Low-Cost Airline, Airline Business Model, Airline Operations, Airline Strategies, Airline Airport Correlation, Airline Regulatory Framework, LCC Operations, Sustainable LCC Model, and Indian Low-Cost Carrier.

Defining Business model on the aspect of customers, segmentation, buyers-selling of specified services and product, benefit and solution analysis- avail through a

Creating Value for Firm	No frills sell services only, Standardising offering high seating density; Service delivery and quality control; small haul, lesser fare, multi-frequency, point-to-point service; no seat assignment; no distribution through travel agents; refundable fares /single fare cabin /no advance purchased (APEX); shorter turnaround time	(Luca Graf David Gillena,b,, Ashish Lallc Li-Yen Chang, Shao-Chih Hung Adél Németh a,, Hans-Martin Niemeier b Mark Graham Mark Goh a, Jongsay Yong, Andrea Salanti a, Paolo Malighetti a, Renato Redondi M. Lenartowicz, K. Mason)
Passengers /Clients	Both B2C and B2B sales; National level Sales; Corporate business on a transactional level; Accomplished advancement from a regional airline to serving 59 airports in 30 states; Strategic decision on routes and connections Regional Connectivity	David Warnock-Smith, Andrew Potter Keng-Chieh Yang a, Tsui-Chuan Hsieh b, Hendrik Li b, Chyan Yang b Jan Claussen, Eleanor O'Higgins Yu Kyoung Kim, Hyung Ryong Lee Nigel Dennis Ching-Fu Chen, Tsai-Fang Wu Sara Dolnicar
Key Resources	Professional Competency and Training; Major Hubs Operations; Secondary Airports Usages; Innovative Operational Efficiency; Fleet Assignment /Single Cabin Configuration; No Code Sharing; Maximum Stage Length; Lower Turn Around Time(TAT)	Linder and Cantrell; Chaharbaghi et al. ; Mansfield and Fourie; Kraemer et al. ; Mahadevan; Morris et al., Davenport et al.; Linder and Cantrell; Walters; Zott and Amit; Schweitzer)
Product Differentiation	The appearance of functioning distinction; Distinction is completed by emphasizing on-time arrival, lowest conceivable fares, and customers devising a good time onboard (a spirit of fun).	Klaus Grabler b, Bettina Grün a,c, Anna Kubnig b Tim Hazledine Martin Dresner Peter Forsyth Fabio Evangelhoa, Cristian Huseb, Alexandre Linharesa Keith J. Mason Josep Maria Raya-Vilchez
Revenue Resources	Fixed Revenue Source; High Load Factors/Demand; Capacity Utilisation; Fright Business /Diversified Business	Anne Graham, Nigel Dennis Yu-Chiun Chiou, Yen-Heng Chen John F. O'Connell, George Williams Esther Martinez-Garcia a, Marcelo Royo-Vela Li-Yen Chang, Pei-Yu Sun Josip Mikulic, Darko Prebezac)

Table 1 : Business Model Component (Self Compilation)

distribution channel, value chain configuration, core process and activities, suppliers and partners value addition in the system, delivery tools-incorporate

business sense through cost analysis, product pricing, pricing models-core USPs' and differentiation from competitors, sustainability studies (Skarzynski, 2008).

Many researchers illustrated a brilliant literature overview of business models in terms of creating value for the firm, passenger segmentation, vital resources, product differentiation, and revenue sources. Compilation from various authors is shown below as Table 1:

2.3 THEORETICAL BACKGROUND

There are numbers of research studies that explain the concept of a business model. As per these studies, there is a requirement of a business model for every firm. Do these studies attempt to find out answers to several questions such as what kind of business model should any organisation follow? Which type of business model evidences for improvement and achievement of the firm? What kind of business model yields determined economic gain? According to these research studies, no business models give assurance for commercial accomplishment. Yet, there are three essential features of a valid commercial model, i.e. the unique value of the firm, tough to duplication of the firm, and stranded in realism (Linder and Cantrell, 2001). According to Walters (2004), an organisation should emphasis on five important factors under its business model which includes the flow of funds, return on invested capital, dispersed equity (lower capital volume), fundamental resources, and individual skills within the firm, and lastly the firm's value chain placing.

Many authors explained specific as well as general corporate models and described which kind of model is the most effective for the firms. Zott and Amit (2007) illustrated the novelty-centred business model, in which an organisation or firm either add value in market development or market penetration through innovative product, substances to the representation of firms. In another article, product market strategy was clubbed with the same, and entitlement that the

uniqueness-centred corporate model joint through diversity, cost control, or bazaar senses enhance the firm performance (Zott and Amit, 2008).

According to Schweizer (2005), there are two assumptions for the success of the business under different business models. The first one is the Layer Player Model, where an organisation focuses on the value-addition in the organisation's value chain. The second one is the Market Maker Model, where the industry applies informational earnings to produce an all-inclusive novel dimension in the value chain leading to the revenue enhancement for a couple of firms in a specific business. Yet, these two models trail a huge risk in case of a proactive competitor, as their fabrication is based upon the skill-augmenting experience along with either legitimate fortification or inherent facts that lead to the function as robust establishments.

Consequently, in the second assumption of the third model, known as the Orchestrator Model, the firm emphasises on some phases of the value chain while subcontracting and synchronising with other firms. These hypotheses may have the most exceptional and longstanding perspective and the maximum likelihood of becoming a first business model plan.

According to Exposed corporate models, where the firms aggressively pursuit for and deed external ideas and at the same time permit futile in-house knowhow to stream the new external firms to advantage from what permits business to better generate and detention value (Chesbrough, 2007a). Moreover, discerning of the corporate model in various steps may help administrators to develop a precise commercial model.

This study outlines an entire Business Model Framework (BMF), which classify potential commercial models, from fundamental models that are not very esteemed ones to the advanced and much-appreciated models. The topmost execution is at level five and six models, where the business joins in its development of invention with the business model. In these models, the leading

dealers and customers are corporate associates wherewith the firm may stake both minimal and commercial threats. In these models, the author claims that even if the firms affect these levels as per the business model, it could be very lucrative and stiff to emulate as no dominant business model continues insistently (Chesbrough, 2007b).

Restructuring of business model is considered as a learning advancement, and this may add to the success and profitability of the business (Chesbrough and Rosenbloom, 2002). This is also the practice of ongoing innovation of business model. According to Mitchell and Coles (2003), innovation offers a way to surpass opposition. In the context of the current competitive environment, best business players frequently take into consideration significant developments of their business models and the most efficient organisations swipe these models on a biennial or triennial basis. These firms believe that persistent operational plans are crucial for a successful business model and invention from time to time.

According to Linder and Cantrell (2000), firms must be dominant in the capacity to transform. To achieve more profitability, it is imperative to explore novel business models by the firms (Linder and Cantrell, 2002). The optimum technique to undertake this is through structural outlook as conflicting to inconsistent administrative configuration, and with this mindset, the researchers compete with the firm's ongoing business model. The firms, which adopt to accomplish several outlooks instead of dissimilar administrative slabs, may be protected by giant payouts since they escape the outrages that can be initiated by frequent operational alterations.

Davenport et al. (2006) suggested that to contend within the market; the companies must continuously generate and restructure their specific business models. It means that the organisations must take into consideration a wide range of business models to evade the complex current business model. It has also been emphasised that the organisations must be proficient at unlearning previous

achievements and tactical outlooks to evade pathway association. It is the procedure of organised re-invention where the organisations must opt to achieve sustainability. (Davenport et al., 2006).

Morris et al. (2005) differentiated between essential and exclusive prerequisites, which is involved in the genuine business model. This study fragmented the business model into three stages. As per this study, the first phase is known as the foundation level. It comprises the core of the business model. In the second phase, which is known as the elite level, the organisation applies exclusive strategies for the original mechanisms and generates persistent benefits from the business. In the last phase, which is known as the rules level, the organisations thoroughly associate to the accomplishment of the business model because there, somehow, the organisation's strategies are safeguarded. Reliable compliance to these simple philosophies, the organisations can rescue with different comparable business models (Morris et al., 2005).

Innovative technology, huge adaptability and digitalisation have modified the enterprise surroundings drastically. Global virtual networks result in decreased costs, today's networks, cooperative cost propositions, new distribution channel combos and spread and shared revenues – in other phrases, the functionality of a company to adopt a cumulative number of possible enterprise configurations. Also, the outcome of those improvement consequences into augmented complexity and uncertainty in enterprise firms, the need for management standards and tools, and the involvement of modularity aspects for dealing with those complications. Growth of commercial enterprise in phrases of stakeholder's numbers ensuing into complex, and complicated to understand (Osterwalder, 2004)

The idea of business model has ended up handy because new generations managers have a plethora of selections in terms of branding their fee proposition, essential partner choice, configuring their cost network, patron retention and pitch

together with many complexes yet crucial selection in stake of commercial enterprise (Osterwalder, 2004)

As per Osterwalder “The main reason behind crafting any model is to aid in grasping basic understanding, through describing, or predicting smart actions inside the gift world employing bestowing a simplified presentation of a selected entity, occasion or phenomenon”. The business version is such a notion; it indicates the sound professional judgment of a corporation. It is a strategic tool to manual a company to make money; in other words, what the business enterprise must give and who is the client. Business fashions are very dynamic and robust to broaden, yet innovative commercial enterprise fashions are the most critical asset to the organisation.

Researchers claimed difference among enterprise models and strategy in various research studies. Most of the researchers diagnose the association and edges between approach and enterprise models, at the same time as a few correlated the same with business approaches. The distinction among commercial enterprise version, for example, Zott and Amit (2008) attempt to streamline enterprise model and approach as “the enterprise version is a structural template that describes the corporation of a focal company’s transactions with all of its external constituents in element and product markets.” A commercial enterprise model for an organisation is the outcome of the strategic selections and their end outcomes hence it's miles the reflection of the strategy

According to Shafer et al. (2004), the main additives of commercial enterprise fashions are price capturing, cost network, price creation and strategic selections. According to them, a commercial enterprise version isn't always a method, however, replicates the strategic adoptions made and utilised to examine & interconnect strategic alternatives. As per Morris et al. (2003) link “Strategic selections describe a corporation, even as commercial enterprise fashions make the choices clear. They see that commercial enterprise fashions have necessities of

each strategy and operational effectiveness, i.e. tactics. Also, identify corporation networks, approach and shape, operations personified inside the organisation's commercial enterprise methods and useful resource base, in addition to finance and accounting as the main factors of the business version”.

According to them, the additives of the business version exemplify the method. Heikkila” et al. (2007) explains “Numerous interfaces amongst strategies, business fashions and networks, and preserve that companies are engaged in three tuning approaches: horizontally at the approach-enterprise version-interface among the companies, horizontally at the methods-enterprise version-interface among the companies, and “vertically” inside each business enterprise to align the techniques and tactics to come upon the demanding situations of collaboration”.

Fjeldstad and Haanæs (2001) diagnose that tradeoffs determine the in shape among the firm inner value introduction and competitive context. This manner tradeoffs among price introduction and strategic choice define commercial enterprise models and procedures. Value configurations are as influential gear for examining strategic situations and a smaller quantity of essential in the evaluation of operations. They are the notion that value for clients is created via strategic positioning concerning to value configuration.

Osterwalder (2004) tries to build an amalgamation of the commercial enterprise version literature and defines nine commercial enterprise version building blocks consisting of 4 pillars: Pillar 1 product/ offer (fee proposition), Pillar 2 purchaser interface (target client, distribution channel, relationship), Pillar three infrastructure management (price configuration, capability, partnership), and Pillar four financial factors (fee shape and revenue model)

Osterwalder correlates the association of activities & resources, as value creation, which is essential for the creation of value for the consumer. For a business enterprise, the business models and the offerings offered by an organisation are influenced by cost configurations. So, there may be an information gap amongst

academia on how enterprise fashions should be defined and what must be included.

Pillar	Building block of business model	Description
Product	Value proposition	A value proposition is an overall view of a company's bundle of products and services that are of value to the customer
Customer interface	Target customer	The target customer is a segment of customers a company wants to offer value to
	Distribution channel	A distribution channel is a means of getting in touch with the customer
	Relationship	The relationship describes the kind of link a company establishes between itself and the customer
Infrastructure management	Value configuration	The value configuration describes the arrangement of activities and resources that are necessary to create value for the customer
	Capability	A capability is the ability to execute a repeatable pattern of actions that is necessary in order to create value for the customer
	Partnership	A partnership is a voluntarily initiated cooperative agreement between two or more companies in order to create value for the customer
Financial aspects	Cost structure	The cost structure is the representation in money of all the means employed in the business model
	Revenue model	The revenue model describes the way a company makes money through a variety of revenue flows

Source: Osterwalder (2004)

Figure 2.1: Osterwalder Model Components

According to Mahadevan (2000), a useful business model depends upon different conditions. Selecting a suitable business model is grounded upon the framework and influences precisely to the organisation. The business model is also a consequence model with an optimum type of procedure for specific circumstances in a precise bazaar (Mansfield and Fourie, 2004). Kraemer et al. (2000) illustrated the instance of Dell and recommended a way so that a business model may have essential gains in specific bazaar circumstances. Chaharbaghi et al. (2003) suggested that the modification of the framework.

2.4 THEMewise LITERATURE REVIEW

The literature has been categorised into different key themes concerning critical success factors of a low-cost carrier. The details are presented in the below given:

Theme	Author	Inference	ICC - Initial Conceptual Construct/ Sub Constructs	Research Gap
LCC Strategies	Li-Yen Chang, Shao-Chih Hung Omar S. Elwakil, Martin Dresner Jost Daft, Sascha Albers John F. O'Connell, David Warnock-Smith b Marco Alderighi, Alessandro Cento c, Peter Nijkamp d., Piet Rierveld d Ming Hsin Lin David Gillen, Alicja Gados Alessandro V.M. Oliveira Cristina Barbot Fré de 'ric Dobruszkes Nenad Njegovan Luca Graf David Gillen a, b., Ashish Lalle Li-Yen Chang, Shao-Chih Hung Adél Németh a., Hans-Martin Niemeier, Mark Graham Mark Goh a, Jongsay Yong, Andrea Salanti, Paolo Malighetti, Renato Redondi M. Lenartowicz, K. Mason, A. Foster Frédéric Dobruszkes Alison Rieple, Clive Helm, Paolo Malighetti, Stefano Paleari, Renato Redondi b Benjamin Marcus a, Chris K. Anderson b, Yu-Chun Chang Jaap G. de Wit, Joost Zuidberg Wolfgang Grimme Richard Klophaus, Roland Conrady, Frank Fichert Brian Graham, Jon Shaw Markus Franke Graham Francis, Nigel Dennis, Stephen Ison, Ian Humphreys Keith J. Mason, William G. Morrison David Jarach, Fabrizio Zerbinì, Giulia Mimiero	To maintain the competitive positioning & operational efficiency, LCC use various types of operational strategies i.e. cutting cost, cost leadership, dynamic pricing, expansion, etc. It also includes the shift of the original business model to a hybrid model like 'airline within the airline' or 'low-cost long-haul carrier' (LCLHC). Demand & supply dynamics as expansion strategy i.e. Merger & Acquisition, Alliances, Airline within the airline, The combination of these strategies results into the advance LCC business model.	Route & Network Strategy; Cost Reduction Strategy; Expansion Strategy; Hybrid Strategy; Pricing Strategy, Product Differentiation, Cost Optimization, Merger & Alliances	Though many of the authors identify various airline strategies but couldn't able to explain the process of strategy formulation & implementation particularly in the Indian context. i.e. How LCC airline implement a particular strategy or a set of multiple strategies to achieve sustainable Business Model?

Airport & LCC Relationship	Yap Yin Choo, Tae Hoon Oum Shinya Hanaoka, Batari Saraswati David Warnock-Smith, Andrew Potter V. Dimitra Pyrialakou, Matthew G. Karlaftis, Panayotis G. Michaelides Andreas Papatheodorou, Zheng Lei Ann M. Torres a, Chris Barry b, Maire 'ad Hogan b Ahmad Azmi M. Ariffin, Mohd Fahmi Yahya Anne Graham	LCC airline has a correlation with airport & growth of LCC airline depends on various airport choice factors i.e. terminal configuration & location. Airport efficiency has an intense effect on LCC airline operations.	Airport Efficiency Terminal Configuration Airport Accessibility Airport Infrastructure	The limited literature on "How airport efficiency influences LCC operations"
Regulatory Framework	Peter Morrell; David Starkie; Anming Zhang a, Shinya Hanaoka b,1, Hajime; Inamura c,2, Tomoki Ishikura	The airline industry is one of the most regulated and restrictive industries in international trade. Domestic deregulation and liberalization have been progressing at an uneven pace across countries. Liberalization of the international markets has yet to overcome numerous obstacles like traffic rights, restrictions & local politics by government & regulatory bodies.	Freedom of Air Traffic Rights Flying Regulations Flying Restrictions	How regulatory framework influence LCC operations?
Sustainable Business Model	Linder & Cantrell; Chaharbaghi et al. ; Mansfield & Fourie; Kraemer et al. ; Mahadevan; Morris et al., Davenport et al.; Linder & Cantrell; Walters; Zott & Amit; Schweitzer; Chesbrough, N.M.P. Bocken, Betz; Gordijn & Akkermans.	Business Model offers unique value, hard to imitate & grounded to reality. Execution & positioning is important in the sustainable business model.	Value Proposition Core Activities & Assets Revenue & Cost Streams	Though the authors studied the components, elements of business models, development along with the framework but how LCC strategies are formulated & executed to

		<p><i>Business model classifications as Orchestrator Model, Layer Player Model Market Maker Model, Walter Cooper Model.</i></p> <p><i>Attributes of Business Model i.e. key resources, key activities, industry partners, Cash flow, return on investment (ROI), distributed assets (low capital intensity), core assets and distinctive capabilities and finally the firm positioning, cost and revenue streams, customer relationship management in the industry value chain.</i></p> <p><i>Development of Business Model Framework & business model innovations for competitive advantage</i></p>	<p><i>Business Model Components</i></p> <p><i>Customer Relationship Management</i></p> <p><i>Industry Partners</i></p> <p><i>Business Model Competitiveness</i></p>	<p><i>obtain a sustainable business model is not clear.</i></p>
LCC Airline key Operations (25)	<p><i>Yu Kyoung Kim, Hyung Ryong Lee Belén Rey a., Rafael L. Myro a, Azun Galera b Enrico Bachis , Claudio A. Piga Cristian Huse a, Fabio Evangelho Colette Fourie, Berendien Lubbe John Parton a, Tim Ryley b, David Warnock-Smith, Andrew Potter Keng-Chieh Yang a., Tzui-Chuan Hsieh b, Hendrik Li b, Chyan Yang</i></p>	<p><i>LCC is widely researched in the operational dynamics i.e. service, fares, cost, direct connection, regional connectivity, aircraft usage, staff temperament, booking accessibility,</i></p>	<p><i>Low Operating Cost, Regional Connectivity, passenger perception, Customer Relationship Management, Service Quality, Process Timing,</i></p>	<p><i>Scanty literature is available on critical success factors of Indian LCCs & How LCC airline operations lead to a sustainable business model?</i></p>
	<p><i>b Jan Claussen, Eleanor O'Higgins Yu Kyoung Kim, Hyung Ryong Lee Nigel Dennis Ching-Fu Chen, Tsai-Fang Wu Sara Dolnicar a,* Klaus Grabler b, Bettina Grün a,c, Anna Kulnig b Tim Hazledine Martin Dresner Peter Forsyth* Fabio Evangelhoa, Cristian Huseb, Alexandre Linharesa Keith J. Mason Josep Maria Raya-Vilchez a, Esther Martinez-Garcia Junwook Chi a, JungHo Baek Hongwei Jiang José I. Castillo-Manzano a, Lourdes López-Valpuesta a, Fernando González-Laxe b Laura Diaconu, Anne Graham, Nigel Dennis Yu-Chium Chiou, Yen-Heng Chen John F. O'Connell , George Williams Esther Martinez-Garcia a, Marcelo Royo-Vela Li-Yen Chang, Pei-Yu Sun Josip Mikulic, Darko Prebezac</i></p>	<p><i>procedures, Scheduling, etc..</i></p> <p><i>Customer Relationship Management, passenger perception & service quality are the prominent success factors for the performance of LCC operations.</i></p>		<p><i>Indian industry evidence is missing from the literature</i></p>

Figure 2.2: Self Compilation

2.4.1 Airline Strategy

	Strategic Alliances & Code sharing	(Bilotkach, Gaggero, & Piga, 2011)/ (Lenartowicz, Mason, & Foster, 2013) and (Bilotkach, 2007)
	Product Proliferation	(Suau-Sanchez, Fageda, & J Mason, 2014) and Barbot, 2008]
Airline Expansion	Airport Performance	(Y. C. Chang & Lee, 2010)
	Airline Profitability	Oliveira, 2008
	Internationalization	(Ramón-Rodríguez, Moreno-Izquierdo, & Perles-Ribes, 2011)
	Yield Management	(Bilotkach et al., 2011)
	Fare Bundling	(Suau-Sanchez et al., 2014)
Dynamic Pricing Strategy	Revenue Management	(Belobaba, 2011)
	Market Segmentation	(Alderighi et al., 2011)
	Demand Characteristics	(Mantín & Koo, 2009)
	Network Development	(Dobruszkes, 2009)
Hybrid Business Model	Airline Pricing	(Homsombat et al., 2014)
Airline Strategy	Fare Unbundling	(Suau-Sanchez et al., 2014)
	Route/Network	(Y. C. Chang & Lee, 2010)
Internationalisation Strategy	Fleet Diversity	(Berghöfer & Lucey, 2014)
	Ownership Structure	(Albers, Heuermann, & Koch, 2010)
Marketing Strategy	Fares Fluctuation	(Suau-Sanchez et al., 2014)
Sustainability	Fleet Planning	(Rico Merkerta, 2011)
	Economic Regulations	(B. Graham & Shaw, 2008)

Figure 2.3: Airline Strategy

This area of LCC covers various strategies that include expansion strategy, marketing strategy, operational strategy, airline within airline strategy, etc. Liberalisation has brought up easy market access and practices of new routes and network (Whyte and Lohmann, 2015). This expansion of the liberalised air space offers a new opportunity for service and a new type of business to airlines (B. Graham and Shaw, 2008). Topics like airline expansion, network strategy, dynamic pricing strategy, Internationalisation strategy, hybrid business model, pricing route and network, etc. have been widely covered under the concept (Figure 2). Rivalry between minimal effort transporters in fast development and full administration arrange transporters has gotten one of the most pertinent issues of the aircraft business (Oliveira, 2008).

Writing affirms that carrier extends globally through merger and code sharing by picking either household or worldwide accomplice under semi or conventional, integral collusions (Bilotkach, 2007). Between worldly value segregation is an unmistakable element of carrier evaluating procedures (Alderighi, Cento, and Piga, 2011). Within the sight of LCC, full service providers will in general receive a more forceful high-low evaluating methodology (Mantin and Koo, 2009). Hardly any investigations center around Hybrid Business Model, which covers themes, for example, carrier inside an aircraft, carrier evaluating, toll unbundling, course/organize, and so on. Internationalization Strategy incorporates armada assorted variety, proprietorship structure and promoting procedure.

The hybridization of the plan of action is a compelling technique for a carrier to accomplish upper hand and manageability (Morandi, Malighetti, Paleari, and Redondi, 2015). Aircraft inside aircraft (AWA) procedure is likewise being trailed by numerous individuals of the undeniable aircrafts with profound pockets to counter-assault the nearness and strength of minimal effort transporters (Homsombat, Lei, and Fu, 2014). Writing additionally features that level and

vertical separation is a piece of carrier extension technique, yet item expansion isn't obliging procedure (Barbot, 2008). The aircraft size, the hybridization of the transporter's plan of action and a carrier arrange focus influence the probability to codeshare (Morandi et al., 2015). Specific air terminal utilization is a significant system for a carrier as it is exceptionally corresponded with savvy arrange structuring, income age and serving more traveler to support and development of an aircraft in a serious market (Chang and Lee, 2010).

Additionally, aircraft gainfulness is an element of course decision conduct of a carrier predominantly properties on account of the long or short-take and high-thickness markets (Oliveira, 2008). Intertemporal and understood value segregation is a significant procedure for LCC (Alderighi et al., 2011). Most of the literature covers the firm related strategies, but the process of strategic management regarding low-cost carrier is not listed in the literature, particularly in the Indian context. Thus, there is huge scope for the research on the strategic implementation process, i.e. how LCC airlines formulate and implement various strategies to achieve a sustainable business model. (Yadav & Dhingra, 2018)

2.4.2 Airport and Airline Relationship

The literature on this theme indicates that airports and airlines are entities, which share a common goal (De Neufville, 2008). At the same time, they are in a relationship of service suppliers – customers (Barbot, D'Alfonso, Malighetti, and Redondi, 2013). Studies highlight that the factors which contribute towards the relationship between the airport and airlines are airport choice factors, airport's competition, airport infrastructure, airport operations, airport privatisation and airport valuation and vertical collusion (Yadav & Dhingra, 2018).

The nature of airline become more competitive, resulting in shrinking yields and lower margins with elite product offering forcing LCC airlines to cut down the operating cost. This controlling pressure includes the station or airport charges which further pressure to the airport operators (**Graham, 2013**) LCC airlines

pushing the airport operators to lower down the airport charges and compensate the loss by the enhancing of non-aeronautical revenue. **(Humphreys, 2006)** . The airline business is capital intensive and entails exceptionally high fixed costs. Many expenses aren't easily reduced like maintenance fees, personnel expenses, fuel costs etc. which results into competition amongst carriers to choose the airport operator offering lesser, reduced or even subsidised charges which are almost 4 % of total airline operating cost. **(Starkie D., 2014)**

Studies have focused on LCC choice factors, air traveller's choice and airline operations (Warnock-Smith and Potter, 2005) (Lian and Rønnevik, 2011). Behavioural analysis of passengers travelling from airports is crucial in term of low-cost carrier (Castillo-Manzano, 2010). The services provided at an airport strongly influence its image (Ariffin and Yahaya, 2013). The significant airport charges of an airline include take-off, landing, and parking of aircraft, and for the use of passenger facilities including noise and emissions charges under environmental charges due to co2 emission and other environmental hazards. **(Forsyth, 2006)** Passenger Service Fee, User Development Fee and Development Fees are directly levied to the passengers, whereas Landing, Parking and Housing charges are levied to airlines. Also, upscaling in pax specific charge(s) would result in the decrease for the airline-specific charges and vice-versa .**(ICAO, Airport Economic Manual, 2006)**.Also, the airline sets lower fares when flights depart from or arrive at dominated airports (Barbot, 2006). Under AERA act 2008, the authority covers regulation and fixation of charges for aero services, monitoring of significant airports performance standards and user charges. **(AERA, 2019)**

The significant airport charges are regulated and monitored by the Airport Economic Regulatory Authority in India. The authority adopts hybrid-till approach for all other major airports, including non-aeronautical contribution to 30- 40% to offset the aeronautical charges. Literature reflects a concern regards to

non-aeronautical revenue through single till dual till or hybrid till. Single till i.e. cross-subsidizing the aeronautical cost entirely through non-aeronautical revenue approach resulting in reduced airport charges is beneficial for airlines in reducing the operating cost wherever airports inclines towards dual till under which aeronautical and non-aeronautical cost and revenues are treated separately incentivizing the airport operators. (AERA, 2019). The hybrid-till model enlist the subsidizing of airport costs on basis of 30 % of non aero revenue plus aero revenue as step taken by airport charges & tariff regulator Airports Economic Regulatory Authority (AERA) across India .(*The Hindu*)

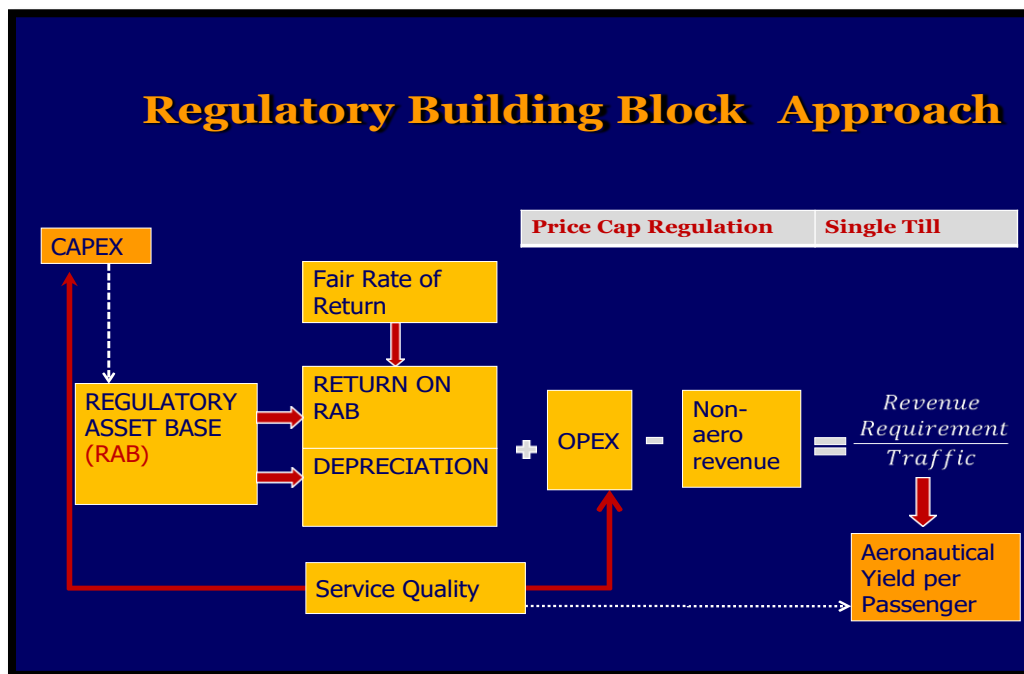
"AERA favors the single till approach as it's more suitable for government airports and airline operators. There is strong debate over applicability of revenue approaches as MoCA is in favor of providing airport operator a better chance to flourish and develop providing powers to airport authority of India." (*MoCA*). (G Francis A. F., 2003) penned down that the airport operators are not able to cover the operating cost as few of the low-cost airlines tend to push the airport operator for the prices below the operator's marginal costs resulting limited options with airport operator to offer reduced landing charges and rely on economy of scope probability. (Barrett, 2004) mentioned that airports usually charge landing fees on the basis of aircraft weight, a fee per passenger that passes through the terminal as terminal user facility charges (TUFC), aircraft parking charges and charges for office space. Additional charges contribute to ground handling charges which airline can do for itself as well as provide ground handling services for other international airlines or by outsourced ground handling agency.

Airport charges or pricing mechanism, Price cap regulation is pervasive across monopoly markets. The formulae for determining prices under such a cap incorporate terms reflecting inflation (e.g. Price Cap Incentive - CPI) known as 'CPI-X regulation'. The 'X' factor principally reflects the expected changes in

financial limitations about investments, depreciation, & cost implication of increased level of service and projected competence enhancements (through reduced operating costs), and capacity growth on the other. (MoCA, 2010)

ICAO's Policies on airport charges and CNS (Communication, Navigation and Surveillance) also recommends that landing charges should not be discriminated depending on flight length flown. (ICAO, Policies on Charges for Airports and Air Navigation Services, 2009)

(Barrett, 2004) highlighted that the low-cost airlines have a strong track record in delivering business even to less commercial viable airports offering non-aeronautical revenue sources such as catering and retail bundled services.



Source – IATA

(Mark Hansen, 2013) highlighted the role of on-time performance (OTP) and punctuality, failing in maintaining the same, resulting in downscaling the market share and revenue of an airline. Fuel, crew and maintenance costs emerged as the

high costs due to delay at airport excluding the buffer costs, i.e. aeroplane ownership, lease and rental, depreciation and insurance etc. (Cook, 2004) further identified the minor role of passenger related costs as compared to overall compensation and concluded that delay impacted market share and revenue losses contribute to long term costs.

Eurocontrol reported that the costs of the major delay are fuel, crew and maintenance. Also, airport charges can increase with regards to long gate delays which also contributes to late arrivals resulting in passenger and ground handling cost (Cook, 2004). Due to the regulatory implications in delays, the major integral component is counted for passenger cost, including additional overheads on passenger loading arrangements in case of delays. (ITA, 2000) defines various costs as a result of schedule disruption, improper and offscale of operational efficiency at significant hubs in terms of missed flight connection, minimum connecting time prolonged timeslot and cancellations of flights.

(Lei, 2010) concluded that it's a rational decision for an airport operator to allocate capacity to the low-cost airline with cheaper average airport charges. Also, as low as 15 % share in airport total traffic provides flexibility to the low-cost airline to negotiate for lower landing fees per passenger. Airport Low-Cost Airline relationship ((G Francis A. F., 2003) (Humphreys, 2006)) projected the potential of additional traffic at the same time with a decrease in Landing Fees per passenger for the low-cost airline. Also, the finding of studies throw light on the possibility of airport operator competitiveness with low-cost airline operations even with reduced airport charges (Landing and Parking) compensated by non-aero revenue possibilities through LCC passengers (Lawton T, 2015)

LCC airlines highly influenced the non-aero revenue of the airport operator, thanks to the imitable spending patterns of the LCC passengers which are the result of the product differentiations by low-cost airlines curving the profiles of

passenger arg. **Hans-Martin Niemeier** us that passenger probability and the surplus is a crucial reason for boosting airport non-aeronautical revenues, not the airline itself (**Niemeier, 2014**). David Starkie also pointed out that under dual till the charges would remain low as airports would garner higher revenue through upscaling in unregulated non-aeronautical revenue (**Starkie, 2006**)

Most of the studies under the theme cover airport infrastructure, airport privatisation, and airport valuation but there is scope for further research in the field of airport airline connectivity that answers the questions such as what is the role of the airport in airline sustainability? How airport connections and airport services are valued for the LCC operations? What is the role of policy formation and regulations on airline and airport connectivity? How the regulatory framework of airport influences the LCC as a business model (Yadav & Dhingra, 2018).

Literature indicates that market structure is a widely researched area and covers airline competition, airline supply and demand, market power, network strategy, pricing and fare, etc. Airline competition covers resource utilisation (Low and Lee, 2014), pricing behaviour (Aydemir, 2012), Infrastructure investment, startup strategy, operational cost and business travel. Airline entry and service quality, network competition are covered under market power (Pels, 2009).

The literature confirms that the market structure of a country defines the service quality level of airlines (Yetiskul and Kanafani, 2010) and also the preferences parameters amongst low cost and full-service carrier (Low and Lee, 2014). Also, LCC entry and joint ventures have a significant impact on market structure (Fageda and Fernández-Villadangos, 2009). Intra mode of transportation, competition, and income level and population size are the significant determinants of market power (Zhang, Yang, Wang, and Zhang, 2014).

Airline & Airport Relationship	Airport Choice Factors	<i>Air Traveler's Choice</i>	(Nadine Pantazis, 2006)
		<i>Airline Operations</i>	(Paolo Malighetti a, 2011)
		<i>LCC Operations</i>	(Jun Ishii a, 2009)
		<i>Corporatize Operations</i>	(Warnock-Smith & Potter, 2005)
	Airport Competition	<i>Passenger Delight</i>	(Ariffin & Yahaya, 2013)
		<i>Low-Cost Operations</i>	(Shinya Hanaoka *, 2011)
		<i>Low-Cost Carrier Fares</i>	(Barbot, 2006)
		<i>De Hubing</i>	(Renato Redonda, 2012)
		<i>Linear Transfers</i>	(José I. Castillo-Manzano a, 2012)
	Airport Infrastructure	<i>Low Cost terminal</i>	(Neufville, 2008)
		<i>Terminal Design</i>	(Lin, 2013)
		<i>Airport Charges</i>	(Graham, 2013)
	<i>Low-Cost Traffic</i>	(Rubén Sainz-González a, 2011)	
Airport Operations	<i>Flight Characteristics</i>	(Pai, 2010)	
	<i>Pax Behavioral</i>	(Castillo-Manzano, 2010)	
	<i>Airport Planning</i>	(Cristina Barbot a, 2013)	
	<i>Airport HUB</i>	(Achim I. Czerny a, 2014)	
Airport Privatisation			
	<i>LCC Operations</i>	(Ariffin & Yahaya, 2013)	
	<i>Airport Competition</i>	(Lian & Rønnevik, 2011)	
Airport Valuation & Vertical Collusion			
	<i>Value Determinants</i>	(V. Dimitra Pyrialakou, 2012)	

Figure 2.4: Airport Airline Relationship

Though airline market structure is widely covered in literature, especially in pricing, competition and market power concepts (Flores-Fillol, 2009) but still there are few unanswered questions, i.e. How regulations impact airline market structure? How does policy framework determine LCC success? Besides, there is

a further scope of research in the area of connecting passenger market, as literature is available on the economic impact of an interlining or connecting passenger in the LCC market (Yadav & Dhingra, 2018)

2.4.3 Airline Business Model

A large number of low-cost carriers have evolved into hybrid carriers which blend low-cost traits with those of full-service network carriers (Klophaus, Conrady, and Fichert, 2012). LCCs have taken advantage of the progressive liberalisation of the European market (Budd, Francis, Humphreys, and Ison, 2014). Due to the evolution of low-cost carriers (LCC), airfares have reduced, and air travels have become more affordable (de Wit and Zuidberg, 2012).

The highlight point model embraced by minimal effort transporters concentrated on short-separation, local, relentless courses among cause and goal instead of having corresponding flights at center points as the center point and talked model received by inheritance transporters (Francis, Humphreys, Ison, and Aicken, 2006).

The literature also highlights that the nature and size of airline operation along with airline revenue management and composition of aircraft fleet are key factors, which influence the LCC business model and its success. Airline business model cover airline fare and pricing, airline personnel management, airline operations, airline strategy, travel and tourism development (Malighetti, Paleari, and Redondi, 2009).

Literature also confirms that airline fare and pricing are the most critical drivers in the LCC business model, the reason being the non - price competition in the market (Lu, 2009). Airline fare and pricing cover the environmental cost, hybrid pricing, airline performance, low-cost operations, revenue management (Figure3). Employee relationship and employee engagement have been covered by airline personnel management (Hunter, 2006).

Airline Business Model	Evolution of European LCC	Entry & Exit Market	(L. Budd et al., 2014)
		Hybrid Pricing	
		Airline Performance	(Dominic Detzen a, 2012)
		Low-Cost Operations	(Tretheway, 2011)
	Airline Fare & Pricing	Revenue Management	(Poeit, 2011) and (Michaels, 2009)
		Environmental Cost	(Lu, 2009)
	Airline HR	Employee Relationship	(HUNTER, 2006)
		Hybrid Model	(James Pearson a, 2014)/ (John F. O'Connell, 2006)
		Tourism	(Jin Young Chung a, 2011)
		Network Development	(Dobruszkes, 2006)
	Airline Operations	Service Quality	(Graf, 2005)
		LCC Strategy	(Graham Francis a, 2006)
		Long Haul Operations	(Whyte & Lohmann, 2015)
		Air Regulations	(Anming Zhang a, 2008)
		Airline Profitability	(Keith J. Mason a, 2008)
	Airline Strategy	Cargo Operations	(John Gardiner 1, 2008)
		Route & Network	(Stephan Heinz, 2013)/ (Reynolds-Feighan, 2010)/ (Graham Francis Nigel Dennis, 2007) and (Edgar Jimenez, 2012)
		Airline Marketing	(Whyte & Lohmann, 2015)/ (de Wit & Zuidberg, 2012)/ (Xavier Fageda a, 2011)/ (Graham, 2009)/ (Mason, 2007)
		Hybrid LCC Model	(Klophaus et al., 2012)/ (John G. Wensveen, 2009)/ (Morrell, 2005) and (David Jarach a, 2009)
		Leisure Travel	(Papatheodorou & Lei, 2006)
	Travel & Tourism Development		
		Stay/Trip Duration	(Berta Ferrer-Rosell a, 2014)

Figure 2.5: Airline Business Model

Further scope of research is prominent in the field of airline business model comparison as limited literature is available on LCC business model comparison tools or methods, i.e. How we can rate the LCC business Models across the globe (Yadav & Dhingra, 2018)

2.4.4 LCC Key Operations

This area of LCC includes network and fleet scheduling, low-cost operation, tourism development, airline supply, and airline personnel management as crucial success factors of the low-cost carrier. Studies indicate that the airline needs to go over certain fare benefits to the passengers to attract more passengers (Malighetti, Redondi, and Salanti, 2014). In many airlines, the basic route fare makes up the airlines demand in the market (Delaplace and Dobruszkes, 2015).

Low-cost operations cover hub and spoke, point-to-point model, airline competition. De-tubing is a crucial factor for airline operations (Bilotkach, Mueller, and Németh, 2014). Deregulation has also produced structural changes within the leisure industries all around the world (Wu and Hayashi, 2014).

Route utilisation, hub and spoke development, charter operations are very much important factors for efficient operations (Yetiskul, Matsushima, and Kobayashi, 2005). Tourism development is also an essential catalyst for the growth of low-cost operations and much of the literature showcase the importance of tourism activity for gearing up the LCC operations (A. Graham and Dennis, 2010).

Though there are many studies that focus on airline operations and it's low-cost applicability, but literature is scanty on critical success factors required for the sustainable business model for the low-cost airline (Yadav & Dhingra, 2018)

2.5 INITIAL CONCEPTUAL CONSTRUCT and SUB – CONSTRUCTS

Strategy Formulation

Strategy formulation process comprises of environmental scanning in which the organisation operates, followed by defining the company's mission and goals, its internal strengths and weaknesses along with external opportunities and threats (SWOT). Environmental scanning is carried out by employing PESTEL Analysis - Political, Economic, Social, Technological, Environmental and Legal Factors; and Porter's 5 Forces Model that includes bargaining power of suppliers, bargaining power of customers, existing competition in the market, new entrant potential threats and substitute products for buyers in the **(Morris et al., 2005)**.

Strategy Implementation

The next step of the strategic management process is the implementation which incorporates - organizing the association, designating assets, guaranteeing that the firm has gifted representatives set up, and creating reward frameworks that adjust worker conduct to the key objectives. Operational management is an ongoing day-to-day practice once the strategic implementation is determined, followed by performance management and development. Strategy maps and balanced scorecards are tools which help strategy maturation by enabling the evaluation KPIs and comparison with decided goals and objectives. Numerous methods and practices are utilised in the strategic evaluation stage. Some of the commonly used techniques are system tracking, manual tracking and meetings between corporate and functional units. Constant feedback and effective communication are the keys to implementation. **(Linder and Cantrell, 2001); Walters (2004); (Zott and Amit, 2008)**.

Strategy Evaluation

Evaluation plays a pivot role in the whole process as it quantifies the end result and suggests a course correction required to ensure objective achievements. To measure the strategic plans, various methods are in practice such as system tracking, manual tracking, meetings amongst corporate and functional units as part of project management with time horizon analysis. Responsive evaluation delivers a realistic and humanistic method to program valuation. The responsive evaluation comprises of program's background (history), conditions and transactions among various stakeholders.

Airport Operational Efficiency

Airport airline relationship is crucial in terms of airport strategic fit in the requirements of the LCC airlines business model. The airport provides a facility which helps the airline to reduce cost and density utilisation for the high load factor (Pitt and Brown, 2001). It will also lead to the quick processing time, ground time and turnaround time for an airline between arrival and departure from an airport. Turn Around the time of an airline is time between chocks On and chocks Off the aircraft on-ramp (De Neufville, 2008)

Operational efficiency of airports is all about reducing processing time to cater maximum aircraft moments and reduce the turnaround time at the ramp for the airline; It can also be invigorated by ensuring that there is enough demand to operate from the station (city pair) with regular frequencies including assuring high load factor and capacity share. In making airport choice for an airline, airport competition is also playing a major role. In competitive airport market ,LCCs might not able to negotiate with multi airport due to competitive environment (Gillen and Lall, 2004). According to Dobruszkes (2006) “different models of airports, i.e. regional airports; feeder airports, tourism airport, regional & model airports has unique attribute for an airline along with strategic benefits.”.

Airport Infrastructure and Cost

Air terminal budgetary execution and LCC activities, Graham and Dennis (2007) found with their investigation of UK and Irish air terminals that the air terminals served by LCCs would, in general, have lower unit incomes, especially as respects air terminal charges additionally lower unit costs yet there was no undeniable connection between air terminal productivity and ease tasks. Charges additionally lower unit costs, yet there was no undeniable connection between air terminal gainfulness and minimal effort activities. (e.g., Harvey, 1987; Windle and Dresner, 1995a; Pels et al., 2001; Hess and Polak, 2005) conclude that while determining the airport choice by the low-cost carrier, airport access time is the utmost factor along with convenient schedules of an airline from the airport. Suzuki and Audino (2003) examined the factors leading to passengers bypassing a local airport and travelling up to 400 km to access an alternative airport.

National Civil Aviation Policy

National Civil Aviation Policy (NCAP 2016) is authorities arrangement recommended with the aid of Union Cabinet on June 2016. The NCAP 2016 spreads the expansive approach regions, for example, Bilateral traffic rights, Regional availability, Fiscal Support, Maintenance, Repair and Overhaul, Safety, Air Transport Operations, 5Years /20 Aircrafts Requirement for International Routes, Air-freight Operations, Aeronautical 'Make in India'. The UDAN Scheme which turned into propelled on April 27, 2017, utilising PM Narendra Modi, is a key part of the National Civil Aviation Policy.

The full critical features of the NCAP are:

- Viability Gap Funding for activity below Regional Connectivity Scheme (RCS).

- Un-served or below-served publications beneath RCS – Revival
- Commuter Operator (Scheduled)
- Routes Rationalisation- Route Dispersal Guidelines (RDGs)
- The prerequisite of 5 years and 20 aeroplanes for global activity has been changed to 0 years and 20 flying machines or 20% of the absolute limit.
- Liberalisation of local code sharing

Bilateral Agreement

It is the comportment of monetary and political connection between two sovereign states. It is an agreement which is activated by an individual state or together by numerous states, individually. At the point when states remember each other as autonomous states and consent to strategic relations, they make a reciprocal relationship. States with reciprocal ties will trade political operators, for example, ministers to encourage discourses and support.

Monetary understandings, for example, organised commerce understandings (FTA) or remote direct venture (FDI), marked by two states, are a typical case of two-sidedness. Since most monetary understandings are marked by the attributes of the contracting nations to give special treatment to one another, not a summed-up guideline but rather a situational separation is required. Consequently, through two-sidedness, states can get increasingly customised understandings and commitments that just apply to specific contracting states (MoCA)

Air Traffic Rights

These rights grant worldwide business administrations among, through and at times inside the nations that are gatherings to air administrations understandings or different bargains. While it concurred that the third to fifth opportunities would be consulted between states, the International Air Transport Agreement was

likewise opened for marks, enveloping the initial five opportunities. The staying 4 opportunities are made conceivable by ASA - air administrations understandings however are not 'authoritatively' perceived because the Chicago Convention does not perceive that.

Regional Connectivity – UDAN (Ude Desh ka Aam Nagrik)

The legislature of India, with the goal of "Affordable air travel for common people", pointing towards lower airfare for air make a trip and to help national financial improvement, employment increment and multi-purpose infra upgrading in India. Toward the beginning of the plan, out of all-out 486 air terminals, 406 were under unserved air terminal, 27 had been all around served air terminals out of 97 non-RCS air terminals, and twelve had been operational air terminals out of 18 partaking underserved close by operational air terminals with customary fixed-wing flights.

UDAN plan will add to this number through speeding up the improvement and operationalisation of India's latent capacity focus of about 425 unserved, underserved, and regularly immature territorial air terminals with regular planned flights.

Business Model Components

Key Activities are the most fundamental exercises which are a significant affecting boundary in executing an organization's offer. Distinct advantages are considered as **resources** for an organization which are basic to help and support the business. In addition, they are a key imperative in making an incentive for the client. These assets could be money related and non-budgetary assets which incorporates human, physical and scholarly. Accomplice arrange incorporates business **partnerships** figured through key collusions and joint endeavors between contenders or non-contenders.

Value Propositions: Value proposition is described as the differentiating aspect between the company and its competitors. The value proposition includes creativity and innovation is not only the product offerings but also in the service provided to customers. This could be qualitative in nature, such as overall customer experience and satisfaction; or quantitative in terms of features or price of the product or service.

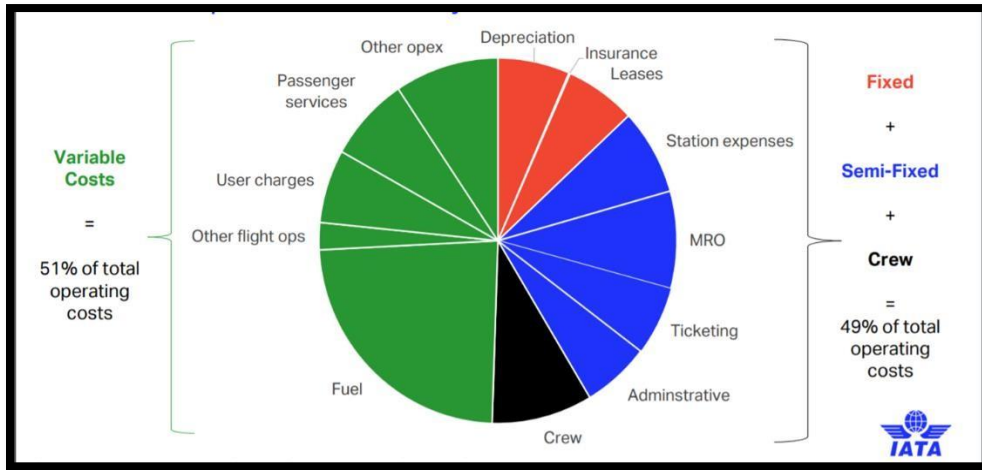
Client Segments: Customer distinguishing proof and division is the way to building a helpful plan of action. Different arrangements of clients can be sectioned dependent on their various needs and credit to guarantee fitting execution of corporate methodology to meet the qualities of chose gatherings of customers. Client division could be arranged into geographic division, segment division, psychographic division and social division.

Channels: A carrier may bring its incentive to its engaged customers through different channels. Different channels, for example, web based life stages, print media, influencers, superstar supports and computerized ads will help share the association's contributions rapidly and capably. Moreover, the association could have its own channels, accomplice channels or a mix of both.

Customer Relationships: To guarantee the endurance and achievement of any organizations, organizations must recognize the kind of relationship they need to make with their client portions. Different types of client connections incorporate Personal Assistance, Dedicated Personal Assistance, Self Service, Automated Services, Communities and Co-creation.

Cost Structure: This characterizes the most extreme critical financial results while working under various plans of action. Classes of Commercial Structurer can be Cost-Driven – This plan of action centers around limiting all expenses and having nitty gritty. for example Minimal effort aircrafts. It could be Value-Driven – less worried about the cost; this plan of action centers around making an

incentive for items and administrations. for example, Virgin Atlantic Airline.



Source – IATA

Figure 2.6

The main characteristics of cost Structures include fixed Costs – The costs are unchanged across different applications. e.g. salary, rent. Variable Costs – Costs vary depending on the amount of production of goods or services. For an airline, it includes station cost, distribution cost, airport charges etc. Economies of Scale I terms of supplying more capacity (seats) to reduce the overall cost per seat and Economies of Scope in terms of code sharing, interlining and strategic alliances for an airline.

As defined by the International Air Transport Association (IATA), low-cost airline costs classified as fixed costs, semi-fixed costs and variable costs. Fixed cost includes MRO, distribution, insurance, lease and aircraft purchase, depreciation and sales and marketing. Variable cost includes fuel cost, user charges, passenger services, other OPEX (Operating Expenditure) and flight operations. IATA Airline Cost Management (IACM) inked the fixed cost as total operating cost (TOC) as high as 51 % and variable costs as 49% of TOC.

As per McKensey the component of cost of an ease carrier can be partitioned into three classifications as a direct working cost, Indirect Operating Cost and

Overheads costs. The referenced expenses are caused via aircrafts regardless of their plan of action and ease carrier downscale the expense of activities, give modest flights or limited passages dependent on these expenses. The direct working expenses are identified with the airplane and travelers. These trade off those heads of costs which can be legitimately doled out to the activities of the airplane or travelers amuse. To give lower airfare to the travelers, LCC endeavor to lessen their direct working expenses by concentrating on effectiveness (Graham, 2013). Aircraft related direct working expenses incorporate fuel, support and fix, landing charges, ground taking care of, course and routes and staff costs. Traveler related direct working expenses incorporate inflight suppers, providing food, air terminal burden charges, commission on load and so on. (G Francis A. F., 2003).

While backhanded working expenses are not straightforwardly acquired during airplane tasks, yet the transporter charges the travelers for this expense – sets out toward loading onto the flights. These expenses incorporate stopping charges, team and lodge pay, taking care of costs at base stations. Overhead expenses are acquired for the smooth and bothers free flight activities and propositions costs are administrative costs towards deals, advertising or work force related concerns. It incorporates business costs, deals and promoting, bookkeeping costs, faculty related costs and other general administration costs .(Barrett, 2004)

Low Operating Cost

The prominent qualities of LCC is lower cost and expense. LCCs are decreasing their expenses additionally by utilising: an institutionalised fleet (the adaptability of the group's task and producing investment funds in preparing, capability, a load of extra parts.) of cost-effective aeroplanes (Regularly B737, all the more as of late A319) (Franke, 2004), expanding the number of seats on the flying machine, and enhancement of the number of seats as indicated by the vital team.

They institutionalise the administration (just one class, just one help); diminish to nothing, or nothing, the free administrations ready; and sidestep the trip specialists. Web Reservations (EasyJet sells 95% of its seats like this) or by phone. Just point-to-point connection is sold; no associations are conceivable (disentangling baggage taking care of and planes turnaround); no tickets are printed; seating is free; auxiliary air terminals with lower charges are utilised; there are no FFP - long-standing customer programs and non-incorporation into partnerships is the standard. (Malighetti, Redondi, and Salanti, 2014)

Airline Revenue Management

It is the submission of systematic analysis that forecast consumer behaviour at the micro-market levels and optimize product obtainability and price to maximise revenue growth. Pricing is a factor that invigorates the benefits in supply network through a proper match of market interest. Income, the executives, can be characterised as the use of estimating to build the benefit delivered from a constrained stock of supply network resources (Delaplace and Dobruszkes, 2015).

Revenue Streams: The way a company makes income from each customer segment. Several ways to generate a revenue stream are *Asset Sales, Usage Fee, Subscription Fees, Lending/Leasing/Renting, Licensing, Brokerage and Advertising*. For an airline, revenue can be earned either operational or ancillary. Operational revenues are from air transport operations including passenger, tickets, cargo, ground handling etc. Ancillary revenue can be earned by non-technical operations like food, baggage wrapping, seat selection, meals choice, special service request etc.

Airline revenue accounting system is used to manage and control, the entire reporting, use and accounting of airline tickets. Historical Demand and Booking Patterns. Demand Forecast and Displacement Analysis Revenue the panel is the general technique, remembering for profundity investigation and determining, Yield management is the genuine value streamlining part. Income, at its best, is a

practical approach that concentrates each gathering or division inside an organisation on the moves they must make to expand productivity. An organisation that can implant this point of view in its way of life will probably receive the rewards, remembering a more prominent effect for incomes and edges. (Bilotkach, Mueller, and Németh, 2014)

Innovative Marketing and Sales

Advertisers realize that customary showcasing methods are not helpful any longer, and the organizations are encompassing by trend setting innovation. Imaginative systems in showcasing permit advertisers to follow the presentation adjust the methodologies to oblige the clients' needs better.

An advertising procedure includes long haul destinations for an organization, while the business technique is all the more present moment. A marketing strategy involves how a company promotes and distributes the product, but the sales strategy includes how to get the customer to buy a product or service (Yetiskul, Matsushima, and Kobayashi, 2005).

The advertising blend is a vital instrument to help comprehend what the item or administration can offer and how to get ready for a fruitful item advertising. The advertising blend is most ordinarily executed through the 7 P's of showcasing: *Price, Product, Promotion, Place, Physical Evidence, Process and People*. Creative advertising is a lot of imaginative procedures and exercises that showcase and convey new items and administrations to a focused on gathering of purchasers.

Development and promoting are the two words that must comprehend. Advancement in advertising is a movement that includes new thoughts that have a positive effect on another item and administration. Advertising is a procedure that includes advertisers to convey item and administration data to customers.

Passenger Service Perception

The fundamental requisite for an organisation's survival depends heavily on delivering top-notch service to its customers. Hence, it becomes vital for an airline to comprehend what travellers anticipate from its services. Service quality can be characterised as a customer's general impression of the overall effectiveness of the organisational service. Wu and Hayashi (2014) emphasise that passenger satisfaction is central to the practice of consumer sovereignty. (Wu and Hayashi, 2014)

Customer Relationship Management

Customer Relationship Management (CRM) is quickly developing into a vital component for enhancing customer retention and enabling cost reduction and enhanced profit margins. In the airline industry, CRM uses the Frequent Flyer Program and client feedback databases as an information source. Moreover, a comprehensive database with precise and continuous data on customer preferences, grievances and feedback are essential to further build on the customer relationship (A. Graham and Dennis, 2010).

2.6 GAPS IN LITERATURE

It is evident from the literature review that the low-cost carrier (LCC) is widely studied and illustrated in literature mainly from an operational aspect, airline strategy, airline airport relationship, regulatory framework and impacts on LCC business model. Still, they failed to explain the critical success factors of a low-cost carrier, the interrelationship of airline airport, the impact of the regulatory framework on LCC sustainability. As explanation is essential for strategic implementation process at the business model level, there is a need for process study of LCC strategies and their practices at an organisation level. Extensive literature has been found for low-cost carrier's critical success factors, strategic

implementation process, airport airline relationship, and regulatory framework impact on LCC airline business model. It provides a detailed description based on tacit and implicit knowledge available with airline managers at an organisation level. The dynamic operations-oriented industry, like the airline industry in India, found no references to the best of researcher knowledge. (As on 02-05-2019, literature in databases has been found namely EBSCO (Business Source Premier and Business Source Elite+), Emerald, Elsevier's Business Management and Accounting Collection (Science Direct), Blackwell's HSS Collection, IEEE Online, ACM Digital Library. The literature keywords include the words like Low-Cost Carrier, Low-Cost Airline, Airline Business Model, Airline Operations, Airline Strategies, Airline Airport Correlation, Airline Regulatory Framework, LCC Operations, Sustainable LCC Model, and Indian Low-Cost Carrier).

The literature gaps emerged from an extensive review of literature are penned down below: -

- Limited literature is available on the LCC airline strategy implementation process to achieve sustainable Business Model.
- Limited literature is available on the crucial role of the airport on low-cost carrier airline sustainability.
- Limited literature is available on the Indian regulatory framework impact on LCC sustainability.
- Scanty literature is available on airline multiple strategies and its linkages to achieve a sustainable business model.
- Scanty literature is available on critical success factors of the low-cost carrier in the Indian context.

2.7 CONCLUDING REMARKS

As the first step in the literature review, a detailed literature survey was carried out related to critical success factors of a low-cost carrier. Then, literature was analysed and categorised based on key themes such as, i.e. *LCC airline strategic planning and implementation, airline airport relationship, regulatory framework impacts on airlines sustainability, LCC strategies linkage with the business model and critical success factors.*

Detailed literature on various sub-constructs has also identified from the literature and presented in this chapter. Finally, literature gaps are arrived from this detailed literature review and presented. Next section discusses the research design and research methodology adopted for this research..

CHAPTER 3

RESEARCH METHODOLOGY AND DESIGN

3.1 INTRODUCTION

This section focusses on the research method and design adopted for carrying out academic research. The design of research depicts the association between empirical facts, used to scrutinize the initial topic of research coherently and its concluding outcomes (Yin, 2003). It specifically deals with the research plan, strategy, data collection techniques, and data analysis approach. Section 3.2 deals with the focus and objectives of the research, research questions, and its nature. Section 3.3 describes the overall approach and rationale for the selection of case study methods.

Furthermore, it describes some specific methods used for conducting this study and its relevance to society. Section 3.4 discusses the design aspects of the case study such as the number and selection of cases, the structure of case study design, and sampling. Section 3.5 explains the data collection methods employed in this study. Section 3.6 describes the data analysis methods using grounded theory (Charmaz, 2006), within-case analysis (Tsang, 1997), and cross-case analysis (Miles and Huberman, 1994). Section 3.7 elucidates the empirical research in terms of internal, external, and construct validity, and reliability (Yin, 2003). Finally, section 3.8 deliberates the use of Case Study Protocol (CSP) during data collection and presents the complete protocol document used in this present investigation

3.2 RESEARCH QUESTIONS AND RESEARCH OBJECTIVES

3.2.1 Research Focus

The focus of research is to understand and describe the critical success factors of the low-cost carriers (LCC) along with airline strategies formulations, planning and execution at the organizational level in the Indian context. It is also to understand the strategy formulation process and how such articulated strategies have been adopted in the airline business model. In addition, the study focusses on the role of airport-airline relationship in boosting airline sustainability along with regulatory framework impact on the same low cost carrier success factors and airline strategies related processes namely *formulation, selection, and implementation of strategy* at the organizational level in the Indian context.

The published literature review entails various studies on LCC covering different aspects of strategies namely expansion, marketing, operational, airline within an airline, and so on. Issues such as carrier growth, networking policy, dynamic tariff policy, Internationalization plan, amalgam business model, assessing itinerary, and so on have been broadly canvassed in the literature. In the availability of LCC, full-service airlines prioritize to implement an increasingly forceful high-low tariff approach (Mantin and Koo, 2009). Literature additionally features that vertical and horizontal diversity is a fragment of carrier growth policy however the outcome expansion is not a cooperative approach (Barbot et al., 2008).

The carrier size, amalgamation of the airline's business model, and carrier networking engrossment influence the probability of code sharing policy (Morandi et al., 2015). Specific air terminal use is an essential methodology for a carrier as it is exceptionally associated with financially savvy system structuring, profit-making, attending increased travelers to uphold and growth of the carrier in the focused marketplace. (Chang and Lee, 2010). Additionally, carrier lucrativeness is a component of the route selection activity of an airline primarily attributed due to the stretched or small drag, and highly concentrated

marketplaces (Oliveira et al., 2010). Time-specific and tacit tariff segregation is a significant methodology for the LCCs (Alderighi et al., 2012). It is apparent from the literature that the organization related strategies are broadly covered but they have failed to explain the strategic implementation process for low cost carriers i.e. How LCC airlines formulate and implement various strategies to achieve sustainable business models (Yadav and Dhingra, 2018).

Moreover, no references have been found after an extensive literature search on *LCC critical success factors and strategy implementation study* using a qualitative research approach at an organizational level. As on 08-12-2019, the literature has been found in a few databases like Elsevier's Business Management and Accounting Collection (Science Direct), IEEE Online, EBSCO (Business Source Premier and Business Source Elite+), ACM Digital Library Emerald. The keywords used in the literature search are Low Cost Carrier, Low Cost Airline, Airline Business Model, Airline Operations, Airline Strategies, Airline Airport Correlation, Airline Regulatory Framework, LCC Operations, Sustainable LCC Model, and Indian Low Cost Carrier.

Therefore, the focus of this study is to understand and describe the critical success factors of LCC along with airline strategies formulations, planning, and execution at an organization level i.e. low-cost carrier in an Indian context. It is also to understand the strategy formulation process and how such articulated strategies have been adopted in the airline business model. Also, the focus of the study is to understand the role of airport airline relationship in boosting airline sustainability along with regulatory framework impact on the same. For this study, case study methodology has been chosen as it attempts to enlighten a choice or couple of choices: nomination, applied, and with what outcome (Yin, 2003).

At an organizational level in airline functioning, the silent and specific facts in the area of LCC business model sustainability are accessible with airline administrators and professionals employed in the airline industry. It is required to

acquire a thorough awareness of these facts in the sustainability of the LCC business model in the Indian context along with the formulation and practices of several airline strategies at the organizational level. Consequently, a qualitative study is an appropriate methodology in apprehending and salvaging silent and specific facts of best practices in the LCC business model sustainability. To carry out this research on airline strategic management related processes at the organizational level in an Indian context, prominent Indian LCC carriers have been chosen. The choice of the enterprise and trade verticals have been broadly deliberated later in chapter under 3.4.

3.2.2 Problem Statement

The existing literature covers various LCC business models and strategies, but the critical success factors and process of the LCC business model which includes strategy formulation and implementation at an organizational level has not been described.

3.2.3 Research Questions (RQ)

How the LCC is designing and implementing its multi-level plans to safeguard a sustainable airline business model? This question is exploratory, and it seeks to explore and find out the existing strategies and practices of an Indian LCC airline and the formulation of these strategies by airline managers across all levels. From the leading research query, one can derive a further investigative and imaginative subquery of the “what” category (Yin, 1994).

Additional RQ2: - What is the role of airports in LCC sustainability? This query emphasis not only on investigating and depicting the responsibility of airport in LCC operations but also seeks to understand a more causal pattern of impacts

(Airport Infrastructure, Airport role in operating cost of LCC, airline airport financial partnership) on LCC airline sustainability in the Indian context.

Additional RQ3: What is the impact of the aviation regulatory framework /structure of India in low cost carrier (LCC) sustainability? This question is exploratory and descriptive. It seeks to develop an understanding of casual relationships amongst regulatory framework aspects like civil aviation policy, traffic rights, operational requirements impact on LCC airline sustainability in the Indian market.

Additional RQ 4: What are the common and different low-cost strategies of low-cost airlines and how it is linked with the business model? This question is definitional and exploratory in nature. It seeks to find out the similarities and dissimilarities among the various low-cost strategies and practices being used in the business models. Further, it is to understand the linkage of various strategies at the business model level.

Additional RQ 5: What are the critical success factors of the LCC business model to sustain in the Indian context? This question is exploratory and descriptive seeking to know the critical success factors of the LCC business model to sustain in the Indian market. Thus, explaining the must –to- have essentials of LCC airline to have a sustainable business model in the dynamic and thin margined Indian airline industry.

3.2.4 Objectives of the Research Study

The objectives of the study have been listed as follows:

- 1) To identify the critical success factors of LCC business model to sustain in the Indian context
- 2) To understand strategy formulation and Strategy implementation process of LCC business.

- 3) To study the role of an airport in low cost airline sustainability.
- 4) To understand the impact of Indian aviation regulatory framework of India in low cost carrier sustainability.
- 5) To describe the common and different low-cost strategies of LCC and its linkage with the business model.

3.3 OVERALL APPROACH AND RATIONALE

The research problem is defined and explored through a systematic study (Maxwell, 1996). Research questions and designs are prepared to know the problem methodically in the study. Also, the existing theory related to the problem statement is studied and unified by means of the theory development approach. On the basis of existing theory, “theoretical objective” is prepared to explore the problem.

Based on the theoretical objective framework and research questions, empirical based research design with data analysis approaches are established. Then, the researcher starts data collection as per the defined design methodology.

The data is analyzed using a theoretical objective framework and the outcomes of data analysis are the outcomes of the research study. These outcomes may prompt existing hypothesis expansion and comprehend the specific suggestions to the problem. This general research configuration is shown in Figure 3.1.

Further, extensive literature is available in the area of low-cost carrier business model; but, there is a lack in a study on how the airline managers are ensuring the success of LCC by effective use of strategies in planning and execution at an organizational level in an Indian context. Though the literature on low cost carrier is widely studied and illustrated mainly from operational aspect, airline strategy, airline airport relationship, regulatory framework and impacts on LCC business model,

hypothesis and empirical data. The decision is attained through a methodical practice (Gummesson, 2000; Bell and Bryman, 2007).

The inductive methodology depends upon empirical facts. The methodology's first step is data collection. On the basis of the collected data, the researcher cultivates an idea that is used to formulate the hypotheses. The distinction among the inductive and deductive methodologies is that the deductive methodology examines the current hypothesis whereas the inductive methodology creates a novel hypothesis (Gummesson, 2000).

The inductive methodology has been employed in this work. Empirical facts have been collected from airline executives and managers of low-cost carriers (IndiGo and SpiceJet Airlines) through a semi-structured interview regarding their critical success factors and strategic management process. Atlas Ti software is used for coding and QAN diagram purpose.

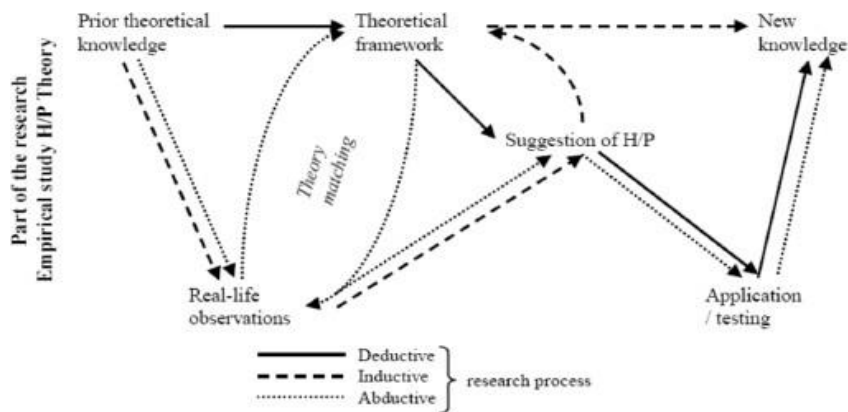


Figure 3.2: Research Methodologies (Spens and Kovács, 2006)

The steps in abductive methodology are the formulation of hypothesis using inductive methodology, explanation of hypothesis, testing of novel hypothesis using case study. Such type of work needs experience; hence, this methodology cannot be applied in a broad outline (Saunders et al., 2007). The abductive methodology is not employed here since a novel hypothesis formulation is not the objective of this research.

Table 3.1: Qualitative Research Method - Features

<i>RESEARCH METHODS</i>	<i>FEATURES</i>
<i>Qualitative - Research</i>	<ul style="list-style-type: none"> ➤ <i>Realistic – Exists in natural world</i> ➤ <i>Usages several techniques that are communicating & liberal</i> ➤ <i>Promising instead of strongly anticipated</i> ➤ <i>Is profoundly informative</i> ➤ <i>Sees the public as complete or unified</i> ➤ <i>Involve in methodical likeness on his/her individual character in the research</i> ➤ <i>Is subtle to his/her individual profile and how does it outline the research</i> ➤ <i>Usages multifaceted perceptive - multidimensional & iterative</i>

(Source: Rossman and Rallis, 1998)

Research methodology (Qualitative) has been chosen for this study for subsequent motives based on the table as conduct. Primary, the type of research question recommends a qualitative methodology. It includes a greater amount of "how" and "what" kinds in lieu of "what number of" or "how much" or "why" kinds. Secondary, the goal is to introduce a definite comprehension of critical success factors and strategic management practices at an organization level (Prominent LCC of India), which need an emphasis on airline administrators/senior official’s viewpoint and their significance, for example, silent and inherent learning accessible with the administrators.

Deprived of any involvement, thorough learning of such procedures is hard to comprehend and portray. Hence, semi-organized meetings and auxiliary statistics have been utilized for data accumulation. Contestant perception has also been utilized as a supplementary method for data accumulation in the present work. This encourages a scholar to comprehend the silent and inherent features of carrier policy formulation and apply them to the current firm. Thirdly, the carrier

policy formulation and execution parts of this research needs should be contemplated in normal settings, instead of in skillful investigational settings.

3.3.5 Research Strategy– Case Study

Due to the availability of various qualitative research methods, it is easy for a researcher to choose a specific type of research methodology(Qualitative), which is well suited to his/her research. Examples of the qualitative methodology are activities research, ethnography and case study research, (Ritchie and Lewis, 2003). In view of accompanying settings, every methodology has some pros and cons:

- (a) Nature of Research Question,
- (b) Researcher monitoring over real social activities, and
- (c) Emphasis on the existing event rather than the past one (Yin, 2003).

Case study research usages numerous sources of evidence for data accumulation (Yin, 2003).In an airline functioning at an organization level, the silent and unambiguous information accessible with LCC executives and senior managers required to be captured for comprehending current methodologies in low cost policies design. Consequently, it is required to have a thorough comprehending of this wisdom in the design of low-cost policies and implementations at institutional level. In apprehending and reutilizing such learning of best practices in the area of airline strategic management, qualitative is appropriate methodology.

In this work, a case study methodology was picked up in light of the fact that it is best suited to the necessities of the research and scholar's ability. The case study methodology is favored where “how” or “why” queries are presented, where the scholar has slight command on the actions, and where the emphasis is on existing rather than the old event inside a few actual situations (Yin, 2003).

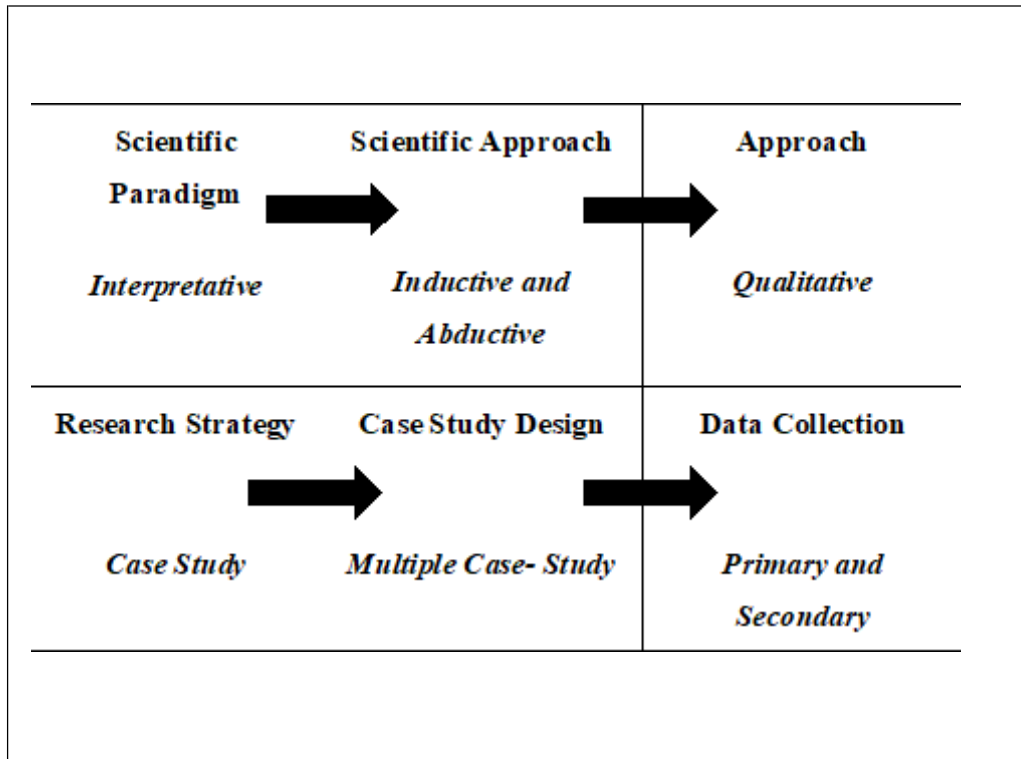


Figure 3.3: Research Design and Methodology (Summary)

Furthermore, the case study methodology permits a scholar to study both the event of awareness and situation, generating many hypothetically significant parameters (Yin, 2003). Thus, this methodology is picked up. Usually, the case study methodology is the best-employed qualitative technique in these types of research (Palvia et al., 2004; Alavi and Carlson, 1992; Orlikowski and Baroudi, 1991; Myers, 1997;).

The objective is to provide a rich description of the processes of strategic planning and execution including airport correlation with LCC airline sustainability and regulatory framework affecting the LCC business model.

For this study, the rationale for choosing case study methodology is fundamental trend among a wide range study to instruct a choice or combination of choices: why they were selected, how they were applied, and with what outcome (Yin, 2003).

3.4 CASE STUDY DESIGN

The development of the case study involves procedure of doing a case study, choosing various cases, assessment, case selection standards, etc. Figure Case study design for this research study is illustrated in Figure 3.4. IndiGo airlines and SpiceJet has been chosen for the study on LCC critical success factors and carrier strategy practices on the basis of market share in the Indian aviation industry. Further, a researcher is having more than 10 years of expertise in the aviation industry domain hence the selection of the LCC airlines helps the researcher to interact with the airline managers and aviation senior executives in-depth and able to participate in the practices at the site.

3.4.1 Number and Type of Cases

Selecting a single or multiple case study development is an vital feature in case study methodology. On the off chance, that the case is to examine the well-detailed hypothesis, or an extraordinary or special case or a brilliant case then the single case study development is an appropriate for the study (Yin, 2003).

Hence, a multiple case study development was picked. At that point, the number of cases that were essential or adequate should have been chosen. In multiple case study development, each case assists an explicit objective inside the general range of research (Yin, 2003). Replication logic is needed for multiple case analyses and further, it enhances the exterior effectiveness of the study (Eisenhardt, 1989; Yin, 2003). IndiGo Airline and SpiceJet have been chosen for the study by analyzing the market share and profiles. These are the top two airlines in the domestic market. In March 2018, IndiGo has achieved the “Benchmark” status while SpiceJet is scaling up its position. In a very short span of months, SpiceJet has emerged as a pure low-cost airline and competing with IndiGo which is only profitable LCC in the Indian market.

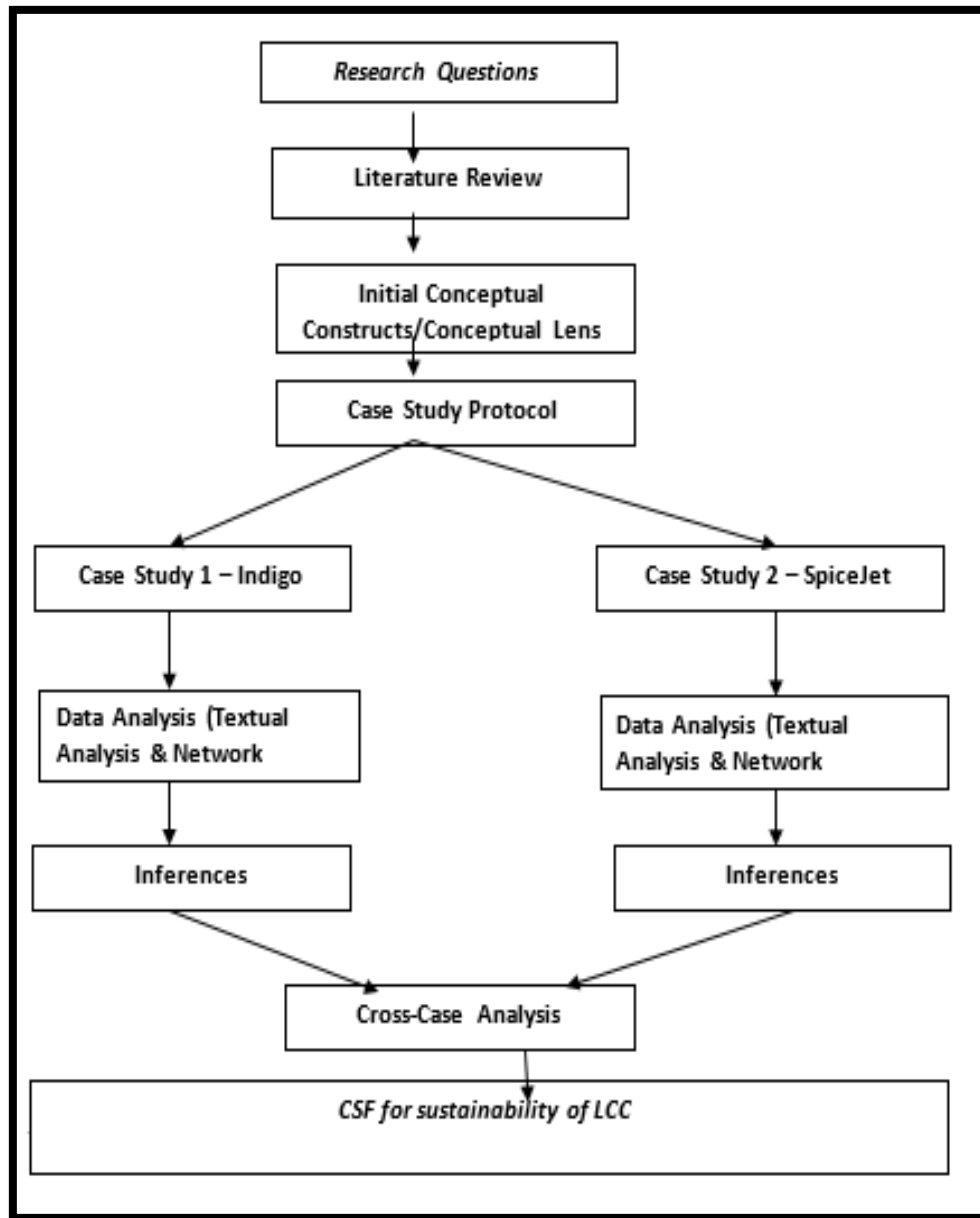
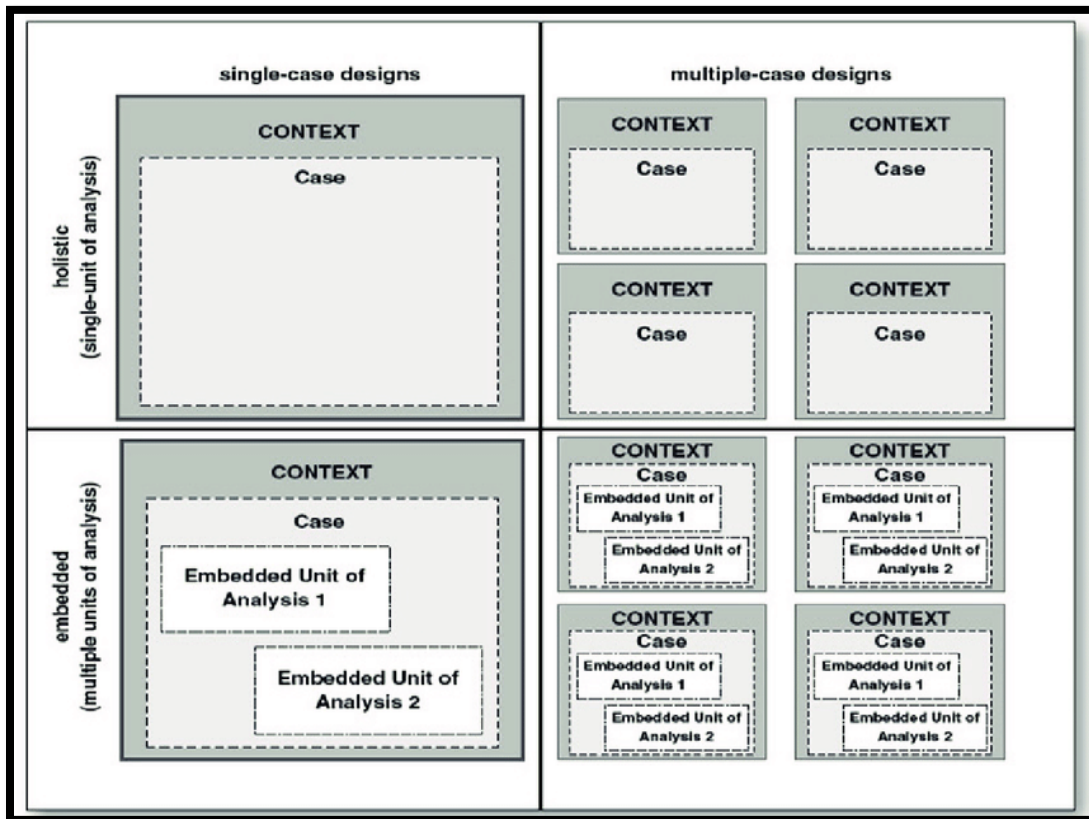


Figure 3.4: The development of the Case Study Methodology

The multi-case plan has been taken into account due to the proof from several cases, which are more convincing, and therefore the complete research is viewed as progressively strong.



Source: Yin (2003); COSMOS Corporation

Figure 3.5: Basics Types of Designs for Case Studies

Therefore, two cases i.e. SpiceJet and IndiGo airlines have been selected with the end goal of correlation of discoveries from different cases. The determination of case studies ought to pursue a "replication" rationale. Replication logic aims to show or predict similar results and explain conflicting results by giving anticipated reasons. Replication rationale expects to appear or foresee identical outcomes and clarify conflicting results by providing intended explanations. (Yin, 2003). Consequently, a multi-case holistic plan (Type 3; Yin 2003) of case study methodology has been chosen for this study.

The multi-case design has been taken into account due to the proof from several cases, which are more convincing, and therefore the complete research is viewed

as progressively strong (Yin, 2003). Different types of case study designs proposed by Yin (2003) is illustrated in Figure 3.5.

3.4.2 Selection of Cases

IndiGo Airline and SpiceJet have been chosen for the study by analyzing the market share and profiles. These are the top two airlines in the domestic market. In March 2018, IndiGo has achieved the “Benchmark” status while SpiceJet is scaling up its position. In a very short span of months, SpiceJet has emerged as a pure low cost airline and competing with IndiGo which is only profitable LCC in the Indian market. Hence, the top two aviation giants in the Indian aviation sector has been picked up for evaluating the critical success factors of LCC in the Indian framework.

3.4.3 The Framework of Case Study Design

The framework of the case study design is discussed as follows: -

Case 1: Business model, Strategy, Process and Practices of LCC in India;

Unit of Investigation: **IndiGo Airlines**

Case 2: Business model, Strategy, Process and Practices of LCC in India;

Unit of Investigation: **SpiceJet Airline**

Degree of investigation for both case studies (Case 1 and Case 2)

1. The level of Analysis (IndiGo and SpiceJet Airlines)
2. The unit of Analysis (Revenue, Operations, Sales and Marketing, Planning and Scheduling)
3. Individual Level (Managers / Senior Executives)

Two within cases have been finished independently and afterward, Cross-Case investigation of the business model, regulatory framework and lcc critical success factors are directed. Three levels are selected to cover employee levels that exist in the company i.e., Junior-level management (individual); middle-level management (unit level/department level); senior-level management (corporate

level). An ordinary but diverse planned traineeship applicable to the study is acknowledged for the aforesaid airlines in India. The process framework of business model, plan and conducts is created in light of the investigation of the aforesaid cases.

3.4.4 Sampling

The theoretical sampling methodology has been utilized for this work. For data sampling, the staff and headquarters of IndiGo and SpiceJet airlines have been considered. The head offices and senior executives (experts) were acknowledged by means of the record accessible with the enterprise on their intranet/website. Airline administrators were questioned dependent on their accessibility either at the site area or outdoor.

The name and contact detail of avionics specialists were acquired from individual referencing, systems and Intranet/site. 22 senior executive's/airline managers related to the LCC operations were picked up in light of the unit of examination and level of investigation. At last, interviews were led by 10 aviation experts for both of the case studies.

3.5 DATA COLLECTION METHOD

“Entanglement subtleties indicates that the facts finds significant classifications, extents, and interlinkages which discover sincerely vulnerable queries as opposed to examining theoretically formulated theories” (**Patton, 1990**). According to Patton (1990), the qualitative data is a thorough, abundant narrative, fully investigated, straight quotes apprehending the public's individual viewpoints and understandings. The advantages of the case study methodology have been discussed as follows: -

- (i) The case study methodology delivers methodical congregation, group of data, and all-inclusive data analysis approaches in order to ensure in-depth info about cases
- (ii) It permits interviewees to share their know-hows in their mother-tongue

instead of the scholars. (iii) It comprises a assortment of indication data like reports, documented records, surveys, meetings, perceptions, and physical relics (Eisenhardt, 1989; Yin, 2003). (iv) This method ensures the validity of the research findings by means of assessment of data gathered from various resources.

The experiential study in the research study perform data collection from the different department heads and aviation experts. LCC's data was collected from four sources: member remarks, meetings, casual dialogs, and authentic reports. The remarks were absorbed on the process parameters of the framework, performers, and activities (Pettigrew, 1997). The scholar additionally prepared thorough on-site reports and annotated the dealings occurring amongst the carrier employees at the organization when conceivable. Case Study Protocol (CSP) was used as data collection tool. CSP is an archive that comprises the poll for data accumulation just as the strategies and general standards to be obeyed during the usage of the protocol. Amid the stage of data collection, construct validity was examined utilizing various proof (report investigation) and dependability has been assured by utilizing data protocol (Yin, 2003). The CSP was created in advance of the data accumulation and partial-planned meetings with the airline expert's/operations managers.

Prior to beginning the meeting, interviewee individual was clarified that the content and the meeting information through data collection uses in two different manners:

- (i) To understand and model the airline strategic management process and key critical success factors linkage in business model
- (ii) To use the data as a case publication in thesis & conference papers. All the 3 levels have been mentioned as follows:

1. Interview with Senior Administration (Chief Development Officer /Vice President – Strategy)
2. Interview with Middle Administration (Various heads of the departmental at their units)
3. Interview with Junior Administration (Operations Junior Managers and Executives)

All these interviews took a duration of 40 to 70 minutes. They were documented and completely translated. Composed interview contents additionally appeared to the candidates alongside additional inquiries. Table 3.2 outlines the primary steps in facts accumulation. All these interviews took a duration of 40 to 70 minutes. They were documented and completely translated. Composed interview contents additionally appeared to the experts alongside continuation of inquiries. Table 3.2 outlines primary steps in statistics accumulation for cases.

Table 3.2: Data Collection Steps

Steps in data collection	IndiGo Airline (Case 1)	SpiceJet Airline (Case 2)
<i>Development, Review & final Draft of Case Study Protocol (CSP)</i>	<i>December 2017 – April 2018</i>	
<i>Initial Communications</i>	<i>May- 2018</i>	<i>May- 2018</i>
<i>Data Collection Interviews</i>	<i>June – October; 2018</i>	<i>June – September; 2018</i>
<i>Field visits</i>	<i>October-November; 2018</i>	<i>September-November; 2018</i>
<i>Internal Validity Assurance</i>	<i>November- 2018</i>	<i>November- 2018</i>
<i>Additional Data Collection</i>	<i>December- 2018</i>	<i>December- 2018</i>
<i>Total number of Interviews</i>	<i>06</i>	<i>06</i>

3.6 DATA ANALYSIS STRATEGY

Information is broke down on premise of The researcher's understandings and depiction of procedures is the reason for information examination in this exploration. These translations are abstract dependent on entertainers' encounters in a unique situation. Such a thoughtful methodology is ordered in a changed type of ground hypothesis (Charmaz, 2006; Locke, 2001). The analysis of data is intended to recognize the following: i) the critical success factors of low-cost carrier along with airline strategies formulations, planning and execution at the enterprise level in the Indian context (sustainable LCC). ii) to understand the strategy formulation process and how these strategies are being implemented in the airline business model. Iii) To understand the role of airport airline relationship in boosting airline sustainability along with regulatory framework influences it. Two most significant examination approaches have been received in the information investigation for this investigation. They are inside case examination and cross-case investigation. The inside case examination approach is utilized to comprehend the case freely and recording it completely while, in the cross-case investigation approach, the similarities and dissimilarities over the cases are explored.

The within case investigation approach assists with arranging singular case information for point by point study and furthermore deals with the puzzling measure of information (Eisenhardt, 1989). After fulfillment of individual case information assortment and investigation, scan for cross-case designs is done from subjective information. These examples are, for example, classifications, codes, measurements, and topic/conspire arrangements (Patton, 1990). The underlying calculated builds distinguished for hypothetical targets are the hotspot for classes to investigate inside case similarities and across changes. The investigation of information has been utilizing literary examination and cross-case strategy. The literary investigation has been practiced utilizing a product "Atlas.ti 8" trailed by delineation of systems administration charts. The textual analysis has

been accomplished using a software “Atlas.ti 8” followed by depiction of networking diagrams.

3.6.1 Data Analysis using Grounded Theory

The data analysis utilizing the stranded hypothesis is an iterative method, which involves numerous iterations among meeting data, current hypothesis, and perception data (Charmaz, 2006).

The subsequent 3 steps utilized iteratively for accomplishing analysis of data:

1. Open Coding
2. Focused Coding
3. Categorizing outlines of correlation between theoretical groups

Open coding & focused coding helps in examining and comprehending concept of LCC critical success factors and airline strategies by creating codes, classifications, ideas of methodologies and conducts on being obeyed in the airline. The third step aides in recognizing the elements assisting in the choice of methodologies and their effect on the carrier business model. Subtleties of these happenings have been discussed as follows:

Step I: Open coding

Initially, the input data will be chosen, classified, and consolidated to comprehend primary theories to identify their details. Open coding illustrated at the point where researcher recognizes the probable topics by drawing together real-life instances from the content. Ryan and Bernard (2000) infer the fact that experiential data can be used for generating codes . Novel codes are made as instance questions and topics are develops from empirical data. Open coding is utilized to examine a novel event, and the attention of the study is based on hypothetical classes from exact proof (Strauss 1990 ; Charmaz, 2006 ;Corbin, 1990). *Figure 3.6* outlines based on the testimony from an interview. In the sample statement, the words ‘revenue per passenger’ outline the operative recital index.

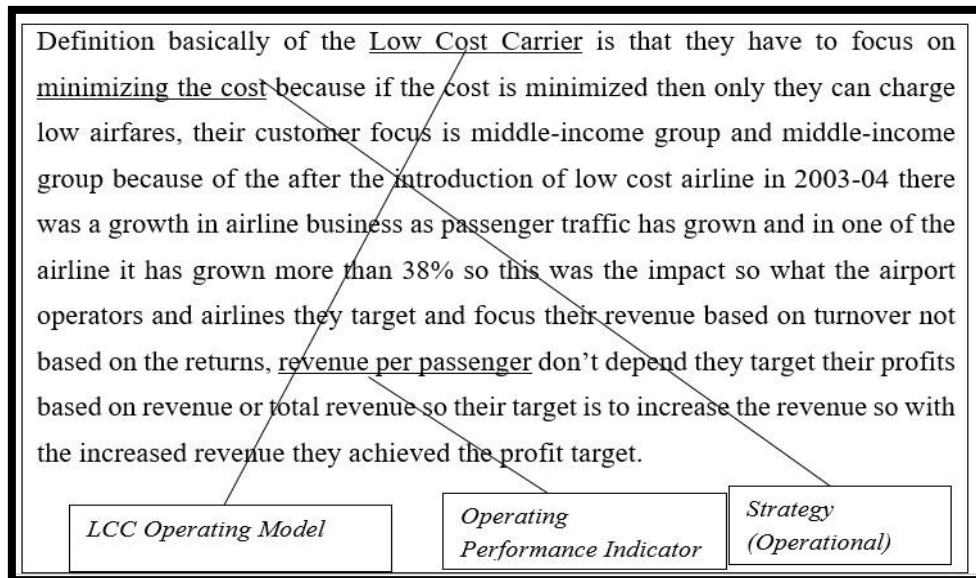


Figure 3.6: Examples of Codes

The interview text's coding has been done through Atlas. ti 8 for simplification for the analysis work by assisting with coding, connecting codes with text sections, making notices, finding, altering, and revamping for a pictorial showcase of data and outcomes (Miles and Huberman, 1994; Creswell, 2007; Weitzman, 2000;).

Step II: Focused / Selective coding

(Strauss and Corbin, 1990) defines identical codes and codes with several general characteristics were consolidated to make theoretical groups and concepts from the empirical dat. Codes were assembled into categories utilizing a bottom-up methodology as depicted in Figure 3.7. Codes demonstrating one,2,3,four were found by means of Vivo coding. They were merged into wide-ranging categories. These categories, categorized themes, fundamental elements of analysis in study is as per data conceptualization. Initial conceptual constructs. have been recognized regarding LCCs from the hypothesis which aids like a foundation of categorizing concepts.

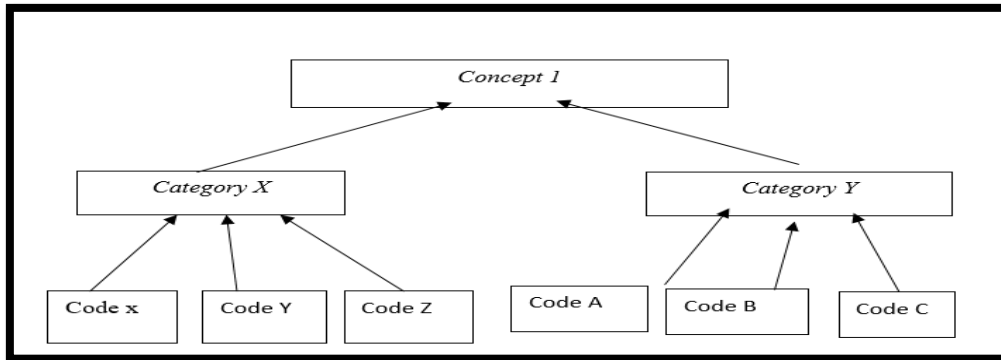


Figure 3.7: Codes, Category and Concepts

Testimonies demonstrating these preliminary concept hypotheses were initially coded and each category was related Initial conceptual constructs' category.

A category can't linked with the ICC, which is known as a new grouping (a novel notion arisen). Figure 3.8 illustrates this categorization and linkage broadly. Marking of all interview data carried out using open & focused coding method as explained above.

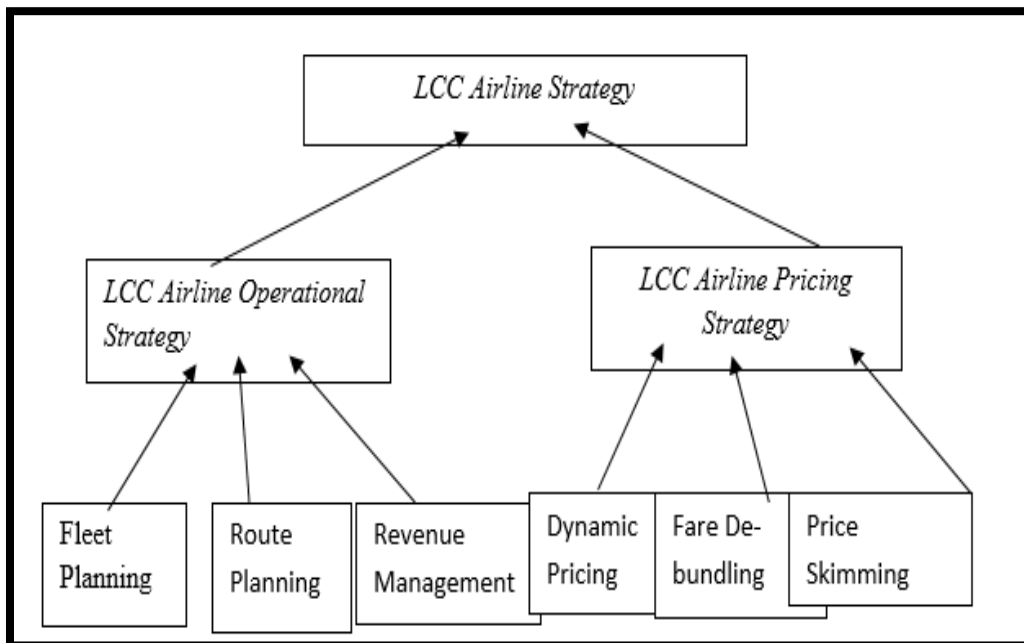


Figure 3.8: Relationship amongst Codes, Categories and Concepts

Step III: Identify patterns of relationship amongst conceptual categories

In it, an attempt is done to recognize the fundamental connection among the categories, concepts and codes. The connection recognized, here, are random ('is the amount of', 'is linked with') and participative type. As referenced by the interviewees, Low Cost Strategy was recognized by making suitable codes through Atlas Ti. Random connection was recognized from the analysis of interview testimonies as shown in figure 3.7.

3.6.2 Within Case Data Analysis

Within-case data analysis is carried out on How the LCC is preparing and implementing its multi-level policies to safeguard the sustainable airline business model? What is the significance of airports in LCC sustainability?

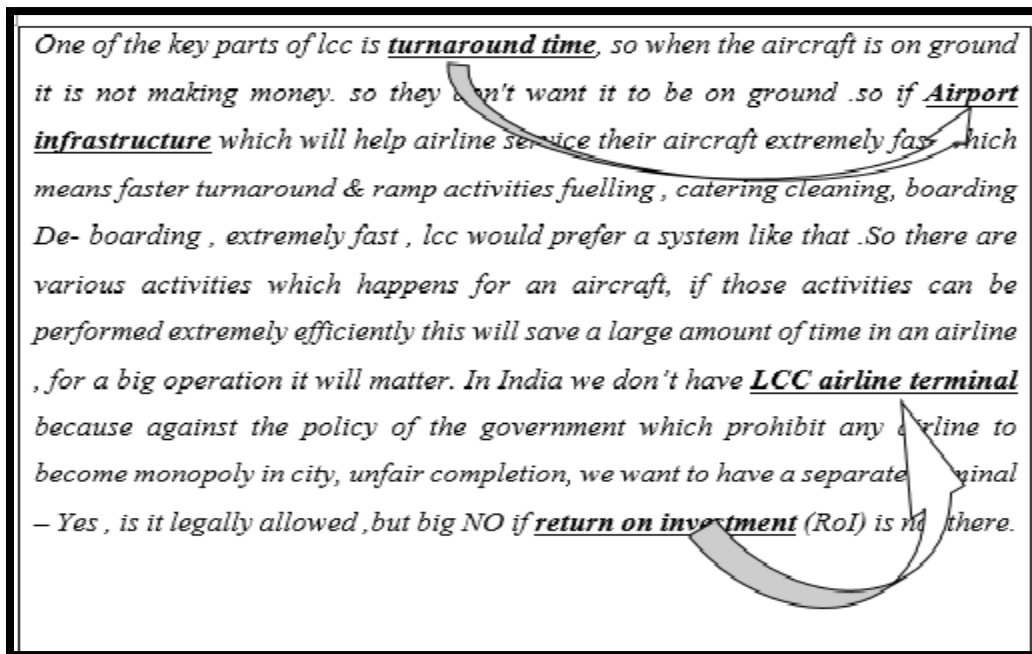


Figure 3.9: Casual relationship identified from interview statements

What is the impact of the aviation regulatory framework /structure of India in low cost carrier (LCC) sustainability? What are the common and different low-cost strategies of low-cost airlines and how it is linked with the business model?

What are the critical success factors of the LCC business model to sustain in the Indian context?

This approach leads to the recognition of various aspects affecting the airline's low-cost policies and actions. These aspects build the foundation for policy preference and implementation in the prominent low-cost airline in India.

Further, airport airline connection and regulatory framework impact on LCC sustainability are also acknowledged. Then, the connection amid the recognized aspects is examined thoroughly. Figure 3.9 depicts the stages inside the case analysis.

The analysis of data has been carried out at conceptual and detailed level. The conceptual analysis outcomes are of a graphic type. Such outcomes explain about the type of policy design, preference, and execution in LCC. Detailed analysis outcomes are perspective type (Tsang, 1997). Therefore, it describes the connection between the aspects affecting the strategic management and sustainability of LCC. Two-level data analysis is performed as per theory of triangulation (Patton, 1990).

Stage 1 - Recognition of aspects affecting to low cost airline strategic management and sustainability of the LCC business model.

This stage perceives the angles influencing the LCC strategy planning that is being actualized LCC in India. As depicted in the past area, open coding and centered coding are used to perceive ideas and classifications from the gathered information.

The codes explaining about the strategies and execution are discovered from the experiential information during the open coding. At that point, these codes are consolidated into more extensive classifications. Further, the classes recognized are classified into ideas. This stage yielded the subtleties of numerous viewpoints impacting the basic achievement factors, strategy inclination, and usage of the

aircraft. The classifications and ideas perceived here are utilized in the resulting two stages.

Phase 2 -Recognition of airline policies selection processes for a particular process.

Here, open coding and centered coding are used to perceive the aircraft minimal effort approaches choice procedures for a specific procedure. The codes clarifying exercises for overseeing aircraft strategy choice are discovered from the test measurements in the midst of open coding. These codes are consolidated into classes. At that point these classifications are additionally ordered into ideas. The associations between the perceived viewpoints are described in Atlas-Ti programming bundle along through "is related with" affiliations.

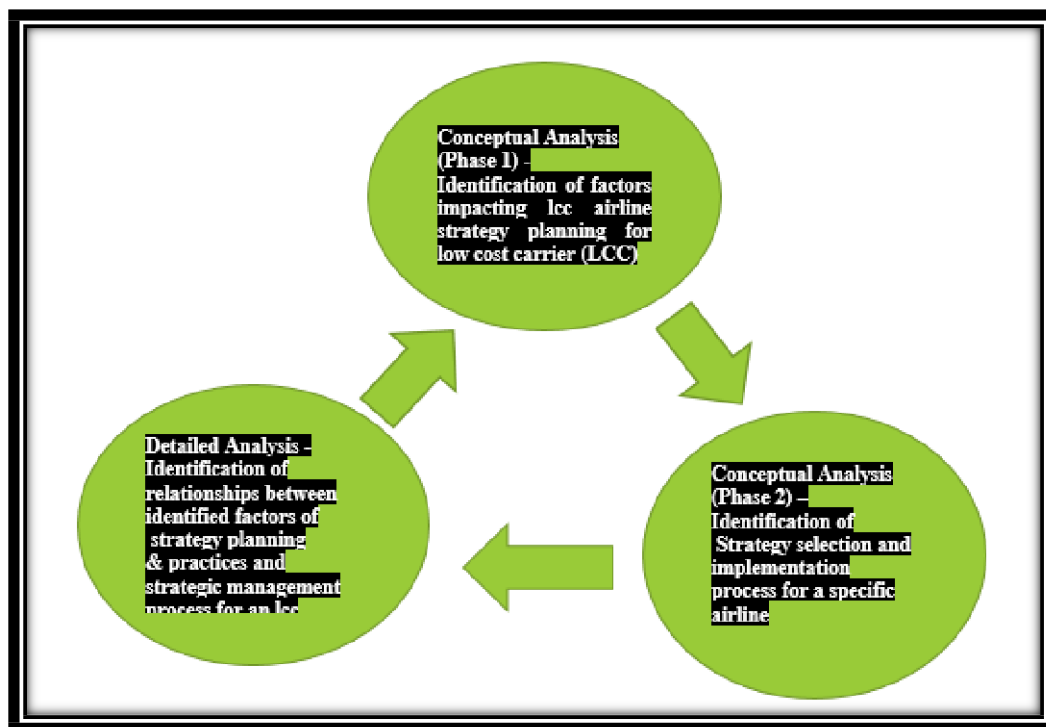


Figure 3.10: Within-Case Analysis : Phases

Phase 3 - Connections between the aspects recognized in phase 1 and LCC policy selection processes recognized in phase 2. A thorough analysis of the interview

data is carried out to recognize the basic designs between these aspects. Each phase results are compared with present hypothesis to find novel emerging concepts. This process is continuous until the discovery of a fresh concept and category. The outcomes of the within-case analysis are accessible through “Qualitative Associative Networks”. Associative networks have nodes connected to one another by connotation. These networks set aside for fuzzy, natural, and intuitive connection among concepts, which are to be accessible diagrammatically. The participative networks are exhibited by means of arrows & boxes where the cases are comprising the concepts.

The arrows shows the connection between the concepts. The arrows can be in one direction or two-way. Connections comprise causality, affiliation, selections, and time (Ryan and Bernard, 2000). The QAN of IndiGo Airlines and SpiceJet are discussed in detail in chapters 4 and 5.

3.6.3 Cross-Data Analysis

Replication rationale is utilized for cross-information examination. This investigation is to analyze and clarify likenesses, dissimilarities and, complimentary discoveries in the investigation of LCC methodologies and practices of the conspicuous ease aircrafts in India. Case correlation should be possible by posting likenesses and contrasts between the cases. Such a case evaluation incorporates the relative results and fitting perspectives across cases (Eisenhardt, 1989).

Cross-case investigation results are shown as a substance logical synopsis table. Such an explanatory table accentuation content fundamentally. It doesn't allude to which case it begins from (Miles and Huberman, 1994). In this examination, a substance systematic outline is introduced through subjective acquainted systems. The discoveries across cases are incorporated through these system outlines. The cross-case examination is talked about in detail in Chapter 6.

3.7 QUALITY OF EMPIRICAL RESEARCH

3.7.1 Construct Validity

**Table 3.3: Data Evidences for Data Triangulation of Case Study 1 and 2
(INDIGO & SPICEJET)**

CONCEPT	CATEGORIES	EVIDENCE TYPE	DETAILS OF EVIDENCES
Strategy Planning and Implementation	<i>Strategic Review</i>	Interviews; Documents; Informal Discussion Participant's Observations Company's Intranet;	Audio records and field notes of interviews; airline's policy available on the intranet; LCC airline policy document; field notes
	<i>Business Environment Scanning</i>	Interviews; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; airline data is available on intranet regarding internal and external scanning; policy document; field notes
	<i>Levels of Strategies</i>	Interviews; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; company's corporate and business policy available on intranet regarding corporate, business and functional; policy document; field notes.
	<i>Strategy Formulation</i>	Interviews; Company's Intranet; Documents; Informal	Audio records and field notes of interviews; airline reports available on intranet regarding strategy formulation; LCC airline policy document; field notes, etc.

		Discussion	
	<i>Strategy Implementation</i>	Interviews; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; airline reports on strategy implementation available on the intranet; LCC airline policy document; field notes, etc.
	<i>Strategy Monitoring</i>	Interviews; Company's Intranet; Documents; Informal Discussion Participant's Observations	Audio records and field notes of interviews; airlines report available on the intranet; LCC airline policy and strategy document; field notes, etc.
	<i>Strategy Renewal</i>	Interviews; Company's Intranet; Documents; Informal Discussion Participant's Observations	Audio records and field notes of interviews; airlines report available on the intranet; LCC airline policy document; field notes, etc.
Airline Airport Relationship	<i>Airport Infrastructure</i>	Interviews; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; airlines report, airport reports available on intranet; LCC airline policy document; field notes etc.
	<i>Airport Operational Efficiency</i>	Interviews; Company's Intranet;	Audio records and field notes of interviews; airlines report available on intranet regarding passengers, air

		Documents; Informal Discussion	traffic, aircraft movements, load factors, market shares; LCC airline policy document; field notes etc.
	<i>Airline Airport Financial Partnership</i>	Interviews; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; airlines reports available on intranet; LCC airline policy document regarding financial data, financial reports; field notes etc.
	<i>Airline Operating Cost</i>	Interviews; Company's Intranet; Documents; Informal Discussion Participant's Observations	Audio records and field notes of interviews; airlines reports regarding operating cost, fuel costs, operating agreements available on the intranet; LCC airline operational documents; field notes, etc.
	<i>Government Challenges</i>	Interviews; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; airlines report available on intranet; government documents, LCC airline policy document; field notes etc.
Regulatory Framework	<i>Civil Aviation Policy</i>	Interviews ; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; aviation reports and government publications, airlines report available on intranet; LCC airline policy document; field notes etc.
	<i>Regional Connectivity</i>	Informal Discussion	Audio records and field notes of interviews; Ministry publications/notifications, aviation consultancy reports

		Interviews; Company's Intranet; Documents; Participant's Observations	airlines report available on intranet; LCC airline policy document; field notes etc.
	<i>Bilateral Agreements</i>	Informal Discussion Interviews; Company's Intranet; Documents;	Audio records and field notes of interviews; MoU documents, airlines report available on intranet regarding partnership and traffic rights, published news; LCC airline policy document; field notes, etc.
	<i>Regulatory Compliance</i>	Interviews; Company's Intranet; Documents; Informal Discussion Participant's Observations	Audio records and field notes of interviews; airlines report available on intranet regarding regulatory requirements; LCC airline policy and operations document; field notes etc.
Airline Strategies and Linkage with Business Model	<i>Airline Partners</i>	Interviews;	Audio records and field notes of interviews; airlines report available on intranet regarding partnership and suppliers' details; stakeholder's reports, LCC airline policy document; field notes, etc.
	<i>Airline Key Activities</i>	Company's Intranet;	Audio records and field notes of interviews; airlines report available on intranet regarding key operations and activities, routes, networks, LCC airline policy document; field notes, etc.
	<i>Airline resources</i>	Interviews;	Audio records and field

		Company's Intranet; Documents; Informal Discussion Participant's Observations	notes of interviews; airlines report available on intranet regarding fleets, assets, equipment, networks, employees; LCC airline policy document; field notes, etc.
	<i>Value Proposition</i>	Interviews; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; airlines report available on intranet regarding value propositions, on time performance reports; LCC airline policy document; field notes, etc.
	<i>Customer Relationship Management</i>	Interviews; Company's Intranet; Documents; Informal Discussion Participant's Observations	Audio records and field notes of interviews; airlines report available on intranet regarding customer feedback, review and service quality; LCC airline policy document; field notes, etc.
	<i>Airline Channels</i>	Interviews; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; airlines reports available on intranet regarding distribution channels, sales channels, production, etc. LCC airline policy document; field notes, etc.
	<i>Passenger Segmentations</i>	Interviews; Company's Intranet; Documents;	Audio records and field notes of interviews; airlines report available on intranet regarding passenger segments, business, first-

		Informal Discussion Participant's Observations	class and economic class pax; LCC airline policy document; field notes, etc.
	<i>Airline Cost structure</i>	Interviews; Company's Intranet; Documents; Informal Discussion Participant's Observations	Audio records and field notes of interviews; airlines report available on intranet regarding operating cost, airports usages, fuel costs, aviation analysis distribution costs, financial data and reports, balance sheet, LCC airline policy document; field notes, etc.
	<i>Airline Revenue Stream</i>	Interviews; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; airlines report available on intranet regarding revenue streams, official reports, LCC airline policy document; field notes, etc.
Critical Success Factors	<i>Cost Leadership</i>	Interviews; Company's Intranet; Documents; Informal Discussion Participant's Observations	Audio records and field notes of interviews; airlines report available on intranet regarding leadership; LCC airline policy document; field notes, etc.
	<i>Innovative Sales and Marketing</i>	Interviews; Company's Intranet; Documents; Informal Discussion Participant's	Audio records and field notes of interviews; marketing promotions, flyers, fare circulars, airlines report available on the intranet; LCC airline policy document; field notes, etc

		Observations	
	Revenue Management	Interviews; Company's Intranet; Documents; Informal Discussion Participant's Observations	Audio records and field notes of interviews; airlines report available on the intranet, balance sheets, yield and load factors, LCC airline policy document; field notes, etc.
	Stakeholder Management	Interviews; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; airlines report available on intranet regarding partnerships, agreements; LCC airline policy document; field notes, etc.
	Skill Competency	Interviews; Company's Intranet; Documents; Informal Discussion Participant's Observations	Audio records and field notes of interviews; airlines report available on intranet regarding recruitments, skill gaps, employee empowerment reports, ministry of civil aviation annual reports ICAO international reports, HR reports and publications; LCC airline policy document; field notes, etc.
	Strategic Decision Making	Interviews; Company's Intranet; Documents; Informal Discussion	Audio records and field notes of interviews; airlines report available on intranet regarding fleet addition, route development, financial allocations, purchasing of aircraft, etc.; LCC airline policy document; field notes, etc.
	Simplicity in	Interviews;	Audio records and field

	<i>Business Model</i>	Company's Intranet; Documents; Informal Discussion	notes of interviews; airlines report available on the intranet
	<i>Government Support</i>	Interviews; Company's Intranet; Documents; Informal Discussion Participant's Observations	Audio records and field notes of interviews; airline reports available on the intranet; LCC airline policy document; field notes, MoCA, Ministry of civil aviation and industry reports. etc.

Determining the precise actions for the notions existence intentional is mentioned to as construct validity (Yin, 2003). This requires that the chosen concepts are evaluated appropriately. Data triangulation explains the complexity in term of validity of study as pieces of evidence are composed as of several bases.

Yin (2003) quotes as “It planned for validating an identical detail or event” and “when you have several resources that however report various aspects”. Collecting proofs from several resources deliver “numerous measures of the identical event” (Yin, 2003) and confirms the “robust corroboration of hypotheses and constructs” (Eisenhardt, 1989).

A technique called triangulation incorporates different resources for gathering significant data such as reports, organization’s site, interviews, intranet, articles, and opinions. The construct validity is further enhanced by delivering several viewpoints in terms of recording opinions of the event. The details of triangulations are furnished in Table 3.3.

3.7.2 Internal Validity

Setting up causal connections among the conditions in order to one lead to another with the best possible separation from the bogus connections is a ramification of Internal Validity (Yin, 2003). There are two kinds of troubles identified with interior legitimacy. Initial, one is building inductions from the contextual analysis i.e., the scientist can't straightforwardly watch the occasion without fail. The subsequent one is false impacts i.e., there might be not many extra productive factors other than the elements perceived in the examination model.

In this examination, a few strategies are utilized to determine the previously mentioned challenges for guaranteeing inward legitimacy. Here, two such techniques are utilized. They are (I) Theory triangulation points of view, utilized on a comparative arrangement of information (Patton, 1990). The information have been broke down with alternate points of view during with on the off chance that investigation like the theoretical and nitty gritty degree of examinations and, (ii) the fundamental challengers were approached to assess and give their comment working on it archives. The comments of the analysts have been consolidated in the last case report. The over two strategies are applied to concentrate on information and procedural understanding which can be portrayed as arbitrary systems among ideas: (cause) brings about one more idea (an impact).

3.7.3 External Validity

Exploration results can be complete by establishing the space of the examination. This can be characterized as External Validity (Yin, 2003). A multi-contextual investigation philosophy assists with fortifying the speculation of the exploration results. As indicated by replication rationale, the structure of multi-contextual investigations and cross-case examination is a significant advance completed in the exploration. This methodology can be dealt with like the utilization of analyses wherein the analyst sums up the hypothesis utilizing one analysis to another (Yin, 2003).

Outside legitimacy can be tended to by methods for replication rationale on the off chance that review relies upon coherent all inclusive statement (Eisenhardt, 1989; Yin, 2003). The contextual investigation isn't an arithmetical speculation like the trial theory testing study. Examination results can be acknowledged significantly after the use of replication rationale once. Different replications are not required to be executed (Yin, 2003).

3.7.4 Reliability

The mistakes and inclinations of the exploration study are the fundamental targets of the unwavering quality test. Exercises during the exploration viz. the activity of information assortment can be dull to deliver an indistinguishable result utilizing an unwavering quality test (Yin, 2003). It implies that if some other researcher actualizes a comparable procedure of information assortment as completed by the previous researcher for the situation study, the researcher will get indistinguishable results and ends..

Confirm stability in implementing the process of data accumulation and analysis, several methodologies have been used in study. Primary, the CSP has been utilized to direct the process of research. The CSP is one of the main methodologies used to increase the trustworthiness of a case study. The CSP escorts the scholar to perform the case study research (Yin, 2003). It comprises interview queries, activities, and common guidelines that should be pursued during interviews. Along with recorded and transcribed data, the filed records have been booked and transliterated for upcoming studies. The CSP has been discussed in detail in the next section.

3.8 CASE STUDY PROTOCOL DEVELOPMENT

This section discusses the use of Case Study Protocol (CSP) and describes the process of developing one for this research. As discussed already, the use of a case study protocol enhances the trustworthiness of the case study and guides the scholar in accomplishing the data accumulation from a particular case study (Yin, 2003)

3.8.1 Process of Developing Case Study Protocol (CSP)

The case study protocol and survey form are used to collect the data from a source, i.e. a particular case study or from a single respondent.

However, the case study protocol differs from the survey questionnaire in a significant way. It is much more than a form or tool and contains the activities and common guidelines to be pursued while using the protocol (Yin, 2003). It is directed at the scholar rather than the subjects of the study and according to Yin (2003), a case study protocol is crucial for the research of a multi-case study.

Based on the conceptual framework and guidelines given by Yin, a case study protocol was developed. The case study protocol is provided in full in the next section. The draft case study protocol was presented to the subject matter experts of low-cost airlines. Further, a presentation was made on the constructs of strategy selection and practices. The feedback from airline experts on these constructs was taken and duly incorporated in the finalization of the case study protocol

3.8.2 CSP FORMAT (CASE STUDY PROTOCOL)

A. Introduction and Protocol Purpose

A1. Background

Although in the existing literature, various LCC business models and policies are identified but the development of the LCC business model, policy formulation and implementation at an organization level to sustain has not been describing in detail. Consequently, the data protocol is designed to examine problem i.e. how LCC is preparing and implementing its multi-level policies to safeguard the sustainable airline business model? What is the role of airports in low cost airline sustainability? What is the impact of the aviation regulatory framework /structure of Indian LCC sustainability? What are the common and different low cost strategies of low cost airlines and how it is linked with the business model? What are the main drivers of the LCC business model to sustain in the Indian context?

A2. Case Study Protocol (CSP) - Purpose

CSP is data gathering tool along with the actions and common guidelines to be followed in applying the protocol. The CSP usages the case study as policy to comprehend the evolution of the LCC business model, policy formulation & implementation at the institutional level in detail.

The additional questions are:

- a. How the low cost carrier (LCC) airline plan and practice its multi-level strategies to ensure sustainable airline business model?
- b. What is the significance of air terminals in the sustainability of LCC?
- c. What is the impact of the aviation regulatory framework /structure of India in low cost carrier (LCC) sustainability?
- d. What are the common and different low-cost strategies of low cost airlines and how it is linked with the business model?
- e. What are the critical success factors of the LCC business model to sustain in the Indian context?

B. Data Collection Procedures

B1. Contact Point & Location Details

In CSP, two case studies have been considered. The first case study is done on IndiGo Airlines and the second one is on SpiceJet. For both case studies, the data gathering of data has been done from the personnel of SpiceJet and IndiGo Airlines (India). The draft catalog of personnel who were communicated for interviews has been created besides their contact and site details. The gathering of data from the

Table 3.4: Data Collection Plan

<i>Descriptions</i>	<i>April 2018</i>	<i>May 2018</i>	<i>June 2018</i>	<i>July 2018</i>	<i>August 2018</i>	<i>Sept. 2018</i>	<i>Oct 2018</i>	<i>Nov 2018</i>
<i>Data Collection for Case Study -1 (IndiGo Airlines)</i>								
<i>Data Collection for Case Study -2 (SpiceJet Airline)</i>								
<i>Site Visit for Case -1</i>								
<i>Site Visit for Case -1</i>								

personnel of SpiceJet and IndiGo Airlines (India) has been accomplished in the year 2018. The data was collected based on informal interviews with all the personnel individually by means of the Case Study Protocol.

B3. Initial Preparations

1. Inform the personnel of the aviation company about the schedule of the interview and acquire his/her consent well in advance.
2. Preparation of interview toolkit namely questionnaire (inquiry form)

C. Case Interview Guide

This guide aligns and flow of the interview as a rule determining the direction i.e. “Critical success factors of LCC business model to sustain in the Indian market”. The significant preliminary conceptual hypotheses distinguished from the

literature survey concerned with this case study is specified in herewith. The hypotheses will be exploited for the purpose of approval amid the interview. Documentary pieces of evidence will be recognized amid the interview and it will be documented.

C1. Description of the Case Study entity:

C1.1 General

1. Firm:
2. Name:
3. Profile:
4. Place:
5. Involvement:
6. Slot:

C1.2. Roles & Responsibilities related to strategic planning and management at the airline.

C2.: Planning and Execution of Airline Strategy

It includes the fundamental research queries, which handle the preparation and implementation of the airline policy and conducts:

C2.1. How the low-cost airline (LCC) is planning and executing its strategy for sustainable operation and business model?

How does the company's policies/objectives influence strategy function in the airline?

What are your organizational core values and mission?

Describe your strategic mission and objectives?

Do you have a specific strategic plan for your airline?

Describe the organization and its roles in strategic planning in your airline?

Do you have a strategy-oriented policy for your airline? If yes, please describe.

What are the factors influence airline strategy planning? How do you manage to prepare strategies for different business verticals?

What is your company core S- W-O-T?

What is the role of company management in selecting a strategy for an airline?

Which different business vertical strategies of the airline such as operations, distributions, ground handling, cargo handling, etc.

How have the strategies influenced the budget in your airline? How do you prepare a budget for Strategy planning and implementation?

How to implement the strategies in your company?

What are the driving forces and challenges in airline strategy practices?

How the monitoring of the execution of strategies manages in your airline?

Do the employee empowerment become important for an airline?

What is the various level of airline strategies?

What are the major challenges in Strategic Implementation for your airline?

How Strategic Leadership plays a pivot role in strategy implementation.

How do you interact with your work teams/supervisors during strategy function?

How do you monitor the execution of strategies on different levels?

How the modifications in strategies being carried out by the strategic teams in your airline?

How has the strategic function influenced by external stakeholders such as key suppliers/contractors?

How market competition influence the strategic planning and management?

How IT is supporting the formulation and implementation of airline strategies?

Will training affect the execution of airline strategies and operational performs?

Any comments on the Renew Strategic Management process wrt your airline.

C2.2. Strategy practiced in the airline to ensure profitable and sustainable business?

Describe various levels and types of strategies and practices at your airline.

How do you ensure profitable and sustainable operations of your airline?

How planning and scheduling has influenced the strategy of your airline?

How you achieve long term, medium term and short-term strategic planning with respect to the airline?

How you arrange the day-to-day strategy function at your airline?

What is the management approach to leverage IT in strategy function in your airline?

C3. Regulatory framework influence on LCC Strategy

How the regulatory framework of a country (INDIA) is crucial in LCC sustainability?

How Traffic rights and regional connectivity is crucial for an LCC?

Does Civil Aviation Policy have some impact on LCC business model?

How Flight restrictions and flying regulations affect the LCC business model?

C4. Airline and Airport Connectivity

How airports can play an important role in airline sustainability?

Has airport operational efficiency impact on LCC operations?

How Airport Infrastructure influence the LCC airline business model?

Has Airline and Airport partnership influences the LCC business model?

C5: Critical Success Factors for LCC sustainability in the Indian market

Comments on LCC critical success factors with respect to the Indian market....

_ Airline Operations

_ Sales and marketing

_ Revenue Management

_ Airline Service Quality

The above interview guide was used for all the levels of employees such as Top management, Middle management and Junior Management in low cost airlines.

3.9 CONCLUDING REMARKS

This chapter presented the research objectives and research questions formulated based on the problem statement for this research study. The overall approach and rationale for this research study are discussed in detail logically by explaining the philosophical assumptions, scientific paradigms, scientific approach, research method, and research study. This study is based on the interpretative paradigm, inductive based qualitative research approach, and multiple case design-case study research strategy. Further, the data collection method is discussed in detail in this chapter. Data collection was accomplished majorly by means of semi-structured interviews using Case study protocol, participant observation, site visits, and collection of documentary evidence. Interview data were transcribed and then analyzed via Atlas- Ti. The details of data analysis strategy such as within-case analysis and cross-case analysis are discussed in detail in this chapter. The methods used to ensure the quality of research are described in detail explaining with the help of four relevant tests such as construct validity, internal validity, external validity and reliability. Last section illustrated the Case Study Protocol in detail. The next chapter describes case study-1 i.e. Critical success factors of low-cost carrier IndiGo Airlines.

CHAPTER 4

LCC BUSINESS MODEL (INDIGO AIRLINES)

INTRODUCTION

This section illustrates in detail the case study – 1 (IndiGo Airlines) data collection and analysis followed by the subsequent sections on LCC critical success factors of IndiGo Airline, LCC airline strategy selection processes in IndiGo, and the association between selection of airline strategy and practices in IndiGo airline of India. Further, section 4.4 describes the detailed discussions on case findings, and section 4.5 illustrates the conclusions of the case-study findings in inference.

4.1 INDIAN LOW-COST AIRLINE – INDIGO AIRLINE

IndiGo Airlines - an LCC of repute is headquartered in the city of Gurgaon, situated in the northern state of India - Haryana. According to the statistics available till June 2018, the LCC carrier is the largest airliner in terms of fleet size and passenger travel, which boasts of over 40% market share of the overall industry.

Moreover, it is the most significant individual Asian LCC regards to fleet size and passenger travel, and the 7th biggest in Asia, exceeding 46 million Pax enplanements in 2017. The established LCC connects sixty six destinations – Fifty one domestic and fifteen internationals with its hub located at Delhi International Airport Limited (DIAL) ,Haryana.

The airline company was a privately-owned business established by Rakesh Gangwal, a USA -based ex-pat and Rahul Bhatia of InterGlobe Enterprises in 2006. The company secured its first 1st aeroplane in July 2006 and commenced its flying in August 2006. By 2012, IndiGo was named as biggest LCC in the Indian market and in November 2015 it chartered the first international flight.

InterGlobe had a 51.12% stake in IndiGo, and 47.88% was held by Gangwal's Virginia-based organization Caelum Investments. IndiGo put in a firm request for 100 Airbus A320-200 aeroplanes in June 2005 with plans to start activities in mid-2006. It started operations on 4th August 2006 - New Delhi to Imphal via Guwahati being the first flight. The airline bought six brand new aircraft in Jan 2007. In December 2010, IndiGo ousted Air India to crown being 3rd biggest carrier in the nation after Kingfisher Airlines and Jet Airways with passenger market share of 17.3%.

In 2011, IndiGo submitted a request for 180 Airbus A320 aeroplane in an arrangement worth US\$15 billion. During January- 2011, in the wake of finishing five years of activities, the carrier got authorization to dispatch worldwide flights. In December 2011, the DGCA communicated reservations that fast development could affect traveller wellbeing.

The following table sets forth key financial data for the periods indicated

Particulars	FY Ended March 31		
	2019	2018	Change
EBITDAR Margin	18.3%	29.0%	-10.7 pts
Net Profit Margin	0.5%	9.7%	-9.2 pts
RASK (Rs.)	3.57	3.64	-2.0%
CASK (Rs.)	3.59	3.15	13.9%
CASK Ex-Fuel (Rs.)	2.11	1.93	9.7%

Figure 4.1.1: Financial Outlook – Indigo Airlines (Annual Report,2019)

In 2011, IndiGo put in a request for 180 Airbus A320 aircraft for nearly 15 billion USD. In February 2012, IndiGo took possession of its 50th aircraft, under six years after it started activities and turned into the second biggest carrier in India.

In January 2013, IndiGo was the second-quickest developing LCC in Asia, only behind Indonesian LCC Lion Air. IndiGo was the second-biggest low-cost airline in the Asian continent with regards to passenger carried and load factor by Mid-2014. In August 2015, IndiGo submitted a request of 250 Airbus A320neo aeroplane worth \$27 billion, making it the most significant single request ever in Airbus history. IndiGo reported (US\$450 million) the first sale of shares through a public offering on 19th October 2015. IndiGo operates 1000+ daily flights with 11 international & 48 domestic routes under its flight menu.

Particulars	FY Ended March 31	
	2019	2018
ASK (in million)	81,028	63,510
RPK (in million)	69,811	55,524
Passenger Load Factor (%)	86.2%	87.4%
Number of Scheduled Passengers Carried (in thousands)	64,743	52,142
Block Hours	853,553	654,040
Number of Scheduled Destinations Served as of period end	68	50
Total Number of Flights	448,904	347,640
Number of Aircraft at period end	217	159*

Figure 4.1.2: Operational Performance Outlook - Indigo Airline

4.1.1 Codeshare Agreements

IndiGo codeshares with the following airlines:

- Turkish Airlines

Fleet developments

During the Paris Show in 2005, IndiGo placed an order for 100 Airbus A320 aircraft with strategic planning to take off operations by mid-2006. The carrier started with first A320 in July having the vision of expanding fleet size to 100 aircraft.

IndiGo was indulged in leasing 20 used aircraft followed by a delay in delivery of the ordered aircraft and lead time. In October 2014, IndiGo stated to invest and expand in terms of its fleet size with further listing 250 A320 NEO aircraft with billions of deal locked. By the end of 2018, Indigo marked itself as the most significant stage length and route depth-oriented airline.

Services

An economy class is USP of IndiGo airlines. To keep the prices low, IndiGo doesn't give complimentary meals/food onboard; however, it offers meal as paid bundled service, on order as part of ancillary revenue. Also, there no IFE (In-Flight Entertainment) installed in aircraft and Hello 6E, the in-flight magazine distributed by IndiGo, is accessible for travellers to peruse. Premium services such as priority check-in, multiple cancellations, pre-assigned seat are offered by the airline to price-insensitive high-end passengers.

Fleet

As of November 2019, IndiGo operates the following aircraft:

Table 4.1: Fleet Size of IndiGo Airline

IndiGo fleet			
Aircraft	In-Service	Orders	Passengers
Airbus A320-200	128	—	180
Airbus A320neo	91	219	180
			186
Airbus A321neo	7	149	222
ATR 72-600	22	36	74
Total	248	394	

Organization Chart (Strategy Planning) – IndiGo Airline:

CHIEF PLANNING OFFICER

/

Director

/

Associate Director

/

Vice President

/

Associate Vice President

/

General Manager

/

Manager

/

Senior Analyst

/

Analyst

4.2 DATA COLLECTION

The data was collected from different sources: (i) Participant opinion at IndiGo headquarter for 1-month (ii) Semi-structured interviews; (iii) Airline Website, Intranet, operation and airline additional documents; and (iv) informal discussions with top airline executives, leaders, strategy officers and managers.

As elucidated in segment 3.5, the information assortment was done at IndiGo office and outside areas. The information assortment stage went on for very nearly eight months. Over a month was spent on starting initial communication and making plans for information gathering (April/May 2018). At that point, four

months were spent in scheduling meetings which were dependent on the accessibility of employees from different levels (June 2018 to November 2018).

Table 4.2: List of Interviewees (IndiGo Airline)

<i>LEVEL OF ANALYSIS</i>	<i>DESIGNATION</i>	<i>INTERVIEW SLOT</i>
<i>Level 1 – Planning</i>	<i>Chief Planning Officer</i>	<i>17th November 2018</i>
<i>Level 2- Regulatory Affairs</i>	<i>Senior Regulatory Expert, Ex AERA Member</i>	<i>9th September 2018</i>
<i>Level 3- Network Planning</i>	<i>Manager (Network Planning)</i>	<i>24th August 2018</i>
<i>Level 1- Airports Relations</i>	<i>Airport Airline Senior Expert</i>	<i>12th October 2018</i>
<i>Level 2- Aviation Business</i>	<i>Senior Aviation Consultant</i>	<i>15th June 2018</i>
<i>Level 3- Strategy Planning</i>	<i>Manager (Strategy Planning)</i>	<i>25th August 2018</i>

Note: The experts' detail is not provided to ensure confidentiality

The details of the participants of the interviews are illuminated in Table 4.2. Recording of the interview was done followed by transcription of the script. Post interpretation of meetings, 1 plus month was spent to gather the interviewees' inputs on draft (December 2018). Contextual investigation report was submitted to the Chief Planning Officer, and his inputs and suggestions were included. Follow-up over the phone was accomplished for explanations and collection of more data.

Within the case, data analysis was undertaken to keep research questions as a focal point based on an interview, i.e. What are the critical success factors for the low-cost carrier in the Indian context? How low-cost carrier /airline is planning and executing its strategies and practices to ensure a sustainable business model.

How is Airport playing a crucial role in LCC sustainability? How is the regulatory framework in India impacting LCC sustainability?

Comparative data analysis and findings are provided in the next section with regards to IndiGo Airline.

4.3 CRITICAL SUCCESS FACTORS FOR LCC AIRLINE – INDIGO

Analysis of data collected from IndiGo Airline was done based on the strategy described earlier. This section illustrates the critical success factor of the low-cost carrier (LCC) in India.

An extensive review of literature highlighted Initial conceptual constructs (ICC) such as LCC strategy Planning and Execution, Regulatory Impact on LCC business model sustainability, Airport Airline Relationship, LCC various strategies and correlation with the business model and LCC critical success factors are presented below.

4.3.1 Airline Strategy Planning and Implementation

Sub-constructs identified by interview data such as Strategic Review, Business Environment Scanning, Level of Strategies, Strategy Formulation, Strategy Implementation, Strategy Monitoring and Strategy Renew. Selected quotations from the interviews are listed below: -

“First of all strategy has to be well defined for an airline depending on how the external market forces are, they will continue to change, in any developing market they will change, so there could be a strategy to safeguard company interest” –

Senior Airport Airline Expert

"Well I think, all airlines have same objectives, to serve the customer in a way that allows it to earn more revenue, depending on where the airline is on the life cycle, you have different objectives. To keep your cost as low as possible, again

the objective of any company is Growth, Profitability and Risk” – Chief Planning Officer (IndiGo Airlines)

“So it's not one, but lots of plans integrate and channelize different plans, then it goes to output. So specific objectives, in terms of fleets, the fleet is decided by my CXO, sitting in Dubai. We then our role comes down, the aircraft is there then what to do with it, Yes, there is a very straight forward line or guidelines that say 1 2 3 do these checks, then put into operations”- Manager (Strategy Planning).

"Strategic plans are the components you can build your strategy. The airline needs to make millions of decisions a day; financing is key - To buy or have aircraft on lease, aircraft choice, you will buy narrow or wide-body aircraft or turboprops, Do you buy aircraft with two engines, four engines etc. Fleet is a huge part of the strategy; getting there right is critical; the most important decision airline takes. So Fleet, Financing and Network, i.e. Hub and Spoke / Point to Point or in-between” – Chief Planning Officer (IndiGo Airlines)

"We come up with a strategy and we align the policies and everything, in terms of labour, finance or economic driven policies are more or less the same but in terms of policy strategy in terms of improving the profits or decreasing the cost, financial related, network-related policies, its more or less based on strategy” – Manager (Strategy Planning)

Airline executives have confirmed that existing policy and objectives have an impact on strategic planning, and these are pivot pillars for strategic planning and management. Strategy plans and decision making are the basis of airline strategy planning. The strategy has to be well defined, for the airline as the primary objective of all the airlines is profit-making.

“All strategies which are made at head office have to be workable. Every strategy has to be linked with a business goal, every business goal has to link with a service goal, to an individual goal, and that’s how it goes down”- Senior Airport Airline Expert.

"Since capacity is more and more constraint, so how effectively we can make it into a loop is the main challenge. Opportunities are huge; we are expending big times. We have crossed 12 international stations in 9 months. Big time potential market is there; we want to go the long haul, but as of now we don't have aircraft to go long-haul. We are still finding out ways to do it. Threats are from the competition as they are growing"-Manager (Network Planning)

"Strategy formulation through target setting, goal formation, SOP building up, competency mapping, I was saying, it will depend on what your strategy is. Strategy, business strategy coming down as goals, every department will also have to make a strategy to achieve this. so, it keeps going down till it gets into standard operating procedures"- Senior Airport Airline Expert

The above quotation explains about the airline formulation modes through competency mapping and goal formulation. It flows from bottom to top, and each department has its strategy aligning with the business and corporate strategy of the airline. Strategy formulation across levels is mainly done at the airline head office.

"Ultimately they have to take into account that cost is minimum that should be the business strategy"- Senior Regulatory Expert.

"Indigo's biggest strength is On-time performance wonderfully done they can beat anybody, and people prefer it also as people themselves say if you want to reach on time prefers IndiGo"- Senior Regulatory Expert.

"Again, training will enhance skills and skills will achieve goal and goals once achieved will satisfy these strategies which are built"- Senior Airport Airline Expert.

"Senior-most management which will interpret the environment, the environment is existing through business reports, through various things, they will interpret that and understand that what will be the impact of this on their own business.

Then they will set goals and then they will set yardsticks for that year or two year or three years .so this is a strategic committee which does that, which will be responsible for the group running that organization and then obviously each strategic leader will have a team and their vision mission" - Senior Airport Airline Expert

"Then choosing network type is an important issue, which market are you going to serve. Here in India, even you assume that 84 commercial airports today, 3800 unique (Square the number – the number /2) airports pairs that can be served, today 350 are served, less than 10 %.

so when I say I want five aircraft to fly in India, 3800 markets, various equipment types, flight frequencies, choice of the network for the planner is almost limitless, that's the network strategy"- Chief Planning Officer (IndiGo Airlines)

"One of the key factors is what the size of the pie is? They must address the market share; right now, this is the seller market in aviation. Therefore, the strategy of the low-cost carrier would be to make money when they can"- Senior Airport Airline Expert

Then you have your cost strategies, marketing strategies, revenue management strategies, pricing strategies, distribution strategies, Sales and Marketing strategies, employee strategies, remuneration strategies then ground handling strategies, you have all the things combined within.

“Tri factors - Customer Satisfaction, Good Employee Engagement, high return on investment for shareholders then u have huge success”- Chief Planning Officer (IndiGo Airlines)

"You build a risk-taking culture, you build a nimble culture, culture is agile and quick, and again these are the decisions that should be taken as a startup of the company. To me, these are basics clean, safe and reliable if you want to be in this game"- Chief Planning Officer (IndiGo Airlines)

From the interview observations and aviation experts' point of view, most of the strategy formulation is done by higher Management @ EXCOM (Executive Committee level. Corporate strategy formulation is dropped down to business-level mainly by C level (Chief Planning Officer, Chief Commercial Officer, Chief Information Officer, etc.) ranking. Then further dropped down to departmental level through Head of the departments. Every activity at departmental level represents the SOP from the corporate level to the end department.

"To set up the organization, set up the processes, make critical decisions, and hopefully let people do their job, hiring the people, and management again you might say the higher form of management is leadership"- Chief Planning Officer (IndiGo Airlines)

"Strength with IndiGo is size, the biggest advantage of size is that you can demand, size flexibility, route so you can drive a lot of system efficiency .so if you have a good vision you can drive system efficiency. Weakness that they are not innovators, they are not innovating the product. Their value addition is not as high as we can expect from a market leader"- Senior Airport Airline Expert.

"Cost is our biggest strength, Network depth and length. Weakness is more on the aircraft size, incomplete orders, too much of aircraft coming in. its grounded or will be flying, which option is less costly"- Manager (Strategy Planning)

IndiGo key strength is Low operating Cost, positive image, High Stakeholder Value, Fleet and Network, Highly motivated staff with multitasking skills. IndiGo key weakness is Non-Innovations, Large Aircraft Orders, Ancillary Revenue. IndiGo key opportunities are International Market Potentials, Market Size, Ancillary Revenue, Cargo Market Potential, Chartering Business. IndiGo key Threats are from competition, regulatory framework, Political Structure, Staff Poaching etc.

"Everybody is talking about airport airports, but the biggest issue is passenger processing capacity. This would mean as a strategy of airline looking forward

into an area where demand is great; infrastructure is not available"- Senior Airport Airline Expert.

"Again, the monitoring is easy, you set up performance indicators, KPI, critical result areas, u try to find once that are meaningful, SMART concept – Simple, Measurable, Achievable, Real and Timely"- Chief Planning Officer (IndiGo Airlines)

"There are strategic committee in the company, at that level, it is discussing and then if it feels that there is some course correction required, it is connected at that level, and I am sure everybody should be doing that"- Senior Airport Airline Expert.

"Strategy implementation in the Indian market is competitive. Otherwise, we can say the government policies are slightly influencing links for LCC (RCS scheme is there), so these are government influencer scheme are the driving forces, but the majority is competition driven." - Senior Advisor (MoCA)

"Every board meeting, it's the strategy for the next quarter. Then every week, the founders are here at ground level, higher management mostly dictates the strategy; they come up with the big picture. But the strategy also goes bottom to UP"- Aviation Business Consultant

"Biggest yardstick for an airline is the complaint, suggestions that give you the way what's going further. The second part is there is something called external stakeholder and internal stakeholders, that means a lot of checks are done"- Senior Airport Airline Expert.

"We have one common mission, that is bifurcated into 5 -6 strategic action, in our kitty, there are two that fall into.... each CXO has individual as per vertical"- Manager (Strategy Planning)"Suppose we had a bad decision, which I am not denying. We say have to bear the pain or stop... we discuss in departmental meeting then to stakeholder meeting" – Manager (Network Planning)

"It's not tops to bottom like other airlines where the founder decide what to do, on the contrary in IndiGo it's very scientific here. It's more concerned about long term profitability or sustainability; then we go backwards; for example, we want to do X then what is required to do X. It's a very systematic method driven, lots of data-based, it's not followed trend, the entire thing is done" - Manager (Strategy Planning)

"Everybody is talking about airport airports, but the biggest issue is passenger processing capacity. This would mean as a strategy of airline looking forward into an area where demand is great; infrastructure is not available"- Senior Airport Airline Expert.

"Core mission is divided into three parts; one is getting the customer lowest price, second is covering the entire network best connection, best connectivity across India, then next is giving human value as the people, internal workers are given more values than the external" - Chief Planning Officer (IndiGo Airlines)

"There is CPO (Chief Planning Officer), take care of Network Planning, Aero Political Affairs, Slots and Schedule. CCO- Chief Commercial Officer takes care of Marketing, Sales, Public Relations and Customer Relations" – Manager (Strategy Planning)

"The process is we planners like us, have identified; we recommend that goes to the chief planning officer, he reviews, if it is not ok or any other vision at a higher level, it shot down but most of the time it goes ahead we call it stakeholders meeting, we discuss with revenue, we discuss with sales, with operations, with crew planning, if the majority of them are saying the same thing, that yes based on this data analysis or focal studies, we implement it"- Chief Planning Officer (IndiGo Airlines)

"It's more profitable, either it should be less cost or more profit. Every vertical has the same thing. So, in terms of the customer relationship, it happens like that.

"Either complaint is less, or good feedback should increase" - Senior Advisor (MoCA)

"Budget is more about spending and sales is more about earning"- Senior Airport Airline Expert.

"Planning is a part of a strategy it can't be separated, and scheduling again depends on competition which route competitor is there, customer profiling, slots so there if there is more competition getting slots is difficult as everyone fights for a prime-time slot"- Senior Regulatory Expert

"I am the part of capacity planning budget, so there is one budget; every department gives their own. Then the finance department makes umbrella budget and then allocate to each of the department. Every department heads will give their budget, then consolidate to the CXO. Then it is headed to higher-ups"- Manager (Network Planning)

"I think empowering people at the front end into service orientation is into strategy only"- Senior Airport Airline Expert.

"By being the best and ahead of our competition. Need one step ahead! Cost is associated with network width and depth (Frequency in that market). We see length, width and depth, so between 2 stations we want to be a market leader"- SVP (Network Revenue)

"We have Everybody of our projects in hand, Everybody works individually on their projects, but the nice thing is that everyone has a clear clarity of priority, we have standard priority stages, and top management will ask accordingly. Day to day top priority is PROFIT; second is COST throughout the organization" – Chief Planning Officer (IndiGo Airlines)

"Every airline has a different business strategy, LCC have different strategy FSC have a different strategy, even LCC for route selection they have a different

business strategy or same route continuously repeated route having a different strategy" – Senior Regulatory Expert.

"It's ambiguity, we slot are there then it's fine but if not, then we need to push it, If schedules are not done properly, or slots are not available, then it is a big challenge. We are handicapped if scheduling team not reacted properly"- Manager (Network Revenue)

"Core implementation of strategy in a sense taking it to the down to the last person. people may make goal sheet, various statements, vision mission statement training program, aligning of the goal, a lot of the companies starts investing in competency mapping"- Senior Airport Airline Expert

"Strategies are implemented in a short time almost immediately. It is carried in Executive Committee Meeting. Which is all CXO level with the founders? Everything goes there; it is ok from there then its implementation part"- Manager (Strategy Planning)

"We have a tracker for monitoring; everything is monitored minutely. We have automated systems which give us alert if in case. The system will not allow us to forget; it will pop up to all the stakeholders who are involved; it's more like project management reviews / continuous reviews. It's tough to forget something, but if it happens then, automation is strong. Everything is tracked. Quantitatively tracked even employee wise. This task is given to this person; he has completed in this time frame and appreciation or bad review"- SVP (Revenue Management)

"Same trackers, end to end trackers depending on days' slots when to open the sale, for commercial, there is one tracker at least. Crew planning has its own tracker. Everybody has the tracker from the inception of the idea till execution and then post-execution review how it is doing. Everything goes into the trackers" – Manager (Strategy Planning)

It is evident from interview observations that airline strategy monitoring is done through automated Tracking System by external and In-house Stakeholders, including customer's feedback and suggestions. Task notifications and Task trackers are used for employee quantitative Tracking.

"One is course-correcting that is building strategies, renewing strategies actually going back to the start point and relooking back. Most of the organization try to do patchwork, so they don't revisit actually" - Senior Airport Airline Expert

As per interview observations, analysis and airline managers, airline strategic renew is done by Airline Strategy Committee based on the Stakeholders Meeting discussion followed by a course correction / Re correction through the departmental meeting.

<i>ICC</i>	<i>Sub-Constructs</i>	<i>Categories</i>	<i>Focused Code</i>	<i>Observation</i>	<i>Evidence from Data Triangulations</i>
Strategy Planning and Implementation	Strategic Review	Planning Strategy and Business Model	Airline Objective Policy and Mission	IndiGo airline objective is profitability through low-cost operations, customer friendliness approach with On-Time performance that projects in its mission and policy documents.	Audio records and field notes of interviews; airline's policy available on the intranet; Indigo airline policy document; field notes and researcher observations.
	Business Environment Scanning	Planning Strategy and Business Model	Airline Environmental Scanning	<p>IndiGo key strength is</p> <p>Low operating cost, positive image, High Stakeholder Value, Fleet and Network, Highly motivated staff with multitasking skills</p> <p>IndiGo fundamental weakness is Non-Innovations, Large Aircraft Orders, Ancillary Revenue.</p> <p>IndiGo key opportunities are International Market Potentials, Market Size, Ancillary Revenue, Cargo Market Potential, Chartering Business.</p> <p>IndiGo critical Threats are from competition, regulatory framework, Political Structure, Staff Poaching etc.</p>	Audio records and field notes of interviews; airline data is available on intranet regarding internal and external scanning; Airline company report 2019, policy document; field notes.
	Levels of	Planning	Corporate,	Corporate level strategies include	Audio records and field notes of

	Strategies	Strategy and Business Model	business and functional Strategies	<p>corporate growth, Range and Diversity etc.</p> <p>Business Level Strategies includes Catering Service Agreements, Contract Management, Lean Distribution System, Lean Organization Structuring.</p> <p>Functional Strategies includes Operational Strategies, Marketing Strategies and Financial Strategies.</p>	interviews; Annual Report is silent on the issue, Researcher observation in term of meeting attendance.
	Strategy Formulation	Planning Strategy and Business Model	Strategy Formulations	<p>Most of the strategy formulation is done by higher Management, EXCOM (Executive Committee level. Corporate strategy formulation is dropped down to business-level mainly by C level (Chief Planning Officer, Chief Commercial Officer, Chief Information Officer, etc.) ranking. Then further dropped down to departmental level through Head of the departments. Every activity at departmental level represents the SOP from the corporate level to the end department.</p>	Annual Report is silent on the issue, Researcher observation in term of meeting attendance.

	Strategy Implementation	Planning Strategy and Business Model	Strategy Implementation	Based on strategic vision and plan, organizational goals are developed and discussed at EXCOM committee meetings and well looped in by departmental goals. Every individual is assigned job roles, and individual goals over performance are measured. Airline Goal Sheet, competency Mapping, Concept Maps based domain training are various tools regarding same.	Annual Report is silent on the issue, Researcher observation in term of meeting attendance.
	Strategy Monitoring	Planning Strategy and Business Model	Strategy Monitoring	Strategy monitoring is done through automated Tracking System by external and In-house Stakeholders, including customer's feedback and suggestions. Task notifications and task trackers are used for employee quantitative Tracking.	Audio records and field notes of interviews; Annual Report is silent on the issue, Researcher observation in term of meeting attendance.
	Strategy Renewal	Planning Strategy and Business Model	Course-Correction	Airline strategic renew done by Airline Strategy Committee based on the Stakeholders Meeting discussion followed by a course correction / Re correction in a departmental meeting.	Audio records Annual Report is silent on the issue, Researcher observation in term of meeting attendance.

Table 4.3: Strategy Planning and Implementation

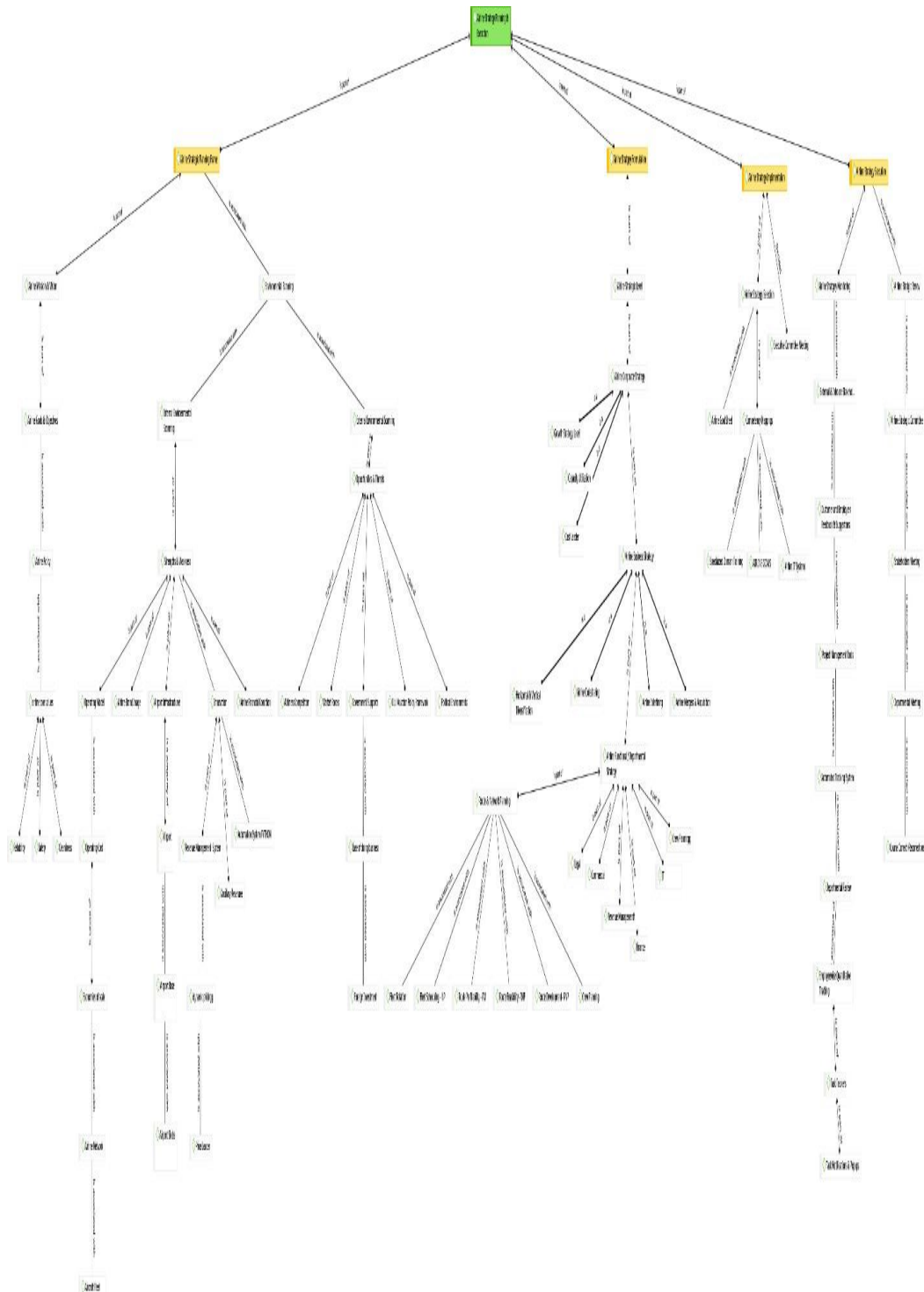


Figure 4.2: QAN – LCC Strategy Planning and Execution

(*Appendix C)

4.3.2 Airport and Airline Connectivity

The sub-constructs illustrated from interview data such as Airport Infrastructure, Terminal layouts, Airport Operational Efficiency, Airline Airport Financial Partnership identified from literature for Airport and airline connectivity. Selected quotations from the interviews are listed below: -

"Today airports are designed as one-size-fits-all. The needs of low-cost carrier sometimes are different from the full-service carrier." – Senior Airport and Airline Expert

"We have public and private airports; the airports have different objectives, facilitate the air transport smoothly; alignment is crucial as much to see the decisions that are made in a Cost-effective way. No money wasted in the system because we all pay for that, airline want efficient infrastructure as much; it's nice to walk through a terminal that is architecturally beautiful and efficient"– Chief Planning Officer (IndiGo)

"Airport can't survive itself, if you open an airport and no airline is going then will the Airport survive? Similarly, airline they can't only fly in sky they have to land also so they both are interlinked/interconnected so one is the supplement product because without that they can't survive that they should understand. So the policy should be in such a way that it helps each other so policy should be like it attracts airline and goes and similarly airline should also support them by travel conveyance etc." - Senior Regulatory Expert, Ex AERA Member

It is quite evident from interview and executives that airport infrastructure is "ONE SIZE FITS ALL" concept means there is no dedicated terminal for low-cost airlines, no secondary airports are there in India, basic services and infrastructural resources like NAVAIDS, Terminal facilities, Curbside Assistance, Airport Accessibility is minimal so airline can't operate from the stations. Moreover, Airports slots are very costly for the congested airports like Delhi and Mumbai as there is limited scope for expansion hence the scarcity of resources

which results into higher airport charges resulting higher operating cost for low-cost airlines. Better infrastructure also helps the airline in branding and uplifting customer service and passenger experience.

"Airport no doubt playing a big role in airline growth. Connectivity defers from Airport to Airport. Delhi is well connected, good connective market. Mumbai is a pathetic connective market. There rail n road transport has a substantial portion, but there is no metro. Bangalore is outskirts, access is crucial, and infrastructure to connect the access to Airport, airport operator duty is to ensure the connectivity – Assistant Manager (Strategy).

“As airline care about processing time, efficiency, runway capacity, immigration facility, scalable and expandable. We face constraint for timings, airport slots, ATC that is updated can't process the pax coz of staffing. There are 6000 airports around the world. You will see some are more successful than others; you will see some are smart how they see their footprint to get maximum out of the same space"- Chief Planning Officer (IndiGo)

"In India today, no airport is designed for allow-cost carrier function. They are designed from an aviation understanding perspective but in India LCC is growing at a very rapid rate, so now airports are being forced push to look but till such time this full-service carrier is also operating, so today today the market is 60 /40. Today the LCC is managing what Airport is giving; tomorrow the full service will have to manage what Airport is giving and when the aviation goes beyond a certain level, and large LCC hubs will come up” – Senior Aviation Consultant

“I have great faith in human knowledge and solving problems. It depends on planning; some old airport is well structured and well planned to cater to the need of today passengers. Public utility v/s private, they tend to more monopolistic than other players that need to manage to some degree. Government regulations are crucial again, incremental and destruction changes, I guarantee you that 100 years later, there will be drastic change not in term of airports but

also airlines. Fundamentally we know what customer wants, he wants quick, less costly transfer from one to another point" – Chief Planning Officer (IndiGo)

"There are few cases in the world where airlines own the airports; many more case airline owns the terminal, common usages vs solo usages is a big issue" – Senior Vice President (Network Planning)

"Delhi has three parallel runways n planning to have 4th runway. Delhi does around 600 movements in a day includes three runways. Mumbai has only one cross runway one-time use. It does 1200 aircraft movements, that why we are more profitable in Mumbai. ATC is not allowing us to fly because of safety issues, flight restriction. International airlines get slot very easily. So, efficiency in terms of infra depends directly to the airline growth"- Manager (Strategy)

"Aviation is seen as a very luxury service today. The day it is seen as the mode of transportation, had that time the Airport will build to cater to certain needs" – Senior Airport Experts

"Airport again raises environmental questions, building, running an airport in the democratic industry is different that undemocratic. Look opposite of china v/s India. China, they want to build something, they allocate people and build that, Mumbai they want to build the extension of Airport and the voters say NO" - Manager (Strategy)

"If you see five years back Delhi airport and compare with now a vast difference is there and willing to pay also as they are getting every facility they want so even LCC also if you are connected with modern airport people will be happy to travel rather than an airport like railway station"- Senior Regulatory Expert, Ex AERA Member.

"Infrastructure if you take any sector it's crucial so as the airport that's why the huge cost is involved, infrastructure includes building/terminal/runway, so it

includes small primary investment and later for expansion so huge infrastructure requirement is there"- Senior Regulatory Expert, Ex AERA Member

Mumbai expansion is not happening that's y another airport is coming so they should plan like Navi Mumbai airport planned 14 years back. However, still, it's not happening, so infrastructure development is crucial for airline development.

Senior Regulatory Expert, Ex AERA Member

"Today the airlines are not big enough. I think the building of an airport terminal will cost, a good size terminal like DIAL Terminal 1, around 2000 - 3,000 Crores rupees, if you will do in a very cheap style then 600 - 700 crores. So, suppose DIAL makes a special terminal for IndiGo, and we spend 2000 crore so where will 2000 crore comes from. So, IndiGo has to pay over some time for 2000 crore eventually. So, is IndiGo in a position today to commit to an investment of 2000 crores? No- then we cannot make terminal for them, is yes so then we can do it for them .so Airport will do when airline becomes big enough to support the airport" – Senior Airport and Airline Expert.

There are some scopes of financial partnership amongst Airport and airline, but again the capital-intensive nature, Railways used to have their terminal points other than the network. How to integrate vertically and horizontally again, catering, reservations system, BHS, economies sole user vs multiusers environments. If I have 1000 flights, I could have my Airport. We have seen transportation company own stations, again its regulatory issue". Chief Planning Officer (IndiGo)

"In India, we don't have LCC airline terminal because against the policy of the government which prohibit any airline to become monopoly in city, unfair completion, we want to have a separate terminal – Yes, is it legally allowed, but big NO if the return on investment (RoI) is not there" Manager (Strategy)

"Nowadays we can see a lot of private players, i.e. GMR/GVK building Delhi/Mumbai/Hyderabad airport, the quality survey also shows that all these

airports are No1, airlines are also happy. When slots are evaluated for coming and going you save a lot of fuel otherwise if you go to Chennai every airline will roam in the sky (loiter) before landing so this increased time and burns more fuel, but modern airports have all facilities, as in an hour 72 flights are going and coming and they are managing it effectively and airlines are also happy” Senior Regulatory Expert, Ex AERA Member

"If Air India wants an entire terminal, it would be much easier as a national carrier. The private player creates a monopoly, but government airline can do it in India" – Manager (Strategy Planning)

As described by airline managers and aviation consultants with reference to above quotations that financial partnership with Airport will take some time in Indian context as it is a highly capital-intensive project to build a dedicated terminal for an airline. Today, the size of IndiGo airline is not that huge to infuse around 2000 crores for a dedicated terminal along with breakeven point challenge, return on that considerable investment and of course, coupled with government challenges.

"Delhi airport has a partnership with jet airways so they will tend to give priority to jet and it will be anti-competitive to others so in a way many experts believe that this shouldn't happen but there are examples of other countries like Frankfurt airport KLM have a partnership, but they ensure that there shouldn't be anti-competitive pricing. Therefore, in a way, if airlines are a partner to Airport, they will have no complaints against Airport because they are also partners, but in India typically it's difficult to work". Senior Regulatory Expert, Ex AERA Member

Some airport doesn't have direct fuel services, so it's impacting TAT (Turn Around Time). There is no hydrant fuel system, no taxiways layout; they have limited resources that is impacting us as an airline. As an airline, we can't contribute to its Airport, who can provide an efficient infrastructure for us to grow. Manager (Strategy)

“One of the key parts of LCC is turnaround time, so when the aircraft is on the ground, it is not making money. So they don't want it to be on ground .so if Airport has infrastructure which will help airline service their aircraft extremely fast which means fueling, catering cleaning, boarding De- boarding, extremely fast, LCC would prefer a system like that. So there are various activities which happen for an aircraft if those activities can be performed extremely efficiently this will save a large amount of time in an airline, for a big operation it will matter” – Senior Airport Expert.

The interview observations result into outcome as airport operational efficiency has impact on airline Turn Around Time and ground time which ultimately has a huge correlation with the airline operating cost as aircraft on the ground is a liability for an airline and aircraft in the air is asset generating revenue for the airline. It also impacts the maximum aircraft utilization hours per day, which is the benchmark for the airline profitability in Low-Cost airliners.

A new category also has emerged out of the analysis as government challenges. Return on the huge investment and of course coupled with government challenges. Government monopolistic thinking and Government policy is not supporting the airline investment as it will bring specific risk to the market rationality unlike another part of the globe without anti-competitive pricing. The findings are listed below as:

<i>ICC</i>	<i>Sub-Constructs</i>	<i>Categories</i>	<i>Focused Code</i>	<i>Observation</i>	
Airline Airport Relationship	Airport Infrastructure	Airline Airport Connectivity	Airport Infrastructure	Airport infrastructure is "ONE SIZE FITS ALL" concept means there is no dedicated terminal for low-cost airlines, No secondary airports are there in India, basic services and infrastructural resources like NAVAIDS, Terminal facilities, Curbside Assistance, Airport Accessibility is minimal so airline can't operate from the stations. Moreover, Airports slots are very costly for the congested airports like Delhi and Mumbai as there is limited scope for expansion hence the scarcity of resources which results into higher airport charges resulting higher operating cost for low-cost airlines. Better infrastructure also helps the airline in branding and uplifting customer service and passenger experience.	Audio records and field notes of interviews; airlines report, airport operating data available on the intranet; Airport Connections Details through the intranet, Civil Aviation Policy Documents, Indigo airline policy and annual report document. MYTP (Multiyear Tariff Planning) Documents of MIAL & DIAL (Mumbai & Delhi International Airport)
	Airport Operational Efficiency		Airport Operational Efficiency	Airport Operational Efficiency has an impact on airline Turn Around Time and ground time which ultimately has a huge correlation with the airline operating cost as aircraft on the ground is a liability for an airline and aircraft in the air is asset	Audio records and field notes of interviews; Researcher observations, airports and airlines report available on intranet regarding passengers, KPMG

				generating revenue for the airline. It also impacts the maximum aircraft utilization hours per day, which is the benchmark for the airline profitability in Low-Cost airliners.	consultancy reports of TAT, air traffic, aircraft movements, load factors, market shares; LCC airline policy document.
	Airline Airport Financial Partnership		Airline Airport Financial Partnership	Financial partnership with Airport will take some time in the Indian context as it is a highly capital-intensive project to build a dedicated terminal for an airline. Today, the size of IndiGo airline is not that huge to infuse around 2000 crores for a dedicated terminal along with breakeven point challenge, return on that considerable investment and of course, coupled with government challenges. Government monopolistic thinking and Government policy are not supporting the airline investment as it will bring specific risk to the market rationality, unlike another part of the globe without anti-competitive pricing.	Audio records and field notes of interviews; researcher own observations and airlines annual reports available on the intranet; LCC airline policy document regarding financial data, financial reports; field notes etc.
	Airline Operating Cost		Airline Operating Cost	12 - 15 % of operating cost is due to airport charges for an airline. Airport as an airline Base, airport charges, parking stands and gates, communication systems, airports slots has directly correlated with airline operating cost. Airport	Audio records and field notes of interviews; airlines reports regarding operating cost, fuel costs, operating agreements available on the intranet; LCC

				choice for an airline also has a huge impact on capacity utilization and demand.	airline operational documents; field notes, Airport Economic Regulatory Authority (AERA), MYTP (Multiyear Tariff Planning) Documents of MIAL & DIAL (Mumbai & Delhi International Airport)
			Government Challenges	Common user V/s Solo User, Voters Concern, Democratic and non-democratic issues, Vertical and horizontal integration from industry side are a significant challenge for the government towards airline airport interfusion. Few operational challenges are towards reservation systems, catering, Baggage Handling Systems and stakeholder management side.	Audio records and field notes of interviews; CAPA Consultancies Reports, Ministry of Civil Aviation (MoCA) Strategic Objectives, Ministry webinars etc.

Table 4.4: Airport Airline Relationship

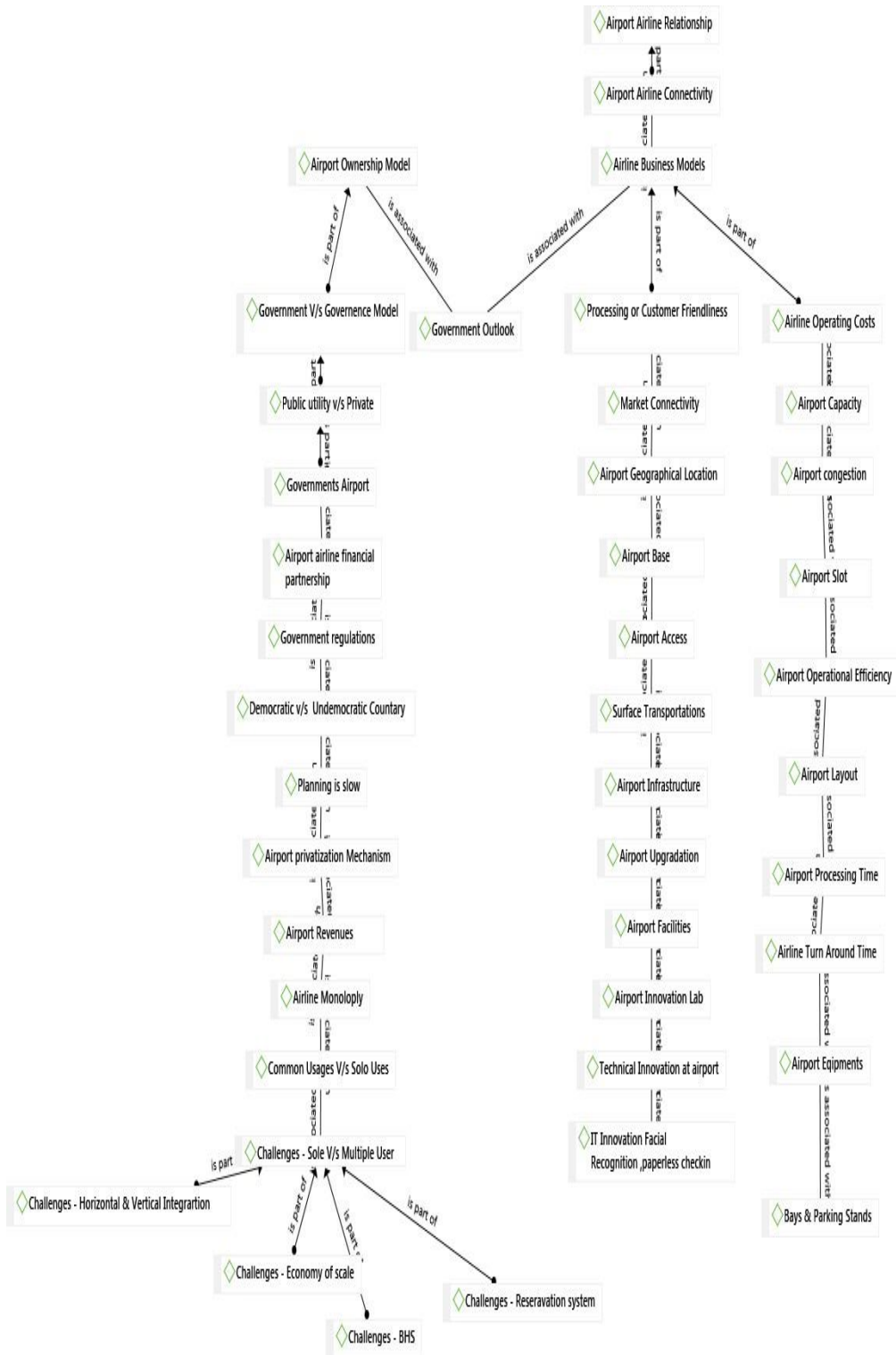


Figure 4.3: QN – Airport Airline Relationship

4.3.3 Regulatory framework impact on LCC sustainability

The sub-constructs illustrated from interview data such as Civil Aviation Policy, Route Dispersal Guidelines, Bilateral Agreement, Regulatory Compliance and Regional Connectivity Scheme etc. Selected quotations from the interviews are listed below: -

"Regulations are changing, since past 1 2 years, my interaction with the regulatory body has been very close, I have the view that work culture is changing in government structure. Some people are more proactivity" Chief Planning Officer (IndiGo)

"In a competitive market generally LCC will prefer to have cutting their cost, how much cost they can cut, some operational cost they can cut some airport facility they can cut but beyond that people will not agree for this. so they have limitations that's why you see there is no difference in prices of LCC and FSC, so regulatory issue are influencing the LCC" - Senior Regulatory Expert

"Government approach is changing; Modi sir is very Pro connectivity. UDAAN scheme, even government is helping AAI" Manager (Strategy); IndiGo Airlines

"New Civil Aviation policy is about two years old now, it has been a big success, it's been relaxation for airline or betterment for the airline, and they have CAT 2 Cat 3 Cat 4 types of cities /airports. As a consumer or pax it is perfect to say that NORTHEAST connectivity is good" Vice President –Network Planning -IndiGo Airlines

From the above quotations, it is quite evident from an interview that new civil aviation policy has been relaxation for the airline in terms of bringing down tax-based cost for airlines, bringing down VAT on ATF and reduced fare. Also, it brings ease in airline operating requirements for the international sector. Civil aviation policy also impacts on Foreign Trade Policies in terms of Export and import. Foreign Direct Investment (FDI), Airport Investment, Government taxes

and revenues, which directly correlates with airline operating cost and profitability.

"When any sector is opened for private participation all want to operate on metro cities nobody wants to go to a rural area, so government decided that those who go to rural area consumer gets a cheaper call rate" - Senior Regulatory Expert.

"Everything is governed by government, if you want to start a route you need to file up with ministry, you want to cancel the route, if it is impacting the ministerial stage, fortunately, we have good support from the government, so I would define the government regulation more flexible now, not very rigid" - Chief Planning Officer (IndiGo)

"Traffic rights are more towards the international side, more on the bilateral side, that depends amongst the interrelation within the country. Getting the bilateral extension for any European country is much easier than getting it from China. It is more country to country base" -Manager (Strategy); IndiGo Airlines

"Unfortunately, Indian regulatory Framework is like Indian airports "one-size-fits-all" so that means, they have the same rule for the pilot, i.e. FDTL flight duty regulation certain kind of regulations, so it doesn't help the airline to come cheap" – Airline /Airport Senior Expert.

"If there is CAT 2 A requirement and u r not making money then u can't exit that the RDG (Route Dispersal Guidelines). Secondly, RCS (Regional Connectivity Schemes) is very hit. Thirdly it's more into fuel subsidies, MoCA has also spoken about Lucknow, Udaipur not to specific airline but it's all. New Aviation policy has also eased out the AERA requirements, so that is also good for both airline and airports. It's more flexible. More or less it's for the betterment" Manager (Strategy); IndiGo Airlines.

"Traffic rights government gives according to their priority; regional connectivity is an issue suppose some airline wants to go to the regional airport they go just to make breakeven they want minimum customers, so they need minimum such

number of pax to breakeven otherwise you will make a loss"- Senior Regulatory Expert

From the interview observations and views of airline experts, it is very evident that Regional connectivity is the prime agenda for the government to boost regional air transport and aviation development. Government has launched UDAAN scheme for making air travel cheaper and within reach of the common man. Government is also boosting airlines to operate domestically providing subsidy and VGF (Viability Gap Funding) also developing secondary airports for LCC airlines.

"Some of the station there is flight restriction coz there is not demand like Allahabad, it opens only for 3 hours because the rest of the time nobody flies there. If I want to fly there, they are ready to fly there in term of flight restrictions" Manager (Network Planning); IndiGo Airlines.

"Defense airspace is impacting, we are growing in the same restriction, so if we are doing it then any other airline can also do it, same restrictions for other airlines too, yes it helps in safety" Manager (Strategy); IndiGo Airlines.

"Somewhere two-third is taken by the defence so defence you can't touch in India, but they may not be actually using so much. so why I am saying there are 550 commercial planes and there are no so many fighters in India, so how come and they are not doing the commercial flying" – Airline /Airport Senior Expert

From above quotations, it is evident that LCC airlines are working in a very regulated environment in India, Traffic rights, i.e. to land in a particular country for commercial purpose and flight restriction because of protected airspace, slots right, airport operational issues, cultural sites and heritage preservation cause airline operations very challenging and hence impacting its financial performances. IndiGo recently a partnership with Turkish airline to tap the international market through enhanced route depth is also under bilateral agreement.

"For an airline operation many things are crucial like cost, there is a cost to it, high operational cost, taxes and fuel it is highly influenced by the government so in such a situation when there is high cost (High cost of oil and taxes) aircraft also, so airline should factor all these prices including employee cost as well assuming employee cost is in their control, but fuel prices are not in their control, government taxes are beyond control"- Senior Regulatory Expert

*"Apart from there, not all airports are 24 * 7. there is flight restriction even on Delhi, you can't fly all over the area, there is the specific jet path that is there for a reason as security matters"- Manager (Strategy); IndiGo Airlines.*

"There are MRO setups in India; many airlines are going abroad go empty and come empty still they are saying it is cheaper because of high taxes here getting an aircraft repaired in India is expensive than going abroad so these are the constraints" - Senior Regulatory Expert.

"Some supporting is required in terms of tax concession, in terms of incentive or some other concession from the government either they should meet the loss" - Vice President –Network Planning -IndiGo Airlines

"The problem is not only in aviation if you go to any other sector like telecom the major user of the airspace or spectrum is Defense, they are using it for security purpose no problem, but it has an economical usage so it should be liberalized" - Senior Regulatory Expert.

"Pilot flying for Jet or IndiGo except there is Boeing and Airbus, but there is a market trend of Salary, it is the same, there is no regulatory (I am not saying reduce safety), but there is no flexibility which could help reduced cost to airlines" – Airline /Airport Senior Expert.

"Flight comes from Hyderabad to Agra it can't come directly due to restriction, so how much fuel is wasting, how much time it's consuming. it's a national asset you monopolize some sector for security reason it's excellent, but at the same time it

has a good economic utilization as nationals have to grow, GDP has to grow, so I think it's time now to liberalize this and gives more airspace for commercial airlines"- Senior Regulatory Expert

"Aviation policy now has started looking at regional routes, which may not be LCC but that is to connect the regional connectivity because government realize that connectivity in the region, smaller cities, towns will boost aviation" – Airline /Airport Senior Expert.

"There are a lot of regulations restrictions, is the right word, on the airspace. two-third of the Indian airspace is not available so if we need to grow 30% of airspace to 300 percentage growth will not happen that means if there is a route for Delhi Bombay" – Airline/Airport, Senior Expert

"Like apart from separate subsidy fund should be available and that fund should compensate the loss of the operator so in UDAN scheme certain part of this is covered but not fully so in UDAN they have given some slab system etc. and RDG is also there, and that should be further liberalized"- Senior Regulatory Expert.

"Government officials have a difficult job to do in terms of bringing these stakeholders together" Chief Planning Officer (IndiGo)

"A regulatory restriction there are those restrictions which have to be relooked, the policymakers are still very defence-oriented" – Airline /Airport Senior Expert so these ways connectivity in a rural area can be improved"- Senior Regulatory Expert.

"Employment generation scheme, they have given various rural airport setup around 35 to 40 airports are there, modernization of few airports are also planned, and AAI is fully supporting these airports by funding or concession, so these schemes are very progressive schemes"- Vice President –Network Planning -IndiGo Airlines.

From the above quotations and the observations from interview highlighted as the Indian government is still pro-defence aviation-oriented and regulatory liberalization is not there in India. Ease of doing business, the airline operating permit and preconditions, Economic regulations with DGCA and BCAS (Security and Safety regulatory bodies) also impact airline financial health. The regulator has made the 1-year contract for the pilot hiring that is hurting IndiGo as they are receiving aeroplanes per week, but the pilot shortage is there in the global market as well as the Indian market. The airline also imposes significant cost in aircraft maintenance requirements by regulators, which ultimately impacts the operating cost of the airline in India. The detailed analysis is listed below as:

<i>ICC</i>	<i>Sub-Constructs</i>	<i>Categories</i>	<i>Focused Code</i>	<i>Observation</i>	<i>Evidence of Data Triangulations</i>
Regulatory Framework	Civil Aviation Policy	Regulatory Structure	Civil Aviation Policy	New Civil Aviation policy has been relaxation for the airline in terms of bringing down tax based cost for airlines, bringing down VAT on ATF and reduced fare. Also, it brings ease in airline operating requirements for the international sector. Civil aviation policy also impacts on Foreign Trade Policies in terms of Export and import, Foreign Direct Investment (FDI), Airport Investment, Government taxes and revenues which directly correlates with the airline operating Cost and profitability.	Ministry (MoCA) Reports, Civil Aviation Policy Document 2019, Consultancies Reports, Researcher Own Observations
	Route Dispersal Guidelines		Regional Connectivity Schemes	Regional connectivity is the prime agenda for the government to boost regional air transport and aviation development. Government has launched UDAAN scheme for making air travel	

				cheaper and within reach of the common man. Government is also boosting airlines to operate domestically providing subsidy and VGF (Viability Gap Funding) also developing secondary airports for LCC airlines.	Researcher Own Observations
	Bilateral Agreements		Bilateral Agreements	LCC airlines are working in a very regulated environment in India, Traffic rights, i.e. to land in a particular country for commercial purpose and flight restriction because of protected airspace, slots right, airport operational issues, cultural sites and heritage preservation cause airline operations very challenging and hence impacting its financial performances. IndiGo recently a partnership with Turkish airline to tap the international market through enhanced route depth is also under bilateral agreement.	Airport Economic Regulatory Authority RDGs – Route Dispersal Guidelines, web documents on the intranet, Ministry (MoCA) Reports, New Civil Aviation Policy Document 2019, Ministry of Defense web material, researcher observation.
	Regulatory Compliance		Regulatory Compliance	The Indian government is still Pro defence aviation-oriented and regulatory	DGCA & BCAS Websites, Ministry Documents, , web documents on the

				<p>liberalization is not there in India.</p> <p>Ease of doing business, the airline operating permit and preconditions, Economic regulations with DGCA and BCAS (Security and Safety regulatory bodies) also impact airline financial health. The regulator has made a 1-year contract for the pilot hiring that is hurting IndiGo as they are receiving aeroplanes per week. Still, the pilot shortage is there in the global market as well as the Indian market. The airline also imposes a major cost in aircraft maintenance requirements by regulators which ultimately impacts the operating cost of an airline in India.</p>	<p>intranet, Ministry (MoCA) Reports, New Civil Aviation Policy Document 2019, Ministry of Defense web material, field notes and researcher observation</p>
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Table 4.5: Regulatory Framework

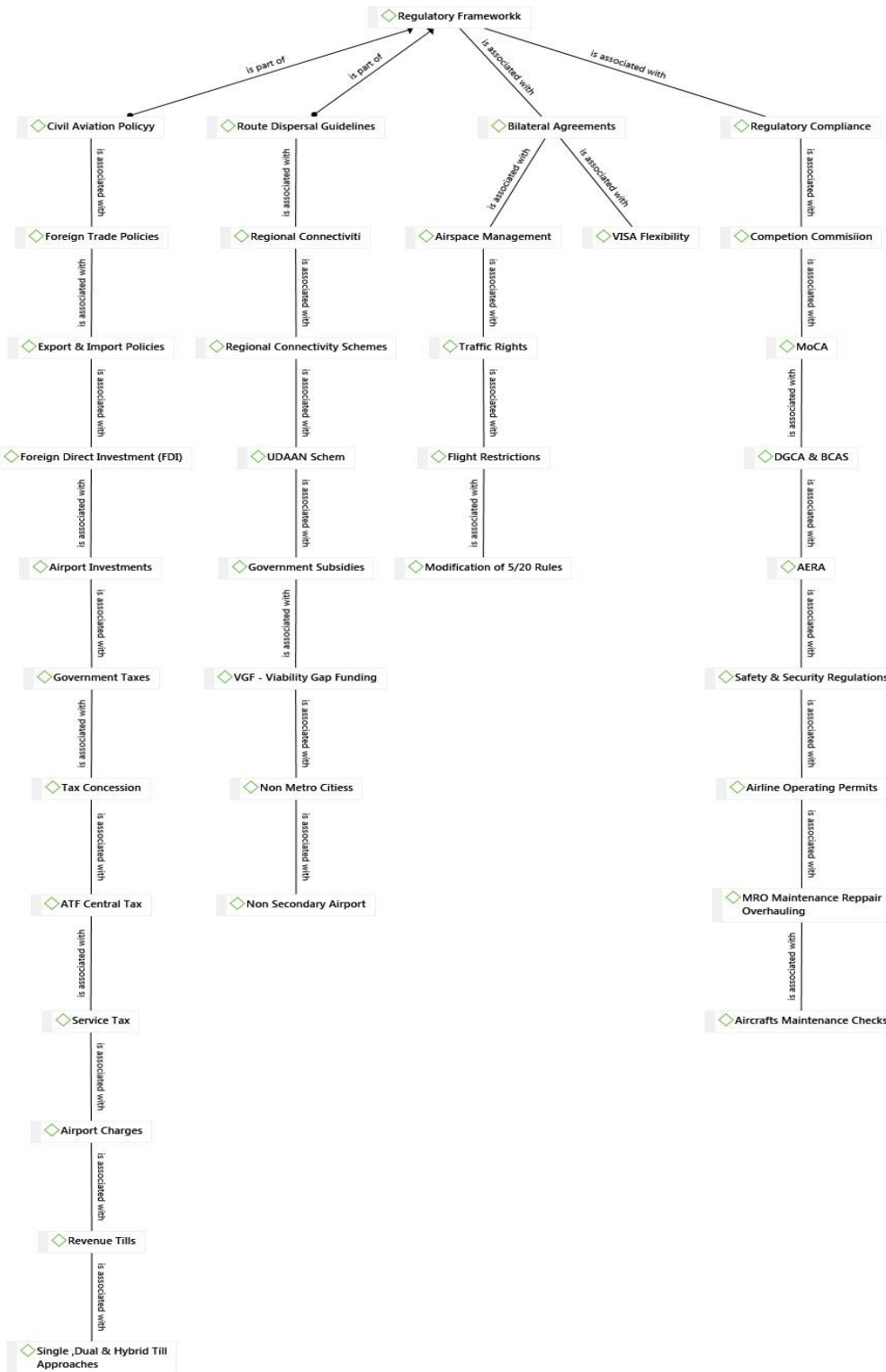


Figure 4.4: QAN – Regulatory Framework

4.3.4 Airline Strategies and correlation with LCC Business Model

The sub-constructs illustrated from interview data such as partners, Airline activities, airline resources, airline revenue streams, value proposition, customer relationship, airline channels, customer segmentation, cost structure and airline revenue streams Selected quotations from the interviews are listed below: -

"Cost is associated with network width and depth (Frequency in that market). We see length, width and depth, so between two stations, within the station and outside the station also we want the market leader. Till we achieve these, we can ensure the profitability or less loss than others; we only need to ensure that our losses are less than others." - Manager (Strategy Planning)

"Though IndiGo is a low-cost airline, the brand we have managed to build has nothing cheap about it. Rather, our quirky advertising has earned a loyal fan-following. IndiGo decidedly has low cost and no frill. This has helped IndiGo explore various alternate revenue streams like pre-booked meals and hot seats which are chargeable" – Chief Planning Officer (IndiGo)

"We want to reduce our distribution cost as an airline as a part of overall cost reduction so how would you do that, so let's see your distributor into website you are also distributing through GDS and travel agencies .so as a strategy this year will go through a direct channel which is website and mobile app and call centre and Adopt certain policies which will discourage people coming through travel agencies and rather encourage them to come to my website, so strategy at a functional level so which is trying to achieve the overall goal"- SVP (Network Revenue)

It is quite evident from interviews and airline experts view that IndiGo has strong connections with industry partners like aircraft manufacturer company AIRBUS, GDS Distribution System, MRO and Maintenance Partners, Travel and Tourism enterprises, Car Rentals and Hotels, GSA etc.

IndiGo major strategies like “Sale and Lease Back”, Aircraft Bulk Order Strategy, Aircraft Purchase Strategies, Airport Slots strategies, Distribution Strategies, Maintenance strategies are based on the reliable partner's association.

"Cost-cutting is primarily on fuel part, we do fuel hedging, apart from that there are other costs, I mean regarding tight checks, audits done, we do have internal and external auditors that is a very severe process, so leakages are less"- Airport Airline Senior Expert.

"Large similar aircrafts order and maintenance cost is key towards reducing the operating cost for IndiGo airline."- Senior Regulatory Expert.

It is quite evident from interview observations that IndiGo has the lowest CASK (Cost per available seat kilometer) among the Indian carriers, thanks to its low-cost strategies i.e. Single Fleet Type, higher aircraft utilization, base flights same-day return, low maintenance cost due to younger fleet size , the outcome of sale and leaseback, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and frequencies.

If the schedule is not made correctly, then planning is failing. We do give drafts schedule to them, but it may or may not be realistic because it may be possible what we have proposed, slots are not available accordingly. It's an ambiguity. We slot r there then it is fine, but if not, then we need to push it. If scheduling is not done correctly or slots are not available, then it is a big challenge. we are handicapped if scheduling team not reacted appropriately- Manager (Network Planning)

It is quite evident from the above quotations that IndiGo key activity is "On-Time Performance which benchmark for the Indian context. IndiGo has achieved this by a collaborative approach within its stakeholders, including customers. Crew Multitasking, quick turnaround time, performance automation, effective fleet

scheduling, integrated communication, flight performance monitoring are the major strategies to achieve on time performance.

IndiGo planes are equipped with an progressive assembly outline for the broadcast of short, candid communications among aircrafts and ground stations using radio or satellite called Aircraft Communications Addressing and Reporting System (ACARS). The station message is automatically broadcast to each concerned staff to have rapid processing time .

“IndiGo follow a policy of network mirroring. It means they launch flights where other airlines are already present so as to drive their rivals out with low pricing. As competition withdraws from certain routes, they increase prices and get profit. Recently, Go air going international with launch flights to Phuket and Male. IndiGo shockingly also after a few days did the same thing with similar launch dates. They will never let others flourish”- Senior Regulatory Expert.

"Sustainability is very simple. Airline profit margins are very low, and unfortunately, most of the airlines do not concentrate where most of the money is spent because most of the senior leaders or managers come from a good generic management background, not from the core aviation competent background"- Senior Airline Airport Expert.

“So in the airline, core money remains in technical areas into fuel, into maintenance contracts, leasing contracts, into training contracts, they are technical by nature, to understand them will take time, so people try and avoid that. IndiGo is making a smart move regarding the same” – Senior Aviation Business Consultant.

It is evident from the interview that IndiGo key resources are capital, aircraft fleet, airport bases, empowered highly trained and professional staff, strong management team, strong brand and image, profitable routes and effective schedules, innovative revenue management and immense inventory with business sense. Aircraft leasing Back strategy, Aircraft Utilization, competitive airport

slots, Employee professional growth appreciation, aggressive promotions, route planning along with strong inventory management are the major strategies developed on the basis of resources.

"You renegotiate this contract by five paise bring it down, but the money lies in fuel hedging, money lies in engine power by our contracts, so that means you must understand the technicalities of the things which does not come easy. so, what happens is that the core money continuous to be lost and the fringe, top layer only you keep scrapping which is a thin layer, and you think that you are doing it" – Senior Advisor (Ministry of Civil Aviation)

"I want to be a top operator in Delhi Bombay route that's my strategy statement now I need to find out there are 72 flights every day if I want to be top then I must do more than 35 flights per day so that 50 per cent coverage, I am driving in that way. so what is the operators what is the pricing what time they are going, time will not decide how many flights will decide that way, and that can be corrected" – Manager (Network Revenue)

It is quite clear from airline experts that IndiGo value proposition lies in strong customer service, Flexi fares and OTP with comfortable travel experience. IndiGo has created value by offering the lowest fares having one type of aircraft with low operating and maintenance cost. Through staff behavioural training, they maintain a strong relationship with the customer with remarkable service.

"No loyalty programs. Again, wonderful thought. People look at prices than loyalty. So chuck loyalty and keep fares low" – Senior Regulatory Expert.

"Cost is one of the keys; then market standing is second, on-time performance, your contract servicing, regulatory compliances, these are some key requirement for an airline, IndiGo is doing right mark"- Senior Aviation Consultant.

"A smart decision by IndiGo to save cost is 'All Female Crew' on flight so that hotel room can be shared amongst crew members and room booking cost can brought down by minimizing hotel inventory " - Manager (Strategy Planning)

“IndiGo employs various little operational tweaks that allow them to maintain on-time performance which in turn makes their guests happy and leads to many more repeat bookings. This airline has managed to turn a huge A320 around in less than 25 minutes! That is operational optimization at its best”- Senior Aviation Business Consultant.

It is evident from airline managers and aviation experts interview that IndiGo maintain high-value customer relation by Automated and Impersonal customer-oriented strategies in term of effective CRM (Customer Relationship Management). Innovative product development, marketing, customer feedback and suggestions, customer call centre and secure complaint monitoring unit along with customer-oriented staff training analysis are few of the strategies towards the same.

“Aircraft utilization and the stage length is crucial. Latest aircraft addition A320 can fly non-stop for nearly six hours, but airlines use this aircraft regularly for flights with a duration of less than one hour to 4 to under five hours of flight. Thus, this is a workhorse on India-UAE/Gulf routes and India-Singapore/Malaysia/Thailand routes”- Manager (Network Planning)

“ IndiGo crew hiring is very aggressive and personalized at same time for instant Ghosh take personal orientation of the candidates and check on attitude and vision with career planning” – Senior Manager (Network Planning)

Perfect execution of the strategies is key towards sustainability of low cost airline and IndiGo is perfectly following the same”- Senior Aviation Business Consultant.

"The organizational structure you are choosing to be simple or complex. Or you are choosing higher people who have the general skill or specific skills. Do you hire some experts, you go outside to international boundaries to hire, employees' implications, regulatory thing. Remuneration strategy it's all very complicated but at the same time very paradoxical, very simplicity, simplicity versus complexity”- Chief Planning Officer (IndiGo)?

From the interview observations, IndiGo airline key channels are Sales, Distribution and communication through which they are gaining competitive advantage in the market. OTA (like Skyscanner /Wego), strong GDS (Global Distribution Systems) development (Travelport), Ex web and Web-based sales distribution are key strategies adopted by the market leader.

In the case of many airlines, reliability, on-time performance, do I care about that, cleanliness, safety index? To me, these are basics from me, clean, safe reliable if you want to be in this game. - Chief Planning Officer (IndiGo)

"The high-pitched cleanliness of IndiGo's aircraft hygienist's ambience and average aircraft age of less than 3 years is key towards customer delight and lower maintenance cost. Also proactiveness of crew in cleaning cabin before landing help the faster processing and lowering turn around time which ultimately lower down the costs " – SVP (Revenue Management)

"Price sensitive passengers with lower surplus and paying capacity, looking for cheap fares and careless service by low cost carrier started assembling to IndiGo "- Senior Regulatory Expert.

It is quite evident from airline experts that Customers of IndiGo Airlines are mainly priced sensitive, working professionals and upper-middle-income group. Customers are majorly in the age bracket of 20-45 years. Fare DE bundling, Dynamic pricing, Flexi fares are the significant strategies IndiGo airline is building competitive advantage.

"Under Sale and Leaseback financial process, IndiGo airline manage to get aircraft on cheaper rate without investing its own money, keeping lower average age of aircrafts and bulk order resulting economy of scopes bringing lower cost ."- Senior Aviation Business Consultant

"IndiGo provide elite customer delight by offering cheap fares, high level services with basic, simple and reliable operations. IndiGo airline is offering

basic products which are the baseline for the air transport and model is very transparent without any fancy burdens” – Airport Airline Senior Expert.

“On time Performance with customers confidence and flexi fares with simple offering is IndiGo strength.” Senior Manager (Strategy Planning)

<i>ICC</i>	<i>Sub- Constructs</i>	<i>Categories</i>	<i>Focused Code</i>	<i>Observation</i>	<i>Evidence of Data Triangulation</i>
Airline Strategies and Linkage with Business Model	Airline Partners	Airline Strategies and Linkage with Business Model	Key Partners	<p>IndiGo has secure connections with industry partners like aircraft manufacturer company AIRBUS, GDS Distribution System, MRO and Maintenance Partners, Travel and Tourism enterprises, Car Rentals and Hotels, GSA etc.</p> <p>IndiGo major strategies like “Sale and Lease Back”, Aircraft Bulk Order Strategy, Aircraft Purchase Strategies, Airport Slots strategies, Distribution Strategies, Maintenance strategies are based on the strong partners association.</p>	Indigo Annual Report 2019, Travelpport Report, Annual Presentations, Web reports freight, Airline Websites, Field Notes and own Researcher observation.
	Airline Activities		Airline Key Activities	<p>IndiGo essential activity is "On-Time Performance which benchmarks for the Indian context. IndiGo has achieved this by a collaborative approach within its stakeholders, including customers. Crew Multitasking, quick turnaround time, performance automation, effective fleet scheduling, integrated</p>	IndiGo annual report 2019, Industry Reports, IATA analysis, Annual Presentations, Web reports freight, Airline Websites, Field Notes and own Researcher observation

				<p>communication, flight performance monitoring are the major strategies to achieve on-time performance.</p> <p>IndiGo planes are equipped with a digital link system for transmission of short, simple messages between aircraft and ground stations via radio or satellite called Aircraft Communications Addressing and Reporting System (ACARS). Before every IndiGo flight departs an automatic message is triggered from the aircraft to its operations control centre – and immediately the same departure time gets recorded in the software. Similarly, the moment the flight lands an automatic message is triggered from aircraft to control centre. Hence, the on-time performance is diligently monitored for every flight in real-time.</p>	
	Key Resources		Airline Resources	<p>IndiGo essential resources are capital, aircraft fleet, airport bases, empowered highly trained and professional staff, strong management team, strong brand and image, profitable routes and</p>	<p>Field Notes and own Researcher observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019.</p>

				active schedules, innovative revenue management and immense inventory with business sense. Aircraft leasing Back strategy, Aircraft Utilization, competitive airport slots, Employee professional growth appreciation, aggressive promotions, route planning along with strong inventory management are the major strategies developed based on resources.	Operational KPI – Key Performance Indicator industry publications.
	Key-Value Propositions		Value Proposition	IndiGo value proposition lies in Strong Customer Service, flexible fares and on-time performance with hassle-free travel experience. IndiGo has created value by offering the lowest fares having one type of aircraft with low operating and maintenance cost. Through staff behavioural training, they maintain a strong relationship with the customer with remarkable service.	Field Notes and own Researcher observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019. Customer Survey Results 2018-19, Industry reports (IATA, CAPA).
	Airline Customer Relationship		Customer Relationship Management	IndiGo maintain high-value customer relation by Automated and Impersonal customer-oriented strategies in term of effective CRM (Customer Relationship Management).	Field notes, researcher observations, Customer feedback results available on web, industry reports, Indigo annual reports 2018,2019.

				Innovative product development, marketing, customer feedback and suggestions, customer call centre and secure complaint monitoring unit along with customer-oriented staff training analysis are few of the strategies towards the same.	
	Airline Channels		Airline Channels	IndiGo airline key channels are Sales, Distribution and communication through which they are gaining competitive advantage in the market. OTA (like Skyscanner /Wego), strong GDS (Global Distribution Systems) development (Travelport), Ex web and web-based sales distribution are key strategies adopted by the market leader. Strong GSA and Travelport help Indigo to reduce distribution cost along with revenue-generating avenue through outsourcing option for other international airline require GDS for booking purpose.	Field Notes and Researcher observation, Travel portal reports, Annual Report 2019, Corporate presentations 2019.SITA industry report. Travelport Web Data.
	Customers Segmentations		Passenger Segmentation	Customers of IndiGo Airlines are mainly priced sensitive, working professionals and upper-	Field Notes, Researcher Observation, IndiGo booking websites, IndiGo

				middle-income group. Customers are majorly in the age bracket of 20-45 years. Fare DE bundling, Dynamic pricing, Flexi fares are the significant strategies IndiGo airline is building a competitive advantage over pricing and product development.	Annual Report 2019, Passenger Traffic data from MoCA & DGCA, Passenger profiling report, Tariff Publications etc.
	Airline Cost Structure		Airline Costs	IndiGo has the lowest CASK (Cost per available seat kilometre) among the Indian carriers, thanks to its low-cost strategies, i.e. Single Fleet Type, higher aircraft utilization, base flights same-day return, low maintenance cost due to younger fleet size, the outcome of the sale and leaseback, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and frequencies.	Field Notes and own Researcher observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019, CAPA & KPMG consultancy Reports, Web Data, IATA Industry outlook,
	Airline Revenue Streams		Airline Revenue Streams	IndiGo significant revenues come from passenger sales, aircraft sublease, ancillary and consultancy services. Major strategies to enhance sales /tickets through innovative	Field Notes and Researcher own observation, Financial Reports and Balance Sheets , Website data , Annual Report 2019, Corporate

				marketing, revenue management, growth and expansion strategy through partnership and code-sharing agreement.	presentations 2019,CAPA & KPMG consultancy Reports, Web Data , IATA Industry outlook.
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Table 4.6: Strategic Airline linkage with Business Model

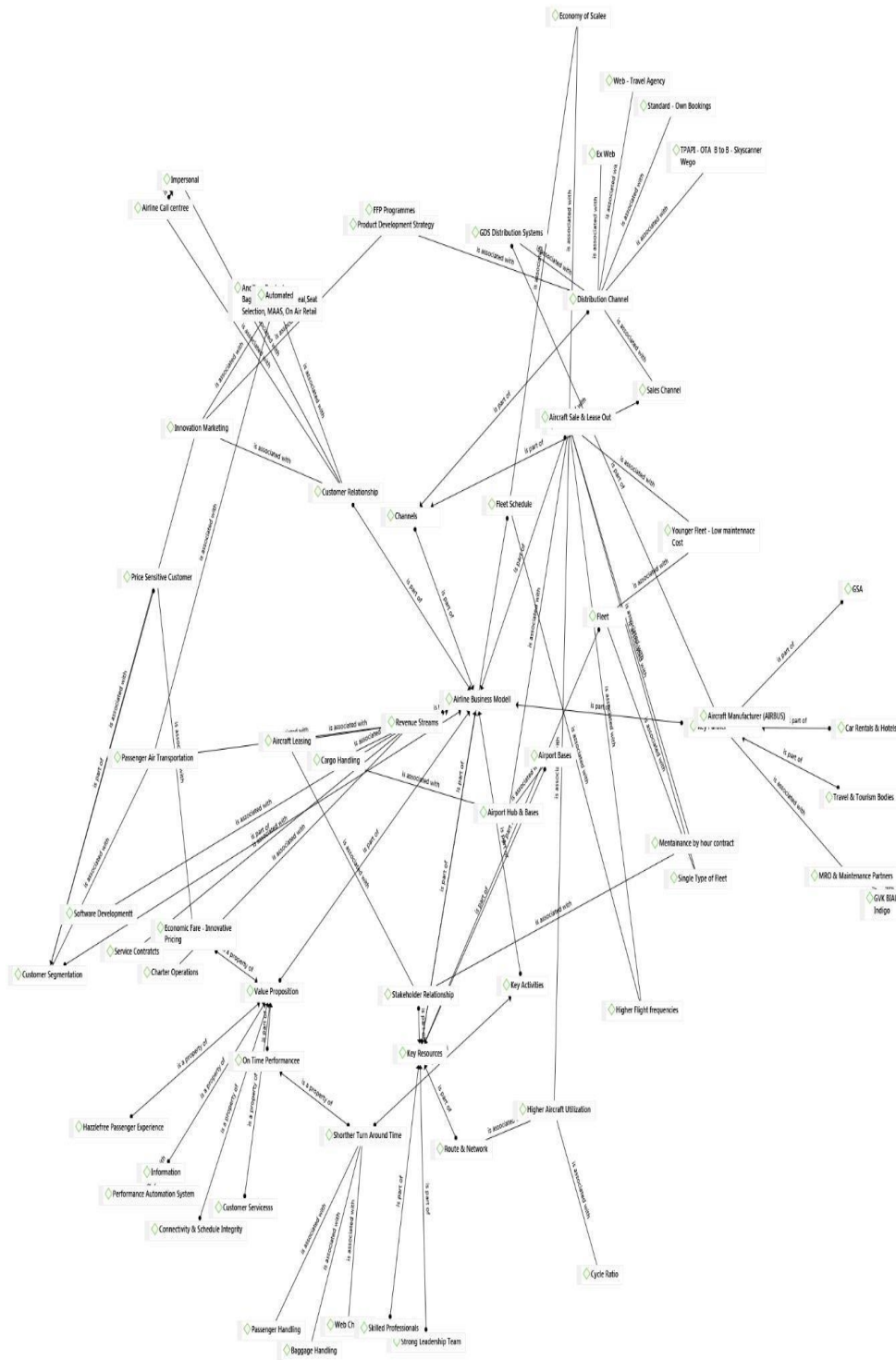


Figure 4.5: QN – LCC Strategies and Linkage with Business Model ((*Appendix D)

4.3.5 LCC Key Features

The sub-constructs illustrated from interview data such as Cost leadership, Innovative Marketing and Sales, Dynamic Pricing and Revenue Management, Simplicity in business Model, Stakeholder Management Skill competency, Strategic Decision Making and Government Support etc. Selected quotations from the interviews are listed below: -

“There is no long-Haul low-cost carrier profitable in India, neither across the world, No LCC has been ever profitable with wide-body aircraft. This is one thing that LCC is considering in entering the market...because cost will increase three times and LCC major unique selling point is cost. Air Arabia has less cost. Air India Express has more cost from Delhi to Dubai, so air Arabia is profitable”.
Assistant Manager (Strategy Planning – IndiGo)

"Airline Operations-To take care of the customer, customer-centric airline-customer demand, customer needs, service quality and satisfaction". Manager (Network Revenue)

“Revenue management, they are doing good they can also promote ancillary revenue because some airports like Cochin airport is 72% non-aero revenue so airline can also do something like this, they should evaluate further good marketing model to make out good ancillary revenue. Senior Airport Regulatory Expert

Run the airline as an airline, not as a supermarket. So that means the people with core competence have to take core airline decisions, rest of them can be outsourced, can be done by the third party, those contracts, service contracts, revenue management. These are core to the airline; they cannot be you know kind of, a lot of dilution is happening at that level. Nothing wrong but it's not taking it to the next level, it is only bringing it down. So that's the only thing. Senior Airport Expert

It is quite evident from the analysis that Operating cost is the major criteria for LCC airline profitability and benchmarked as CASM (Cost Available Seat Mile). IndiGo Airlines is a leader in terms of CASM or low operating cost and maintaining low cost through aircraft sale and lease out method, higher aircraft utilization hours, Higher Stage Lengths, By Hours Maintenance Contract, Economy of Scale, Crew hiring, Efficient fleet and network planning along with new-gen aircraft engines. Fuel optimization through software. Being thin margin business, the key for sustainable business model is lower operating cost.

"I think a couple of things, brand, last customer service and that is key how people perceive you, you may have the lowest prices, but people may pursue either cheap or unsafe or undesirable". Head (Strategy Planning)

"Airports have to be upgraded in term of service quality, once they are upgraded more pax will fly and obviously it will help any airline including LCC"- Manager (Network Revenue)

"Network / reach how many places is you can fly to what is your schedule? What is the depth you have? How much how many options you will get to the customer if you have one flight in a day in a particular sector. Whether your competition has ten flights in a day, obviously the customer will go to the competitor to avail the options"- Manager (Strategy Planning)

"I think that pricing is always important but I'll come back to the main point pricing is not the main thing from a success point of view what matters is how you manage your brand, marketing is important, and your network is important I think these two are the key things then you can manage" - Chief (Strategy Planning)

"Revenue Management is again driven by market forces. Market forces drive to a certain extent; after that, if you are able to take care of the customer, the customer will pay for that. It is not that customer will not pay. There is a certain

level which market forces can drive after that how the airline is doing" Senior Airport Airline Expert.

From interview observations, it is clear that dynamic pricing and revenue /yield management is crucial for the airline. It allows the buffer to the airline in terms of seat bookings at different fare levels at the highest ticket price. At given air traffic growth projection, the dynamic pricing will be game-changer.

"They have to understand that they are LCC if FSC is penetrating the market, then its opportunity lost. Southwest never copied United, Delta etc. Southwest never forget that they are Low-Cost airline – don't try to copy outside the model. The hybrid model will not work in India"- Assistant Manager (Strategy Planning – IndiGo)

"Data-driven decision making, strategic decision making and how many seats we are offering in sectors, people are aware but aircraft manufacturing unit you can't say so the decision has to be transparent". Chief Planning Officer (IndiGo)

"Differentiation in the prices of LCC and FSC because if you see the cost of an airline, it's beyond their control like fuel costs, so that restrict them to create any pricing advantage than FSC because if you select LCC then what will be your preference, so price should be low, but there is no differentiation in prices".

Senior Airport Regulatory Expert

"Price is what LCC should look into, but for that, all these regulations need to be removed like high taxes and all if that is gone LCC have a better future". Senior Airport Regulatory Expert

"Product development and Synchronization for any airline, its quite diversification, amalgamation, business models, customer segmentation, aircraft, different energy levels are various strategic level" Chief Planning Officer (IndiGo)

From the interview observations, it is evident that the airline industry is facing a talent shortage being domain-specific industry. IndiGo airline hires very

professional and competent staff. Also, the lean organization structure allows the staff to participate in decisions making and empower them to make a decision in critical situations. IndiGo has its dedicated Training Centre to hone the professional skills of the staff.

"Sales, it's up to planning time to sell. If it's not going to an agent, the corporate deal is not there; then it's a fail strategy. Marketing and sales, ventures, aggressive connectivity, route expansion with proper marketing along with incentive in marketing and sales are key". Assistant Manager (Strategy Planning – IndiGo)

From the interview observations and viewpoint of airline managers, it is clear that Innovative marketing and sales is the key for the airline business. Marketing mix with product diversification, price promotions, tickets distribution, brand image, product innovations and aggressive sales strategies and policies helps to have more number of passengers flying with the airline hence provide a competitive advantage to sustain in the airline industry.

"Airlines need to start with the same piece of paper fundamentally, making the right sensible decision. Initially, there are many LCC airlines started and grounded to something else" Chief Planning Officer (IndiGo)

"Again it is on the production side, cost side there is still no transparency, you do not know how much our cost is, we pay to employees, what we paid for aircraft, how we are using data to make a decision, in terms of larger business sometime you need to tell people to retain confidentiality" Chief Planning Officer (IndiGo)

From the interview observations, one new category emerged as "Transparent Business Model" as critical success factors. In India, the simple airline business model without any complexity and multi-layer with essential services along with customer services is sustainable. The transparency in the business model is critical to communicate your business vision to end-users. IndiGo airline business model is straightforward with cost leadership focus, and customers are also involved in

their strategic vision and helping the airline to achieve the on-time performance.

Key observations from the interview listed as:

<i>ICC</i>	<i>Sub-Constructs</i>	<i>Categories</i>	<i>Focused Code</i>	<i>Observation</i>	<i>Evidence of Data Triangulation</i>
LCC Key Features	Cost Leadership	LCC Key Features	Cost Leadership	Operating cost is a major criterion for LCC airline profitability and benchmarked as CASM (Cost Available Seat Mile). IndiGo Airlines is a leader in terms of CASM or low operating cost and maintaining low cost through aircraft sale and lease out method, higher aircraft utilization hours, Higher Stage Lengths, By Hours Maintenance Contract, Economy of Scale, Crew hiring, Efficient fleet and network planning along with new-gen aircraft engines. Fuel optimization through software. Being thin margin business, the key for sustainable business model is lower operating cost.	Field Notes and own Researcher observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019, CAPA & KPMG consultancy Reports, Web Data, IATA Industry outlook,
	Strategic Decision Making		Strategic Decision Making	Strategic Decision making for an LCC airline is crucial for success .i.e. Network decision, product decision, revenue and pricing	

			decisions, distribution, personnel decisions, organizational decisions, operating decisions, Fleet Planning and rotation, Fleet Assignment decision, market-driven decisions etc. Data-Driven Decision Making is key for Sustainability. Fleet Planning, Fleet Scheduling, Database decision reduce cost by shortening the flight path, stage length and enhanced aircraft utilization hours with effective revenue management through RM system.		
	Revenue Management		Revenue Management	Being oligopolistic market, dynamic pricing and revenue /yield management is crucial for the airline. It allows the buffer to the airline in terms of seat bookings at different fare levels at the highest ticket price. At given air traffic growth projection, the dynamic pricing will be a game-changer.	Field Notes and own Researcher observation, Financial Reports and Balance Sheets, Website data, Indigo Annual Report 2019, Corporate presentations 2019, CAPA & KPMG consultancy Reports, Web Data, IATA Industry outlook.
	--		Simplicity in Business Model	In India, the simple airline business model without any complexity and multi-layer with essential services along with customer	Field Notes and Researcher Observations, Annual reports are silent on the issue.

				services is sustainable. The transparency in the business model is critical to communicate your business vision to end-users. IndiGo airline business model is straightforward with cost leadership focus, and customers are also involved in their strategic vision and helping the airline to achieve the on-time performance resulting in more revenue and efficiency.	
	Stakeholder Management		Stakeholder Management	Efficient stakeholder management is interloped in airline business model sustainability. IndiGo enjoys a good relationship with its primary and secondary shareholders, customers and government agencies. IndiGo good relationship with aircraft manufacturer AIRBUS, maintenance contractors, MRO, Refuelers, software developers and passengers keeps airline sustainable. It helps in reducing cost and enhance the system efficiency	Field Notes and own Researcher observation, Financial Reports and Balance Sheets, Website data, Annual Report 2019, Corporate presentations 2019, KPMG Consultancy Reports, Web Data, IATA Industry outlook.
	Skill		Skill	Globally, the airline industry is facing a talent	Indigo Annual Report, 2019. Web Data,

	Competency		Competency	<p>shortage being domain-specific industry. IndiGo airline hires very professional and competent staff. Also, the lean organization structure allows the staff to participate in decisions making and empower them to decide in critical situations. IndiGo has its dedicated Training Centre to hone the professional skills of the staff.</p>	<p>Training Report, Field Notes and Researcher Observations.</p>
	Government Support		Government Support	<p>Government support is vital for the boost of aviation, especially the airline industry in India. Infra development, Airport investments, public, private partnership, flexible regulations, VISA relaxation, foreign trade policy and interstate regulatory compliances along with ease of doing business in India are directly correlated with airline sustenance in India. At present, the government is defence oriented, and policymaking is skewed towards defence, but liberalization in regulations make LCC business model more sustainable in the</p>	<p>Field Notes and Researcher Observations, Published and Web-based data, Civil Aviation Policy ministry policy formations and framework reports.</p>

				Indian context.	
	Innovative Sales and Marketing		Innovative Sales and Marketing	Innovative marketing and sales are critical for the airline business. Marketing mix with product diversification, price promotions, tickets distribution, brand image, product innovations and aggressive sales strategies and policies helps to have a higher number of passengers flying with the airline hence provide a competitive advantage to sustain in the airline industry.	Indigo corporate Presentations, Marketing reports, web-based data, IndiGo annual reports, Field notes and Observation

Table 4.7: LCC Key features

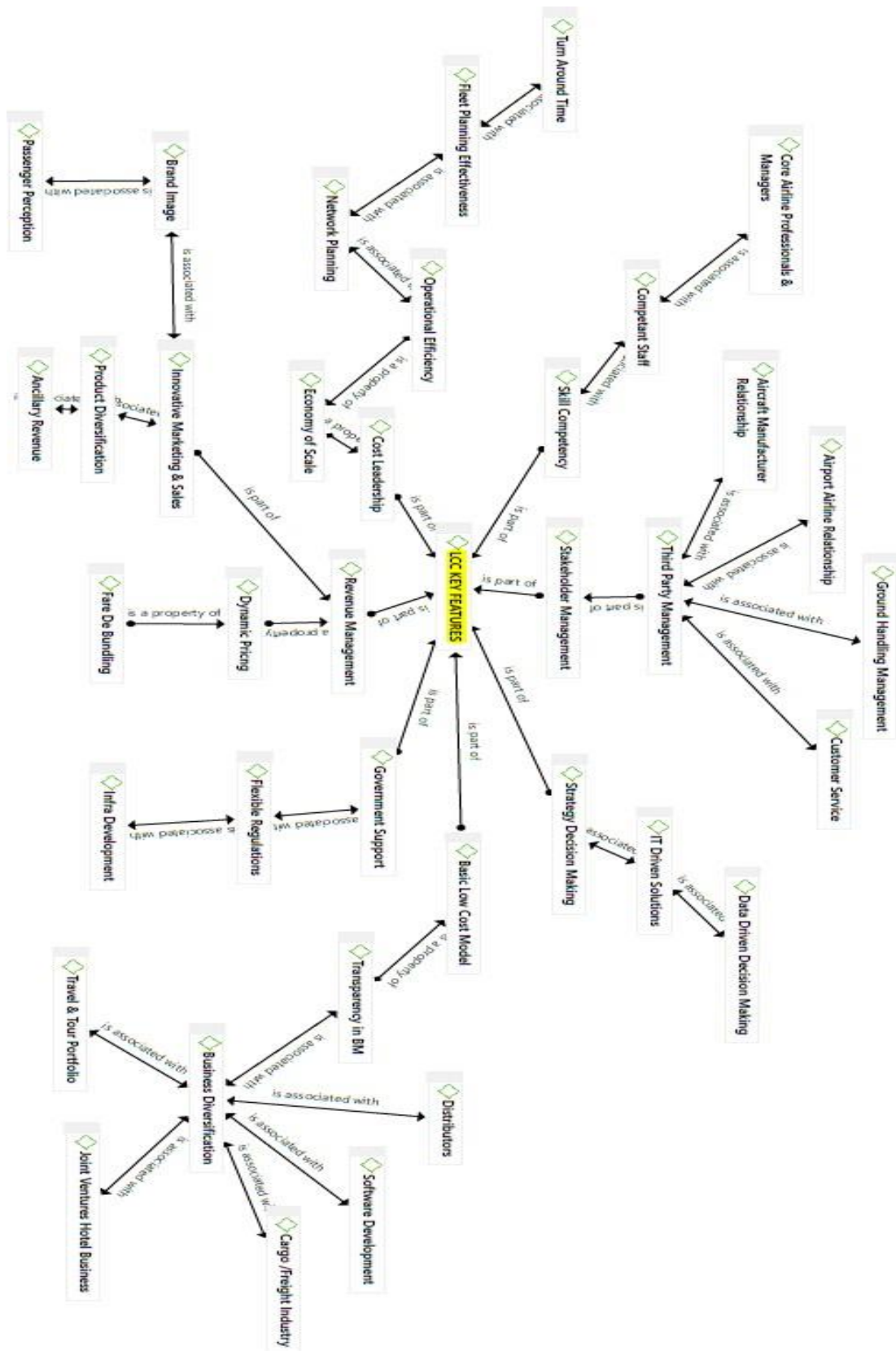


Figure 4.6: QAN Network – Critical Success Factors (CSF)

4.4 FINDINGS AND DISCUSSION

Findings from empirical data analysis are discussed in this section on airline strategic planning and management practices of low-cost carriers and further the role of airport and regulatory framework on LCC business model sustainability. Also, it includes findings and discussion regarding various LCC strategies linkage with its business model and holistically the key critical success factors mandatory for LCC sustainability in the Indian context.

4.4.1 LCC Airline Critical Success Factors

Detailed data analysis resulted in the below-mentioned categories which contribute to CSF of a LCC in the Indian context.

1. Airline Strategy Planning and Implementation
2. Airline and Airport Connectivity
3. Regulatory Framework
4. Airline Strategies and Linkage with Business Model
5. LCC Key Features

Earlier literature on critical success factors of low-cost carriers has identified five major categories as discussed in the review of the literature section. Evidence of all these five major contributing factors including two (2) new subcategories i.e. Government Challenges and Transparent Business Model were recorded in data analysis.

Earlier literature on strategic planning and implementation have acknowledged sub construct as Strategy Review, Business Environment Scanning, Strategy Formulation, Strategy Implementation, Strategy Monitoring, and Strategy Renew (Course Correction). In order to attain sustainability and competitive benefits, an airline may adopt a proven strategy of business model hybridization (Morandi, Malighetti, Paleari, and Redondi, 2015). Several fully-grown airlines with deep pockets follow another strategy, known as Airline within airline (AWA) strategy, to retaliate the existence and supremacy of low-cost carriers (Homsombat, Lei, and Fu, 2014). The prior-state-of-art also emphasizes the vertical and horizontal differentiation and states them as a

constituent of the airline expansion strategy. However, this expansion strategy is not propped up by product proliferation (Barbot, 2008). There is evidence of all constructs from the analysis of data that are listed above. From the interview data, it is quite evident that IndiGo airline's objective is profitability through low cost. As per the airline annual report mission statement implied as IndiGo is pioneered in offering connectivity on Tier -2 & Tier -3 with elite regional connectivity to boost economic growth and social cohesion in India and busy in creating world class air transportation.

On the basis of airline environmental scanning (SWOT) analysis and objectives, most of the *strategy formulation* is done by higher Management @ EXCOM (Executive Committee) level. Then further dropped down to the departmental level through the Head of the departments. Every activity at the departmental level represents the SOP from the corporate level to the end department. This case study has found the evidence that on the basis of strategic vision and plan, *organizational goals are developed* and discussed at EXCOM committee meetings and well looped in by departmental goals. Every individual's assigned job roles and individual goals over performance are measured. Airline Goal Sheet, competency Mapping, Concept Map based domain training are various tools regarding same.

As indicated by the airline managers /experts *Strategy Monitoring* is done through automated Tracking System by external and In-house Stakeholders including customers' feedbacks and suggestions. Task notifications and Task trackers are used for employee's quantitative Tracking. Also, experts shared that *Airline strategic renew* is done by Airline Strategy Committee based on the Stakeholders Meeting discussion followed by a course correction / Re correction through a departmental meeting.

Earlier literature on Airline and Airport Connectivity has identified with sub-constructs such as Airport Infrastructure, Airport Operational Efficiency,

Airline Operating Cost, Airline Airport Financial Partnership, and Government Outlook. There is a pressure from LCC airlines on the airport managing bodies to reduce the airport use fees and redress the forfeit by ameliorating the non-aeronautical income. **(Humphreys, 2006)**.

This case study confirmed all the above-mentioned elements though the practical evidence and illustrated that airport airline financial partnership is missing from the Indian context as per airline experts. As per interview data analysis, Airport Operational Efficiency has an impact on airline Turn Around Time (TAT) and ground time which ultimately has a huge correlation with airline operating cost.

Better infrastructure also helps the airline in branding and uplifting customer service and passenger experience. **(Mark Hansen, 2013)** emphasized the importance of punctuality and on-time performance (OTP). If failed in maintaining the same, it mitigates the income and market-share of an air-carrier. Due to delays at the air terminal, major costs namely crew, fuel, and maintenance costs increase. Such costs do not include the buffer costs viz. insurance and depreciation, rental and lease, ownership of the aircraft, etc. As per airline experts, financial partnerships with airports will take some time in the Indian context as it is a highly capital-intensive project to build a dedicated terminal for an airline.

The experts also shared that government monopolistic thinking and government policy is not supporting the airline investment as it will bring certain risk to the market rationality unlike other parts of the globe without anti-competitive pricing. The study emerged with one new subcategory named as government outlook/challenges. Challenges in terms of the dedicated terminal - Common user V/s Solo User, Voters Concern, Democratic and undemocratic issues, Vertical and horizontal integration from industry side are major for the government towards airline airport financial interfusion.

Regulatory framework literature as penned down in section 2.6.5 has identified with sub construct i.e. Civil Aviation Policy, Regional Connectivity

Schemes, Bilateral Agreements, and Regulatory Compliance. The annual report of Indigo Airlines also articulated that the Ministry of Civil Aviation (MoCA), the Directorate General Civil Aviation and the Airports Authority of India (AAI) regulate the civil aviation industry in India. The regulations are wide-ranging, complicated, and include all significant features of operations, comprising fundamental authorizations, airplane procurements, and itinerary. Little amendments in regulations, or the enforcement of supplementary constraints and circumstances, may impact our commercial operations”.

This case study has found evidence that Regional connectivity is the prime agenda for the government to boost regional air transport and aviation development. New Civil Aviation policy has been relaxation for airlines in terms of bringing down the tax-based cost for airlines, bringing down VAT on ATF (Air Turbine Fuel). The annual report further articulates, “The company has integrated the procedures for preservation of combustible and communicated training proceedings on the same to aircraft to the staff and airplane maintenance engineers comprising aircraft and ground proceedings for preserving the combustible”.

As per airline experts, LCC airlines are working in a very regulated environment in India. Traffic rights i.e. to land in a particular country for commercial purpose and flight restriction because of protected airspace, slots right, airport operational issues, cultural sites, and heritage preservation cause airline operations very challenging and hence impacting its financial performances. Likewise, up-scaling in traveler explicit charge(s) would bring about the decrease for the aircraft explicit charges and the other way around for given reasonable pace of return and conjecture of business volumes (travelers, load, and so forth.). **(ICAO, Airport Economic Manual, 2006).**

This study could find out the evidence that regulatory compliance is playing a crucial role in airline sustainability. Indian Government is still pro-defense aviation-oriented and regulatory liberalization is not there in India. In accordance with the law, AERA's officials cover supervision and obsession of

fares for aerospace administrations, client charges, and observing of significant air terminals execution principles. (AERA, 2019). Ease of doing business, the airline operating permit and preconditions, Economic regulations with DGCA, AERA, and BCAS (Security and Safety regulatory bodies) also impact airline financial health and sustainability of the LCC airline business model in India.

Because of the administrative ramifications in delays, the significant fundamental factor is meant traveler cost comprising extra expenses for traveler lodging provisions if there should arise an occurrence of deferrals. ITA (2000) characterizes different expenses because of timetable disturbance, inappropriate and off-size operational effectiveness at significant centers as far as failed to catch plane association, least interfacing time delayed timeslot, and scratch-offs of flights.

Strategy linkages literature as penned down in part 2.5 has acknowledged sub construct as Airline Partners, Key Activities, Key Resources, Value Proposition, Customer Relationship Management, Airline Channels, Passenger Segmentation, Airline Costs, and Revenue Streams. As per the expert's interview analysis, it is quite evident that IndiGo has strong connections with *industry partners* like aircraft manufacturer company AIRBUS, GDS Distribution System, MRO, and Maintenance Partners, Travel, and Tourism enterprises, Car Rentals, and Hotels, GSA, etc. IndiGo's *key activity* is "On Time Performance which benchmarks for the Indian context. IndiGo has accomplished this by collaborative methodology within its shareholders together with clients (IndiGo, 2018-19).

Experts share that IndiGo key resources are capital, aircraft fleet, airport bases, empowered highly trained and professional staff, strong management team, strong brand and image, profitable routes and effective schedules, innovative

revenue management, and immense inventory with business sense. Interview analysis also focuses on IndiGo *value proposition* lies in Strong Customer Service, Flexi fares, and OTP with elite travel experience. IndiGo yearly report articulates "At IndiGo, all our strategies and procedures ultimately change into customer services, creating them our essential shareholders. Formulated a strong CRM framework which guarantees that following of correspondence, isn't just for our clients but at the same time is for our personnel" (IndiGo, 2018-19). IndiGo has created value by offering the lowest fares having one type of aircraft with low operating and maintenance costs.

Analysis highlight that IndiGo maintain high-value customer relation by automated and impersonal customer-oriented strategies in term of effective CRM (Customer Relationship Management). The yearly report says "As a piece of our client commitment, we have opened different channels of interchanges, comprising call-centers, instruction panels, communication through smartphones and online networking system". Airline managers confirmed that Innovative product development, marketing, customer feedback and suggestions, customer call-center, and strong complaint monitoring unit along with customer-oriented staff training analysis are a few of the strategies towards the same. Airline yearly report affirmed the same expressing. Indigo numerous networks for complaint management through interactive airline's website, call-centers, email, and short messaging service (SMS). Customer feedbacks are taken from travelers to precisely track their interest and offer products accordingly. The effort is to ceaselessly upgrade the whole service experience, over the voyage lifespan, through client response".

It is quite evident from the interview that IndiGo airline's key channels are Sales, Distribution, and communication through which they are gaining competitive advantage in the market. OTA (like Skyscanner /Wego), strong GDS (Global Distribution Systems) development (Travelport), Ex web, and Web-based sales distribution are key strategies adopted by the market leader. Customers of IndiGo Airlines are mainly priced sensitive, working

professionals, and upper-middle-income group. As per experts, IndiGo has the lowest CASK (cost per available seat kilometer) among the Indian carriers, thanks to its low-cost strategies. IndiGo major revenues come from passenger sales, aircraft sublease, ancillary and consultancy services. **IATA Airline Cost Management (IACM)** cemented the fixed expenses as total operating cost (TOC) as high as 51 % and variable costs as 49% of TOC.

Features of low-cost carrier literature as penned down in segment 2.6.7 have recognized sub-constructs such as Cost Leadership, Strategic Decision Making, Revenue Management, Innovative Sales and Marketing, Stakeholder Management, Skill Competency, and Government Support. A new subcategory has emerged from the analysis titled “Business Model Simplicity”. In India, the simple airline business model without any complexity and multilayer with basic services along with customer services is sustainable. The transparency in the business model is key to communicate your business vision to end-users. IndiGo airline business model is very simple with cost leadership focus and customers are also involved in their strategic vision and helping the airline to achieve the on-time performance.

Transparency in the business model not only limited to passengers or stakeholders but also it is about sharing the information, collaboratively joint initiatives, and better productivity in terms of strategic alliances or partnerships. If passengers will close to what airline is doing it means, they will be involved in benchmarking the airline and loyal to the offerings. It also adds simplicity in the business model without any multi-layer complication in perceiving the services. Transparency in the business model will drive down to strategy and tactical pricing which can be treated as a vehicle to drive passenger’s behavior while benefitting partners, stakeholders, and other associated service providers also.

The study could find evidence that Operating cost is a major criterion for LCC airline profitability and benchmarked as CASM (Cost Available Seat Mile).

Strategic Decision making for an LCC airline is crucial for success i.e. Network decision, product decision, revenue, and pricing decisions, distribution, personnel decisions, organizational decisions, operating decisions, Fleet Planning and rotation, Fleet Assignment decision, market-driven decisions, etc. Data-Driven Decision Making is key for sustainability likewise affirmed through airline yearly reports “Airline is intensely needy of the utilization of PCs and multifaceted system revolution to maintain its business”. Airline experts also shared that being an oligopolistic market, dynamic pricing, and revenue /yield management is crucial for the airline.

The new sub-category that emerged from the interview analysis highlight that the simple airline business model without any complexity and multilayer with basic services along with customer services is sustainable. Also, efficient stakeholder management is interloped in airline business model sustainability. IndiGo enjoys a good relationship with its primary and secondary shareholders, customers, and government agencies. The case study could find out evidence that IndiGo Airlines hires very professional and competent staff. Also, the lean organization structure allows the staff to participate in decisions making and empower them to decide in critical situations. Innovative marketing and sales are key to the airline business. According to the airline yearly reports “IndiGo, is able to benchmark its reputation to best place of to work with strong emphasis on employee empowerment preparing staff commitments with serving attitude through integrated HR system”. (IndiGo, 2018-19).

Evidence was found that marketing mix with product diversification, price promotions, ticket distribution, brand image, product innovations, and aggressive sales strategies and policies helps to have a greater number of passengers flying with the airline hence provide a competitive advantage to sustain in the airline industry. As per expert’s interview analysis, government support is very necessary for the boost of aviation especially the airline industry in India. Infra development, Airport investments, public-private

partnership, flexible regulations, VISA relaxation, foreign trade policy, and interstate regulatory compliances along with ease of doing business in India are directly correlated with airline sustenance in India.

At present, the government is defense-oriented and policymaking is skewed towards defense, but liberalization in regulations make LCC business model more sustainable in the Indian context, the equivalent is written down in Indigo airline yearly report as " The guidelines are broad, complex, and include every single significant part of operations, comprising of fundamental licenses, airplane procurements & course-plotting. Any adjustments in guidelines, or the burden of extra limitations and situations, can influence our occupational and activities".

4.5 CASE STUDY FINDINGS IN TERMS OF RESEARCH QUESTIONS

literature review has evident the constructs and sub-constructs that have been confirmed in empirical data analysis composed from aviation and airline experts in India. Section 4.1.1 illustrated the detailed discussions, observations and findings as:

The findings with regards to research questions are penned down below :

- *Findings related to RQ 1 (How LCC airline plan and practice business model and strategy to sustain?)*
 - IndiGo airline objective is profitability through low-cost operations, customer friendliness approach with On-Time performance that projects in its mission and policy documents.
 - IndiGo key strength is Low operating cost, positive image, High Stakeholder Value, Fleet and Network, highly motivated staff with multitasking skills. IndiGo fundamental weakness is Non-Innovations, Large Aircraft Orders, and Ancillary Revenue. IndiGo key opportunities are International Market Potentials, Market Size, Ancillary Revenue, Cargo Market Potential, Chartering Business

IndiGo key threats are from competition, regulatory framework, Political Structure, Staff Poaching etc.

- Based on airline environmental scanning (SWOT) and objectives, most of *the strategy formulation* is done by higher Management @ EXCOM (Executive Committee level). Corporate strategy formulation is dropped down to business-level mainly by C level (Chief Planning Officer, Chief Commercial Officer, Chief Information Officer, etc.) ranking. Then further dropped down to departmental level through Head of the departments.
- Every activity at departmental level represents the SOP from the corporate level to the end department. Corporate level strategies include corporate growth, Range and Diversity etc. Business Level Strategies includes Catering Service Agreements, Contract Management, Lean Distribution System, Lean Organization Structuring. Functional Strategies includes Operational Strategies, Marketing Strategies and Financial Strategies.
- Based on strategic vision and plan, *organizational goals are developed* and discussed at EXCOM committee meetings and well looped in by departmental goals. Every individual is assigned job roles, and individual goals over performance are measured. Airline Goal Sheet, competency Mapping, Concept Map-based domain training are various tools regarding same.
- *Strategy Monitoring* is done through automated Tracking System by external and In-house Stakeholders, including customers' feedbacks and suggestions. Task notifications and Task trackers are used for employee quantitative Tracking.
- *Airline strategic renew* done by Airline Strategy Committee based on the Stakeholders Meeting discussion followed by a course correction / Re correction through the departmental meeting.

- *Findings related to RQ 2 (How airport influence LCC Strategies)*
 - Airline altogether 12 - 15 % of operating cost is due to airport charges for an airline. Airport as an airline Base, airport charges, parking stands and gates, communication systems, airports slots has directly correlated with airline operating cost. Airport choice for an airline also has a huge impact on capacity utilization and demand.
 - Airport Operational Efficiency has an impact on airline Turn Around Time (TAT) and ground time which ultimately has a huge correlation with airline operating cost as aircraft on the ground is liability for an airline and aircraft in air is asset generating revenue for the airline. It also impacts the maximum aircraft utilization hours per day, which is the benchmark for the airline profitability in Low-Cost airliners.
 - Airport infrastructure is "ONE SIZE FITS ALL" concept means there is no dedicated terminal for low-cost airlines, No secondary airports are there in India, basic services and infrastructural resources like NAVAIDS, Terminal facilities, Curbside Assistance, Airport Accessibility is minimal so airline can't operate from the stations.

Moreover, Airports slots are very costly for the congested airports like Delhi and Mumbai as there is limited scope for expansion hence the scarcity of resources which results into higher airport charges resulting higher operating cost for low-cost airlines. Better infrastructure also helps the airline in branding and uplifting customer service and passenger experience.

- Financial partnership with the airport will take some time in the Indian context as it is a highly capital-intensive project to build a dedicated terminal for an airline. Today, the size of IndiGo airline is not that huge to infuse around 2000 crores for a dedicated terminal along with breakeven point challenge, return on that considerable investment and of course, coupled with government challenges. Government monopolistic thinking and Government policy are not supporting the airline investment as it will bring certain risk to the market rationality, unlike another part of the globe without anti-competitive pricing.

- Challenges in term of the dedicated terminal - Common User V/s Solo User, Voters Concern, Democratic and undemocratic issues, Vertical and horizontal integration from industry side are a major challenge for the government towards airline airport financial interfusion. Few operational challenges are towards reservation systems, catering, Baggage Handling Systems and stakeholder management side.
- *Findings related to RQ 3 (How regulatory framework influence LCC Strategy?)*
 - Regional connectivity is the prime agenda for the government to boost regional air transport and aviation development. Government has launched UDAAN scheme for making air travel cheaper and within reach of the common man. Government is also boosting airlines to operate domestically providing subsidy and VGF (Viability Gap Funding) also developing secondary airports for LCC airlines.
 - New Civil Aviation policy has been relaxation for airline in terms of bringing down the tax-based cost for airlines, bringing down VAT on ATF and reduced fare. Also, it brings ease in airline operating requirements for the international sector. Civil aviation policy also impacts on Foreign Trade Policies in terms of Export and import, Foreign Direct Investment (FDI), Airport Investment, Government taxes and revenues which directly correlates with airline operating cost and profitability.
 - LCC airlines are working in a very regulated environment in India, Traffic rights, i.e. to land country for commercial purpose and flight restriction because of protected airspace, slots right, airport operational issues, cultural sites and heritage preservation cause airline operations very challenging and hence impacting its financial performances. IndiGo recently a partnership with Turkish airline to tap the international market through enhanced route depth is also under bilateral agreement.
 - The Indian government is still Pro defence aviation-oriented and regulatory liberalization is not there in India. Ease of doing business,

the airline operating permit and preconditions, Economic regulations with DGCA and BCAS (Security and Safety regulatory bodies) also impact airline financial health. The regulator has made a 1-year contract for the pilot hiring that is hurting IndiGo as they are receiving aeroplanes per week, but the pilot shortage is there in the global market as well as the Indian market. The airline also imposes a major cost in aircraft maintenance requirements by regulators, which ultimately impacts the operating cost of an airline in India.

- *Findings related to RQ 4 (What are the different LCC strategies and how it is linked with LCC business model)*
 - IndiGo has secure connections with **industry partners** like aircraft manufacturer company AIRBUS, GDS Distribution System, MRO and Maintenance Partners, Travel and Tourism enterprises, Car Rentals and Hotels, GSA etc. IndiGo major strategies like “Sale and Lease Back”, Aircraft Bulk Order Strategy, Aircraft Purchase Strategies, Airport Slots strategies, Distribution Strategies, Maintenance strategies are based on the reliable partner's association.
 - IndiGo **key activity** is "On-Time Performance which benchmarks for the Indian context. IndiGo has achieved this by a collaborative approach within its stakeholders, including customers. Crew Multitasking, quick turnaround time, performance automation, effective fleet scheduling, integrated communication, flight performance monitoring are the major strategies to achieve on time performance.
 - IndiGo planes are equipped with latest communication and avionics with a onscreen assembly agenda for the broadcast of short, vital messages among ground and airside staff INCLUDING PILOTS IN FORM OF Aircraft Communications Addressing and Reporting System (ACARS).

- IndiGo **key resources** are capital, aircraft fleet, airport bases, empowered highly trained and professional staff, strong management team, strong brand and image, profitable routes and active schedules, innovative revenue management and immense inventory with business sense. Aircraft leasing Back strategy, Aircraft Utilization, competitive airport slots, Employee professional growth appreciation, aggressive promotions, route planning along with strong inventory management are the major strategies developed based on resources.
- IndiGo **value proposition** lies in Strong Customer Service, Flexi fares and on-time performance with hassle-free travel experience. IndiGo has created value by offering the lowest fares having one type of aircraft with low operating and maintenance cost. Through staff behavioural training, they maintain a strong relationship with the customer with remarkable service.
- IndiGo maintain high-value customer relation by Automated and Impersonal customer-oriented strategies in term of effective CRM (Customer Relationship Management). Innovative product development, marketing, customer feedback and suggestions, customer call centre and strong complaint monitoring unit along with customer-oriented staff training analysis are few of the strategies towards the same.
- IndiGo airline key channels are Sales, Distribution and communication through which they are gaining competitive advantage in the market. OTA (like Skyscanner /Wego), strong GDS (Global Distribution Systems) development (Travelport), Ex web and web-based sales distribution are key strategies adopted by the market leader.
- IndiGo passengers are price sensitive young generation Fare DE bundling, dynamic pricing, Flexi fares are the significant strategies IndiGo airline is building competitive advantage.
- IndiGo has the lowest CASK (Cost per available seat kilometer) among the Indian carriers, thanks to its low-cost strategies i.e. Single Fleet Type, higher aircraft utilization, base flights same-day return, low

maintenance cost due to younger fleet size, the outcome of sale and leaseback, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and frequencies.

- IndiGo significant revenues come from passenger sales, aircraft sublease, ancillary and consultancy services. Significant strategies to enhance sales /tickets through innovative marketing, revenue management, growth and expansion strategy through partnership and code-sharing agreement.

4.6 CONCLUDING REMARKS

The analysis highlights the key critical success factors of IndiGo airlines, its strategy formulation and implementation along with various LCC strategies and business model correlation. The study also results in finding the crucial role of airports in terms of LCC sustainability along with regulatory framework impact with regards to the Indian context.

Further, interviewees indicate that the key for LCC sustainable business model is lower operating cost, strategic decision making, dynamic pricing and revenue management along with simple airline business, effective stakeholder management, lean organization structure, innovative marketing and sales, and government support.

CHAPTER 5

LCC BUSINESS MODEL (SPICEJET AIRLINE)

INTRODUCTION

This section illustrates in detail the case study and data collection details related to this case study-2 (SpiceJet Airlines) are discussed in section. Then detailed data analysis findings are reported in the subsequent sections on LCC critical success factors of SpiceJet Airline, LCC airline strategy selection processes in SpiceJet, and the association between airline strategy selection process and practices in SpiceJet Airline of the large airline in India. Further, section 5.4 describes the detailed discussions on case findings and outcomes of the case study findings are summarized in concluding remarks in section 5.5.

5.1 INDIAN LOW-COST AIRLINE – SPICEJET AIRLINE

SpiceJet is an LCC airline headquartered in the city of Gurgaon, India. It is the 4th biggest airliner in the nation by several local travellers conveyed, with 13.3% of market share as of October 2017. The aircraft operates around the globe 312 connected to 47 domestic and seven worldwide goals from its primary hubs at Delhi, Kolkata, Mumbai and Hyderabad.

Set up as air taxi supplier ModiLuft in 1994, the organization was obtained by Indian business person Ajay Singh in 2004 and re-dedicated as SpiceJet. The aircraft took off marked as a maiden flight operated in May 2005. Indian media nobleman Kalanidhi Maran obtained a controlling stake in SpiceJet in June 2010 through Sun Group which was sold back to Ajay Singh in January 2015. The carrier operates with Boeing 737 and Bombardier Dash aeroplane.

MODILUFT ERA: The beginnings of SpiceJet can be seen back to March 1984 when the firm was developed by Indian Industrialist S. K. Modi to give private air taxi activities. On 17th February 1993, the firm was named as MG Express and went into a particular relationship with the German standard transporter Lufthansa. The bearer gave explorer and payload benefits under the name of Modiluft before stopping tasks in 1996.

5.1.1 : ORIGIN AND GROWTH

Mr Ajay Singh chaired the airline in 2004, and the airline resumed operations with two rented out Boeing 737-800 aircraft in 2005 intended to arrange ten newly composite aircraft for expansion and growth. SpiceJet took off operations in May 2005 and operated first flight from two major hubs in India, i.e. Delhi & Mumbai Airports. In July 2008, SpiceJet emerged as third biggest LCC business model domestically based on overall market share and load factor domestically followed by the then benchmarked low fare commercial airline Air Deccan and IndiGo. In June 2010, Sun Group chairman Mr Kalanidhi Maran procured approximately 35 plus percentage stake of SpiceJet. July 2010 witnessed the order of 30 Boeing 737-8 aircraft and a further fifteen Bombardier Q4 Dash in December 2010.

Approx. Four hundred million (US\$5.4 million) were listed as loss attributable to increment in worldwide ATF costs. The Directorate General of Civil Aviation (DGCA), also raised few concerns regarding flight safety including few other Indian carriers in 2012. As per Bombay Stock Exchange (BSE) records, SpiceJet endures the losses during the same year. In the financial year 2012-13, Mr Maran acquires a stake of worth US\$14 million in the carrier. By the end of 2012, the airline started minting some profit and rebreathe. The LCC carrier again came back to benefits by the end of that year. SpiceJet indulges in an MoU agreement with Tiger Air in 2013 later rejected in 2015.

Mr Singh retook charge in 2015 followed by shareholding sold by Sun Group. SpiceJet airways ordered for 25 Q 400 turboprop aircraft. By that phrase, the

Indian LCC carrier SpiceJet is continued its expansion and connectivity across India and international destination.

	CY	LY	FAV/-ADV
Capacity(ASKM)	9,135	5,762	59%
Profit & Loss summary			
Total Income from operations	36,471	24,868	47%
Other Income	2,702	440	514%
Expenses	38,441	24,758	-55%
EBITDAR	7,616	4,786	59%
EBITDA	6,592	1,355	387%
EAT (without exceptional items)	732	551	33%
Exceptional items	-	-	-
EAT (with exceptional items)	732	551	33%
Key Performance Indices *			
Revenue / ASKM	4.29	4.39	-2%
Expenses / ASKM	4.21	4.30	2%
EBITDAR margin	19%	19%	0.5bps
EBITDA margin	17%	5%	11.5bps
EAT margin (without exceptional items)	2%	2%	-0.3 bps

Figure: 5.1.1 – Financial Performance Outlook (March 2019) Source: SpiceJet Corporate Presentation

The surge in maintenance and repair costs was owing to an upsurge in capacity and aircraft—employee Benefit/Expenses. Expenses in terms of employee remuneration and benefits increased to INR 10,570 million in FY 2018-19.

5.1.2 Corporate Affairs

Mr Ajay Singh is managing director (MD) of the SpiceJet and the headquarter of SpiceJet is in Gurgaon, India. The airline logo consists of 15 specks conceived in 3 lines of 5 each in the request for reducing sizes on a red substance. The airline rebranded its logo in June 2015, with Red Hot compile. SpiceJet airways are listed in BSE, and it is all fleets. They are named with Indian flavor.

5.1.3 Routes & Network

SpiceJet operated with 308 flights/day to thirty-six Indian and six international destinations across the globe in March 2019. SpiceJet airline major hubs are Delhi and Hyderabad International airports, the prime base for its Q 400

aircraft. DGCA allowed SpiceJet airlines to operate international routes on 8th September 2010 after having completion of five years of domestic flying in India. SpiceJet operated very maiden international flights from Delhi - Kathmandu along with Chennai -Colombo on 8th October 2010.

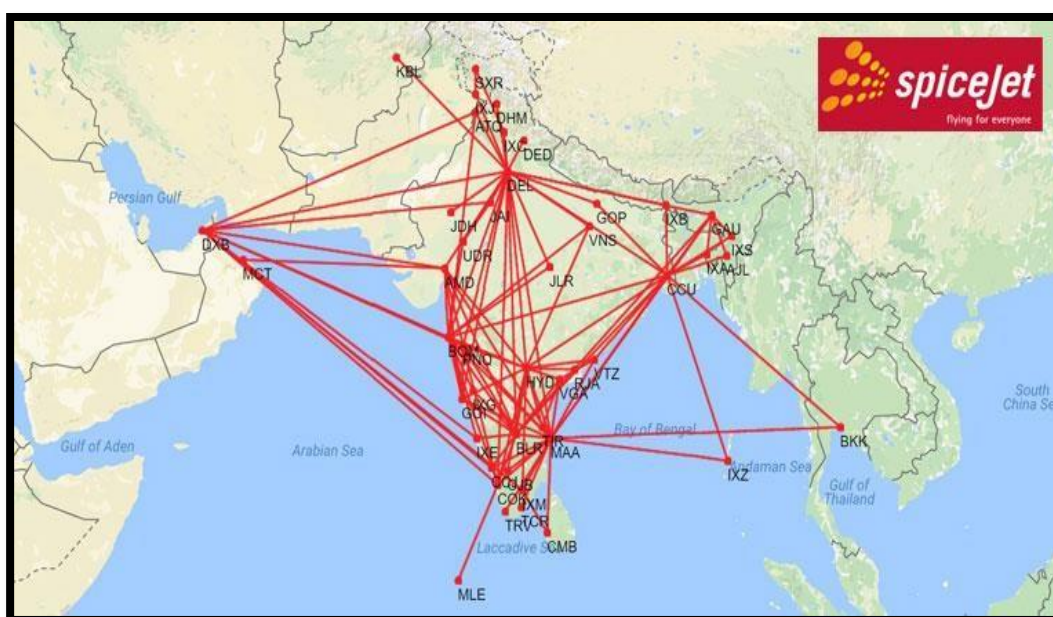


Figure 5.1.2: Route and Network – SpiceJet Airline

	CY	LY	FAV/-ADV
Capacity(ASKM)	9,135	5,762	59%
Expense details			
Aircraft Fuel	13,407	9,683	-38%
Aircraft Lease Rentals	1,025	3,432	70%
Airport Charges	3,264	1,898	-72%
Aircraft Maintenance	6,276	3,850	-63%
Other Operating Costs	1,316	786	-67%
Employee Benefits Expense	4,025	2,706	-49%
Depreciation and Amortisation Expense	4,647	614	-657%
Other Expenses	2,290	1,804	-27%
Finance Costs	1,387	407	-241%
Foreign exchange (gain)/loss	804	(422)	-290%
Total Expenses	38,441	24,758	-55%
Key Performance Indices			
Total CASK	4.21	4.30	2%
Fuel CASK	1.47	1.68	13%
Other CASK	2.74	2.62	-5%

Figure 5.1.3: SpiceJet Expenses (March 2019)

Source: SpiceJet Corporate Presentation (March 2019)

Services:

SpiceJet has marked itself as a unique model, unlike the LCC standard business model of economy class seats only. SpiceMax branded as the elite service offerings for all extra amenities from pre-booked seats to meals on board, extra leg space, full seat pitch, express baggage handling but on premium tactical pricing against its non-meal regular services. The airline does offer full in-flight meals but on selected flights. The LCC airline is not in favor of Frequent Flyers Programmes or rewards system neither it provides any inflight entertainment service.

5.1.4 Fleet Size

SpiceJet Fleet Size:

Aircrafts	In Service	Order	Passengers	
Boing 737-700	3		149	
Boing 737-800	28		189	
Boing 737-900 ER	4		212	
Boing 737 Max 8	10	193	189	
Bombardier Q400	22		78	
Bombardier Q400 NG	5	45	90	
SpiceXpress Cargo Fleet				
Boing 737-700 BCF	1	19	Cargo	Delivered by 2022
Total	78	257		

5.1.5 Newest Orders

In March 2005, SpiceJet airline ordered 1st twenty NextGen Boeing 737-800s, with scheduled up delivery to 2010. SpiceJet placed the order of thirty Boeing 737-800s in November 2010. The airline contracted a US\$4.4 billion contract in March 2011 with Boeing for the obtaining of forty-two 737 MAX 8 aircraft. SpiceJet was indulging in negotiation with Airbus and Boeing aircraft manufacturers for placing more than 110 aircraft in phase wise schedule.

The low-cost airline strategically devices to expand its aircraft size to 230 aircraft by 2020 end, including footprints in the broader domestic market. 2017 Paris show witnessed the signed deal with Bombardier to buy at least 50 Q400 aeroplanes to take advantage of UDAN regional scheme by government of India. In the fiscal year 2018-2019, SpiceJet added 13 new destinations to our fleet, including 19 aircraft (including one cargo) and six new destinations. Today the airline is one of the most significant participants in the regional connectivity program which provides air connectivity to long routes in India. **(SpiceJet, 2018-19)**

Partnership:

Tripfactory and SpiceJet have a partnership to sell the holiday bundle packages through the system. The airline also joined IATA network and MoU with Emirates airline to pitch the presence in GCC region.

SpiceXpress:

The airline took freight business very seriously and launched SpiceXpress - the cargo business unit of SpiceJet. The freight carrier introduced in Sept 2018 and fully operational with 737-70 aircraft on Delhi Bengaluru route. The international cargo destination started with a flight to Hong Kong and

Guwahati on January 2019 honoring as very first Indian carrier to function cargo operations amongst Northeast and Southeast Asia.

Organization Chart (Strategy Planning) – SpiceJet Airline:

CHIEF PLANNING OFFICER

/

Director

/

Associate Director

/

Vice President

/

Associate Vice President

/

General Manager

/

Manager

/

Senior Analyst

/

Analyst

5.2 DATA COLLECTION

Semi-structured interviews were conducted to collect data of the airline personnel who are employees of the SpiceJet Airline using case study data protocol.

Variety of sources were used for the data collection such as (i) Participant observation for more than a month at its headquarter (ii) Interviews of the professionals (iii) Company social sites, websites and reports(iv) Airline personnel's random discussion at various level. As illustrated in part 5.2, the data collection conducted in SpiceJet office and outside locations. Almost eight months were spent on the data collection. Initial contact and decision for data collection took off for the first month (April/May 2018). Then, as per the

availability of the professionals, four months were spent in conducting interviews (June 2018 to November 2018).

Table 5.2: Interviewees List of Case study-1 (IndiGo Airline)

<i>Analysis Level</i>	<i>Profiles</i>	<i>Interview Slot</i>
<i>Level 1 – Commercial Planning</i>	<i>Senior General Manager - Commercial</i>	<i>8th September,2018</i>
<i>Level 2- Regulatory Affairs</i>	<i>Senior Regulatory Expert, Ex AERA Member</i>	<i>16th November,2018</i>
<i>Level 3- Network Planning</i>	<i>Manager (Network Planning)</i>	<i>13th October,2018</i>
<i>Level 1- Airports Relations</i>	<i>Senior Vice President (Revenue and Network Planning)</i>	<i>25th August,2018</i>
<i>Level 2- Aviation Business</i>	<i>Airport and Airline Senior Expert</i>	<i>9th June,2018</i>
<i>Level 3- Corporate Planning</i>	<i>Manager (Corporate Planning)</i>	<i>23rd August,2018</i>

Note: The participant's identity is not specified in the table due to agreed confidentiality

The interviewee's detail is illustrated in listed Table 5.2. Interviews recording was done followed by the transcription. More than a month was dedicated to collect the feedback of the interviewees over transcript (December 2018). The case study draft was consulted to Senior General Manager (Commercial), and Senior Vice President (Revenue and Network Planning) and their suggestions and feedback were unified. Additional info and follow-ups were done over the phone. Keeping research questions as a focal concern, within case data analysis was undertaken: What is the critical success factors for the low-cost carrier in the Indian context? How low-cost carrier /airline is planning and executing its strategies and performs to safeguard a sustainable business

model. This commanded to the documentation of various factors forms the basis for strategies planning, and execution. Further, how the Airport is playing a crucial role in LCC sustainability. How is the regulatory framework in India impacting LCC sustainability? Then, various LCC strategies and linkage with the business model of the airline. Next section illustrates the extensive data analysis & findings of SpiceJet Airlines.

5.3 CRITICAL SUCCESS FACTORS FOR LCC AIRLINE – SPICEJET AIRLINE

Analysis of data collected from SpiceJet Airline was done based on the strategy labelled in segment 3.5. This part labels the critical success influences of the low-cost carrier (LCC) in India.

Initial conceptual constructs were recognized and abstracted from the review of literature as LCC strategy Planning and Execution, Regulatory Impact on LCC business model sustainability, Airport Airline Relationship, LCC various strategies and correlation with the business model and LCC critical success factors are presented below.

5.3.1 Airline Strategy Planning and Implementation

Sub-constructs identified by interview data such as Strategic Review, Business Environment Scanning, Level of Strategies, Strategy Formulation, Strategy Implementation, Strategy Monitoring and Strategy Renew. Selected quotations from the interviews are listed below: -

"First of all, the strategy has to be well defined for an airline depending on how the external market forces are, they will continue to change, in any developing market they will change, so there could be a strategy to safeguard company interest" – Senior Airport Airline Expert

"Initially, the airline would like to operate in a niche area where there is a market, and there is no competition, an ideal situation would be that. But if there is competition then also, we need to analyse how much is the market

potential, based on the market traffic, a total number of passengers moving out of origin whether it is tourist class or mid-level businessman or students or any particular kind of passenger, we do the passenger segmentation and then study them thoroughly. Based on that and the viability decides we fly points to points, all LCC fly points to points". Senior General Manager (SGM)- Commercial

"Strategy function, by large, by my own experience. All-encompassing across the functions, it is an extension of the CEO office in a sense, and it is not limited to a particular function, and the KRA KPI are very different. It is not like that you have to deliver so much revenue or you need to deliver so much PNL, so KRAs' is a resource for strategy professionals. so in that sense lot of policy decisions are taken by the strategy team and hence they affect the policy, but vice versa is also possible which is the question, that individual decisions are taken based on, for example, nothing to do with strategy, it could be a regulatory decision, some regulation has changed the policy has to be changed and how does that affect so that can happen and it does happen but Ideally as I said the flow is the reverse"- Senior Vice President (Network Planning and Revenue)

"We would like to be the number one LCC in India, that is the prime goal of an airline, but at the same time our strategy is to reach to the common man. Under UDAAN scheme, we have the pioneer to fly in Tier 2 and Tier 4 cities, we fly to maximum tier 2 and tier 4 cities why because we got the equipment that no other airline has got, that equipment is Q400, which we can fly (78 seater aircraft) and it requires 800 Meters of the runway, we are flying that to maximum stations, we have almost ten airports in India, and we are planning to have 30 more airports across India" – Senior General Manager (SGM)- Commercial

Airline executives and managers have confirmed that existing policy and objectives have an impact on strategic planning, and these are pivot pillars for strategic planning and management. Strategy plans and decision making are the basis of airline strategy planning. The strategy has to be well defined for the airline as the primary objectives of all the airlines is profit-making.

"We follow a different model here. Traditionally, the airline worked with travel agents. However, we have lifted that model, we have a direct contract with market players, for example. Today E-commerce is on the boom. Instead of E-commerce coming from agents, we directly have a contract with them, ECOM and TDDC. These are the companies to whom we have a direct contract with them. What happened, today you give around 10 12 % to your agent as commission part, we have taken out that and give direct deal with companies, we are the only airline in India with 100 percentages advanced money. In the cargo we take advance payments, another airline is on credit. Our risk factor is zero. Apart from that, we have come up with door to door model also, where we have some 200 trucks, we do B to B, and that also contributes to revenue 7 to 8 cr revenue per month" – Senior General Manager (SGM)- Commercial.

"How much is the market share of your competition are you able to command pricing in the market or not if you are a tiny player then you will not be able to do that two commander pricing on the other hand if you are an overall small player but a big player on a particular route you can command pricing on that so you can be a market leader in certain roots but overall you can be small, so I think that the biggest factor which impacts the strategic planning is competition"- Senior Vice President (Network Planning and Revenue)

"SpiceJet I think the one of the weakness that is there is the frequent change of ownership in the past ten years, and it reset the strategy every time every time there is new management and the reset button is hit of this strategy, so that creates a lot of confusion and a lot of time is wasted, so I think that's one of the key issues, but I think they are very well doing on ancillary part ancillary revenues and associated business verticals so that's a big strength that they have and they are doing very well on it opportunities is the same used International Frontier, ok that is the next growth Frontier that's the huge opportunity. On the Threats, I think SpiceJet certainly have a legacy issue with the previous owner, you know some court case is going on, dues, their certain

money that is odd, so those are on the financial side”- Senior Vice President (Network Planning and Revenue)

“Strategy formulation through target setting, goal formation, SOP is building up, competency mapping, I was saying, a will depending on what your strategy is. Strategy, business strategy coming down as goals, every department will also have to make a strategy to achieve this. so, it keeps going down till it gets into standard operating procedures”- Senior Airport Airline Expert

“There are strategic committee in the company, at that level, it is discussing and then if it feels that there is some course correction required, it is connected at that level, and I am sure everybody should be doing that”- Senior Airport Airline Expert.

The above quotation explains about the airline formulation modes through competency mapping and goal formulation. It flows from bottom to top, and each department has its strategy aligning with the business and corporate strategy of the airline. Strategy formulation across levels is mainly done at the airline head office.

“Load factor is now around 98% which is the highest today. It has been 98 percentages for more than 7 8 months; this shows that the customer has a lot of trust and faith in us. Out OTP is also 97 percentages, on-time performance, so if we maintain the operations and customer trust, so that again results in the repeatability of a customer travelling on SpiceJet flights. That makes every kind of difference”- Senior General Manager (SGM)- Commercial.

“Ultimately they have to take into account that cost is minimum that should be the business strategy”- Senior Regulatory Expert.

“I take care of the logistics part. Pan India logistics sales, cargo sales, policies have been formed by me and then forwarded to Mr Manjeev Singh, who is an advisor to the chairman and then he forwards and discuss with the chairman, and then we formulate. Cargo this is how it happens. Cargo constitutes almost 9 per cent of the overall revenue, and the next time it will be around 12 percentages.” – Senior General Manager (SGM)- Commercial

"Senior-most management which will interpret the environment, the environment is existing through business reports, through various things, they will interpret that and understand that what will be the impact of this on their own business. Then they will set goals and then they will set yardsticks for that year or two year or three years .so this is a strategic committee which does that, which will be responsible for the group running that organization and then obviously each strategic leader will have a team and their vision mission"
- Senior Airport Airline Expert.

"Like as I mention we want the common man to fly, so obviously we work according to that where there is scope for the common man, and the number of pax is there we launched the flight. Like many of the station, we are a pioneer in that, and we got an excellent response. To mention, Delhi Dehradun, Pondicherry – Hyderabad, Huge traffic is there; we keep on exploring the traffic pattern, we find many scopes in tier 2 tier3 tier 4 cities where the pax want to fly and willing to pay."- Senior General Manager (SGM)- Commercial

"One of the key factors is what the size of the pie is? They must address the market share; right now, this is the seller market in aviation. Therefore, the strategy of the low-cost carrier would be to make money when they can"- Senior Airport Airline Expert

"We have an IT software where we know the different product, what station is doing what revenue, different class, everything is monitored in terms of real-time data. Data is fed into the software; every hour, we can check it. This is not only for cargo but all the revenue generating sources for the SpiceJet".
Senior General Manager (SGM)- Commercial

"Again, training will enhance skills and skills will achieve goal and goals once achieved will satisfy these strategies which are built"- Senior Airport Airline Expert. *"Employees has always been taken care of. No organization can flourish until unless you do not care of employees. If employees are*

comfortable, growth is there for them, their growth n their comfort both are taken care of. We have a lot of incentive and promotions for employee and us.

"Strategy implementation in the Indian market is competitive. Otherwise, we can say the government policies are slightly influencing for LCC (RCS scheme is there), so these government influencer schemes are the driving forces, but the majority is competition driven."- Senior Advisor (MoCA)

"So overall strategy can be like that profitability revenue maximization, cost minimization - at a functional level in metrical down we want to reduce our distribution cost as an airline as a part of overall cost reduction so how would you do that, so let's see your distributor into the website you are also distributing through GDS and travel agencies .so as a strategy you will say that well this year will go through a direct channel which is website and mobile app and call centre and Adopt certain policies which will discourage people coming through travel agencies and rather encourage them to come to my website, so strategy at a functional level so which is trying to achieve the overall goal ."- Senior Vice President (Network Planning and Revenue)

From the interview observations and aviation experts' point of view, most of **the strategy formulation** is done by higher Management @ EXCOM (Executive Committee level. Corporate strategy formulation is dropped down to business-level mainly by C level (Chief Planning Officer, Chief Commercial Officer, Chief Information Officer, etc.) ranking. Then further dropped down to departmental level through Head of the departments. Every activity at departmental level represents the SOP from the corporate level to the end department.

"LCC initially did not fly cargo. If you talk about European countries, LCC don't fly because the turnaround time is more. But here in India, we have made it such an efficient model that in 30 minutes' time we offload almost three tonnages of cargo and load almost 3 tonnages of cargo in belly space of the aircraft. Fifteen mints loading and 15 mint loading, so efficiency is there which has done well for us. Roughly around 365 Cr is revenue generated by cargo" – Senior General Manager (SGM)- Commercial.

"Absolutely Revenue Management and Network Planning are the backbones of the airline business not from the cost side, but from the revenue side, network planning as the term includes planning itself strategy and planning of an airline generally much big airline usually network planning is a part of the strategic planning itself. because that is the core of the business what is an airline - the airline is its network"- Senior Vice President (Network Planning and Revenue) always believe that employee should grow"- Senior General Manager (SGM)- Commercial

"Competition is always there, and it is always good. However, we stayed always ahead of our competitors. We ahead of 5 6 steps what our competitors are doing. I mean whatever department it is, we create our niche strategy, which is different from the competition, and that is the only way you can get stay ahead of the competitors". - Senior General Manager (SGM)- Commercial

"Everybody is talking about airport airports, but the biggest issue is passenger processing capacity. This would mean as a strategy of an airline looking forward into an area where demand is great, infrastructure is not available"- Senior Airport Airline Expert.

"Every board meeting, it is the strategy for the next quarter. Then every week, the founders are here at ground level, higher management mostly dictates the strategy; they come up with the big picture. But the strategy also goes bottom to UP"- Aviation Business Consultant.

"Biggest yardstick for an airline is the complaint, suggestions that give you the way what is going further. The second part is there is something called external stakeholder and internal stakeholders, that means many checks are done"- Senior Airport Airline Expert.

"It's more profitable, either it should be less cost or more profit. Every vertical has the same thing. So, in terms of the customer relationship, it happens like that. Either complaint is less, or good feedback should increase" - Senior Advisor (MoCA)

"Planning is a part of a strategy it cannot be separated, and scheduling again depends on competition which route competitor is there, customer profiling, slots so there if there is more competition getting slots is difficult as everyone fights for a prime-time slot"- Senior Regulatory Expert.

"Core implementation of strategy in a sense taking it to the down to the last person. people may make goal sheet, various statements, vision mission statement training program, aligning of the goal, a lot of the companies starts investing in competency mapping"- Senior Airport Airline Expert

"I think empowering people at the front end into service orientation is into strategy only"- Senior Airport Airline Expert.

"One is course-correcting that is building strategies, renewing strategies actually going back to the start point and relooking back. Most of the organization try to do patchwork, so they do not revisit actually" - Senior Airport Airline Expert.

It is evident from interview observations that airline strategy monitoring is done through automated Tracking System by external and In-house Stakeholders, including customer's feedback and suggestions. Task notifications and Task trackers are used for employee quantitative Tracking. As per interview observations, analysis and airline managers, airline strategic renew is done by Airline Strategy Committee based on the Stakeholders Meeting discussion followed by a course correction / Re correction through the departmental meeting.

<i>ICC</i>	<i>Sub-Constructs</i>	<i>Categories</i>	<i>Focused Code</i>	<i>Observation</i>	<i>Evidence of Data Triangulation</i>
Strategy Planning and Implementation	Strategic Review	Planning Strategy and Business Model	Airline Objective Policy and Mission	SpiceJet airline objective is profitability through low-cost operations and higher revenues, customer friendliness and achieves Highest Load Factor that projects in its mission and policy documents.	Audio records and field notes of interviews; airline's policy available on the intranet; LCC airline policy document; field notes
	Business Environment Scanning	Planning Strategy and Business Model	Airline Environmental Scanning	SpiceJet key strength is Brand, Ancillary Revenue, Cargo Revenue .SpiceJet key weakness is Management Change. SpiceJet key opportunities are International market Potentials, Market Size, A, Chartering Business. SpiceJet key Threats are from competition, regulatory framework, Political Structure, Staff Poaching etc.	Audio records and field notes of interviews; airline data is available on intranet regarding internal and external scanning; Airline company report 2019, policy document; field notes.
	Levels of Strategies	Planning Strategy and Business Model	Corporate, Business and functional Strategies	Corporate level strategies include corporate growth, Range and Diversity, business expansion. Business Level Strategies includes Catering Service Agreements, Contract Management, Lean Distribution System, Lean Organization Structuring.	Audio records and field notes of interviews; Annual Report is silent on the issue, Researcher observation in term of meeting attendance.

				Functional Strategies includes Operational Strategies, Marketing Strategies and Financial Strategies.	
	Strategy Formulation	Planning Strategy and Business Model	Strategy Formulations	<p>Most of the strategy formulation is done by higher management as "Commercial Meeting". Corporate strategy formulation is dropped down to business-level mainly by C level (Chief Commercial Officer, Chief Information Officer, etc.) ranking. Then further dropped down to departmental level through Head of the departments. Every activity at departmental level represents the SOP from the corporate level to the end department.</p> <p>Ex- for a new route selection mutual decision is being taken by sales and revenue by analyzing the profitability of that route.</p>	Annual Report is silent on the issue, Researcher observation in term of meeting attendance.
	Strategy Implementation	Planning Strategy and Business Model	Strategy Implementation	Based on strategic vision and plan, organizational goals are developed and discussed at Commercial Meeting meetings and well looped in by departmental goals. Every individual is	Annual Report is silent on the issue, Researcher observation in term of meeting attendance.

				assigned job roles, and individual goals over performance are measured. Airline Goal Sheet, competency Mapping, Concept Map-based domain training are various tools regarding same.	
	Strategy Monitoring	Planning Strategy and Business Model	Strategy Monitoring	Strategy monitoring is done through monthly/Bi-Monthly review of individual projects Assigned to each department by Special projects team	Audio records and field notes of interviews; Annual Report is silent on the issue, Researcher observation in term of meeting attendance.
	Strategy Renewal	Planning Strategy and Business Model	Course-Correction	Airline strategic renew done by Airline Strategy Committee based on the Stakeholders Meeting discussion followed by a course correction / Re correction through the departmental meeting.	Audio records Annual Report is silent on the issue, Researcher observation in term of meeting attendance.

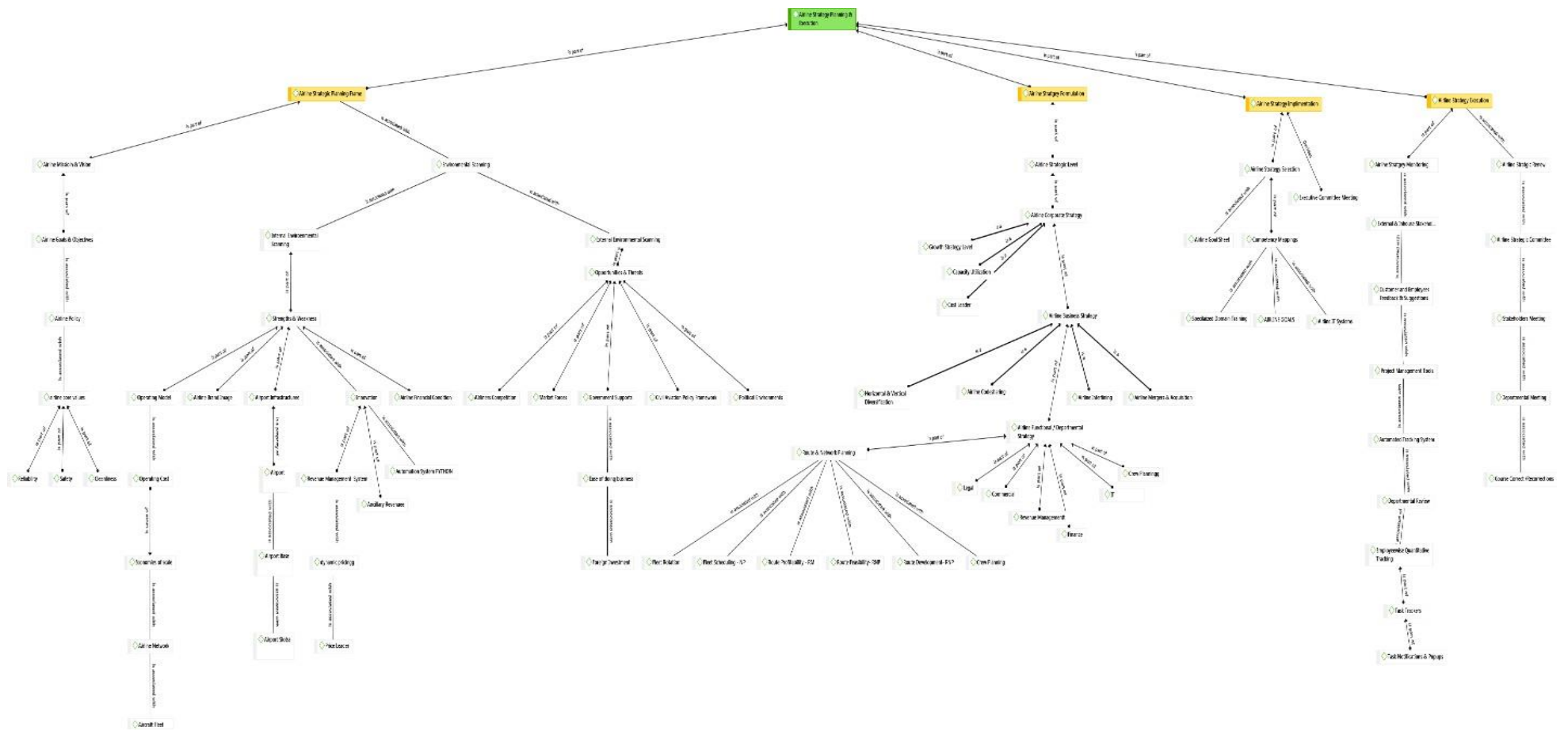


Figure 5.2: QN – LCC Strategy Planning and Execution (* Appendix E)

5.3.2 Airport and Airline Connectivity

The sub-constructs illustrated from interview data such as Airport Infrastructure, Terminal layouts, Airport Operational Efficiency, Airline Airport Financial Partnership identified from literature for Airport and airline connectivity. Selected quotations from the interviews are listed below: -

"Today airports are designed as one-size-fits-all. The needs of low-cost carrier sometimes are different from the full-service carrier." – Senior Airport and Airline Expert

"Airport plays a very important role in any business whether it is LCC or premium airline now if you talk about airports like Patna I am talking about partner because it is already a congested airport so any customer who flies to Patna Airport there is a lack of immunity is there because it is too overcrowded just like railway station so there are lot of up-gradation that needs to be done at that airport customer yes he is getting the benefit of travelling by air specifically when you can travel by road or by train."– Senior General Manager (SGM)-Commercial

"I think roughly depending on the airline the geography anywhere 10 to 20% of the cost can be airport costs and now that is a huge chunk of the cost. The Airport has two ways they can deal help the airline one is on the cost side and second side is on the processing or customer friendliness now you see the Changi Singapore new terminal which is pretty much human-less, and that is amazing. so, Airport has a huge role in the ecosystem"- Senior Vice President (Network Planning and Revenue)

It is quite evident from interview and executives that airport infrastructure is "ONE SIZE FITS ALL" concept means there is no dedicated terminal for low-cost airlines, no secondary airports are there in India, basic services and infrastructural resources like NAVAIDS, Terminal facilities, Kerbside Assistance, Airport Accessibility is minimal so airline can't operate from the stations.

Moreover, Airports slots are very costly for the congested airports like Delhi and Mumbai as there is limited scope for expansion hence the scarcity of resources which results into higher airport charges resulting higher operating cost for low-cost airlines. Better infrastructure also helps the airline in branding and uplifting customer service and passenger experience.

"Actually, in India, there are many airports in India where there is no good equipment. It is the Airport which provides the equipment so if that is not there; it will impact our turn around. I would not say that the Airport shall provide to a particular airline, but it should be provided for every airline. Once the upgrading is there for everyone, it helps the whole customer. So, I have mentioned that these are basic amenities. If there is a baggage conveyor belt and it is obsolete, then it is impacting the customer also because it is impacting customer also"- Senior General Manager (SGM)- Commercial.

"Airport cannot survive itself, if you open an airport and no airline is going then will the Airport survive? Similarly, the airline cannot only fly in the sky they have to land also, so they both are interlinked/interconnected. Hence, one is the supplement product because, without that, they cannot survive that they should understand. So, the policy should be in such a way that it helps each other so policy should be like it attracts airline and goes and similarly, airline should also support them by travel conveyance etc." - Senior Regulatory Expert, Ex AERA Member.

"I think the partnership between a line and airports on a financial aspect already happened if you see London Heathrow IAG is pretty much like that you see, Saudi even in India AAI and Air India but these are governments. so the government has been like that everywhere what if your question is on private side that is also there IAG British Airways and London Heathrow so, therefore, there are examples like that But I think airports are Complicated business, they are very capital intensive on the infrastructure side, the airline is a very different kind of business generally I think it will take time, examples which will be probably

exception largely the norms will not be together in this two spaces"- Senior Vice President (Network Planning and Revenue)

"Airport no doubt playing a big role in airline growth. Connectivity defers from Airport to Airport. Delhi is well connected, good connective market. Mumbai is a pathetic connective market. There rail n road transport has a huge portion, but there is no metro. Bangalore is outskirts, access is crucial, and infrastructure to connect the access to Airport, airport operator duty is to ensure the connectivity"
– *Manager (Commercial Planning)*

"Today the airlines are not big enough. I think the building of an airport terminal will cost, a good size terminal like DIAL Terminal 1, around 2000 - 3,000 Crores rupees, if you will do in a very cheap style then 600 - 700 crores. So, suppose DIAL makes a special terminal for IndiGo, and we spend 2000 crore so where will 2000 crore comes from. So, IndiGo has to eventually pay over a period of time for 2000 crore. So, is IndiGo in a position today to commit to an investment of 2000 crores? No- then we cannot make terminal for them, is yes so then we can do it for them .so Airport will do when airline become big enough to support the airport" – Senior Airport and Airline Expert

As described by airline managers and aviation consultants concerning above quotations that financial partnership with Airport will take some time in Indian context as it is a highly capital-intensive project to build a dedicated terminal for an airline. Today, the size of SpiceJet airline is not that huge to infuse around 2000 crores for a dedicated terminal along with breakeven point challenge, return on that considerable investment and of course, coupled with government challenges.

"In India today, no airport is designed for a low-cost carrier function. They are designed from an aviation understanding perspective but in India LCC is growing at a very rapid rate, so now airports are being forced push to look but till such time this full-service carrier is also operating, so today the market is 60 /40.

Today the LCC is managing what Airport is giving; tomorrow the full service will have to manage what Airport is giving and when the aviation goes beyond a certain level, and large LCC hubs will come up” – Senior Aviation Consultant

“Delhi has three parallel runways n planning to have ^{the fourth} runway. Delhi does around 600 movements in a day includes three runways. Mumbai has only one cross runway one-time use. It does 1200 aircraft movements, that why we are more profitable in Mumbai. ATC is not allowing us to fly because of safety issues, flight restriction. International airlines get slot very easily. So, efficiency in terms of infra depends directly to the airline growth”- Manager (Strategy)

“Mumbai expansion is not happening that is y another airport is coming so they should plan like Navi Mumbai airport planned 14 years back, but still it is not happening so infrastructure development is crucial for airline development”- Senior Regulatory Expert, Ex AERA Member.

“Aviation is seen as a very luxury service today. The day it is seen as the mode of transportation, had that time the Airport will build to cater to certain needs” – Senior Airport Experts.

“Airport again raises environmental questions, building, running an airport in the democratic industry is different that undemocratic. Look opposite of CHINA vs INDIA. China, they want to build something, they allocate people and build that, Mumbai they want to build an extension of Airport and the voters say NO” - Manager (Strategy)

“If you see five years back Delhi airport and compare with now a vast difference is there and willing to pay also as they are getting every facility they want so even LCC also if you are connected with modern airport people will be happy to travel

rather than an airport like railway station"- Senior Regulatory Expert, Ex AERA Member.

"Delhi airport has a partnership with jet airways, so they will have a tendency to give priority to jet and it will anti-competitive to others so in a way many experts believe that this should not happen, but there are examples of other countries like Frankfurt airport KLM have a partnership, but they ensure that there should not be anti-competitive pricing. Therefore, in a way, if airlines are a partner to Airport, they will have no complaints against Airport because they are also partnering, but in India typically it is difficult to work" -Senior Regulatory Expert, Ex AERA Member.

"Some airport does not have direct fuel services, so it is impacting TAT (Turn Around Time). There is no hydrant fuel system, no taxiways layout; they have limited resources that is impacting us as an airline. As an airline, we cannot contribute its Airport who can provide an efficient infrastructure for us to grow"- Manager (Strategy)

"One of the key parts of LCC is turnaround time, so when the aircraft is on the ground, it is not making money. So they don't want it to be on ground .so if Airport has infrastructure which will help airline service their aircraft extremely fast which means fueling, catering cleaning, boarding De- boarding, extremely fast, LCC would prefer a system like that. So there are various activities which happen for an aircraft if those activities can be performed extremely efficiently this will save a large amount of time in an airline, for a big operation it will matter" – Senior Airport Expert.

"Nowadays we can see a lot of private players, i.e. GMR/GVK building Delhi/Mumbai/Hyderabad airport, the quality survey also shows that all these airports are No1, airlines are also happy. When slots are evaluated for coming and going you save a lot of fuel otherwise if you go to Chennai every airline will

roam in the sky (loiter) before landing so this increased time and burns more fuel, but modern airports have all facilities, as in an hour 72 flights are going and coming and they are managing it effectively, and airlines are also happy" Senior Regulatory Expert, Ex AERA Member.

The interview observations result into outcome as airport operational efficiency has impact on airline Turn Around Time and ground time which ultimately has a huge correlation with the airline operating cost as aircraft on the ground is a liability for an airline and aircraft in the air is asset generating revenue for the airline. It also impacts the maximum aircraft utilization hours per day, which is the benchmark for the airline profitability in Low-Cost airliners.

A new category also has emerged out of the analysis as government challenges. Return on the huge investment and of course coupled with government challenges. Government monopolistic thinking and Government policy are not supporting the airline investment as it will bring specific risk to the market rationality, unlike another part of the globe without anti-competitive pricing. The findings are listed below as:

<i>ICC</i>	<i>Sub-Constructs</i>	<i>Categories</i>	<i>Focused Code</i>	<i>Observation</i>	<i>Evidence of Data Triangulation</i>
Airline Airport Relationship	Airport Infrastructure	Airline Airport Connectivity	Airport Infrastructure	Airport infrastructure is "ONE SIZE FITS ALL" concept means there is no dedicated terminal for low-cost airlines, No secondary airports are there in India, but SpiceJet is focusing now on UDAN scheme and provide connectivity to Tier 2 and Tier 3 cities, and it has significant routes in Udan schemes compared to IndiGo and others. Secondary Airport does help in reducing the airport charges impacting on the overall cost structure of LCC also projecting the customer delight.	Audio records and field notes of interviews; airlines report, airport operating data available on the intranet; Airport Connections Details through the intranet, Civil Aviation Policy Documents, LCC airline policy and annual report document. MYTP (Multiyear Tariff Planning) Documents of MIAL & DIAL (Mumbai & Delhi International Airport)
	Airport Operational Efficiency		Airport Operational Efficiency	Airport Operational Efficiency has an impact on airline Turn Around Time and ground time which ultimately has a huge correlation with the airline	Audio records and field notes of interviews; Researcher observations, airports and airlines report available on intranet regarding passengers, KPMG consultancy reports of TAT, air traffic, aircraft movements, load

				operating cost as aircraft on the ground is a liability for an airline and aircraft in the air is asset generating revenue for the airline. It also impacts the maximum aircraft utilization hours per day, which is the benchmark for the airline profitability in Low-Cost airliners. Operational efficiency also helps the airline to cut cost in terms of fuel burn, ground handling costs, staff cost and airport slot charges etc.	factors, market shares; LCC airline policy document.
	Airline Airport Financial Partnership		Airline Airport Financial Partnership	Financial partnership with Airport will take some time in the Indian context as it is a highly capital-intensive project to build a dedicated terminal for an airline. Today, the size of IndiGo airline is not that huge to infuse around 2000 crores for a dedicated terminal along with breakeven point challenge, return on that considerable investment and of	Audio records and field notes of interviews; researcher own observations and airlines annual reports available on the intranet; LCC airline policy document regarding financial data, financial reports; field notes etc.

				course, coupled with government challenges. Government monopolistic thinking and Government policy are not supporting the airline investment as it will bring specific risk to the market rationality, unlike another part of the globe without anti-competitive pricing.	
	Airline Operating Cost		Airline Operating Cost	12 - 15 % of the operating cost is due to airport charges for an airline. Airport as an airline Base, airport charges, parking stands and gates, communication systems, airports slots has directly correlated with airline operating cost. Airport choice for an airline also has a huge impact on capacity utilization and demand.	Audio records and field notes of interviews; airlines reports regarding operating cost, fuel costs, operating agreements available on the intranet; LCC airline operational documents; field notes, Airport Economic Regulatory Authority (AERA), MYTP (Multiyear Tariff Planning) Documents of MIAL & DIAL (Mumbai & Delhi International Airport)
			Government Challenges	Common user V/s Solo User, Voters Concern, Democratic and undemocratic issues, Vertical and horizontal integration from industry	Audio records and field notes of interviews; CAPA Consultancies Reports, Ministry of Civil Aviation (MoCA) Strategic

				side are a major challenge for the government towards airline airport interfusion. Few operational challenges are towards reservation systems, catering, Baggage Handling Systems and stakeholder management side.	Objectives, Ministry webinars etc.
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Table 5.4: Airport Airline Relationship

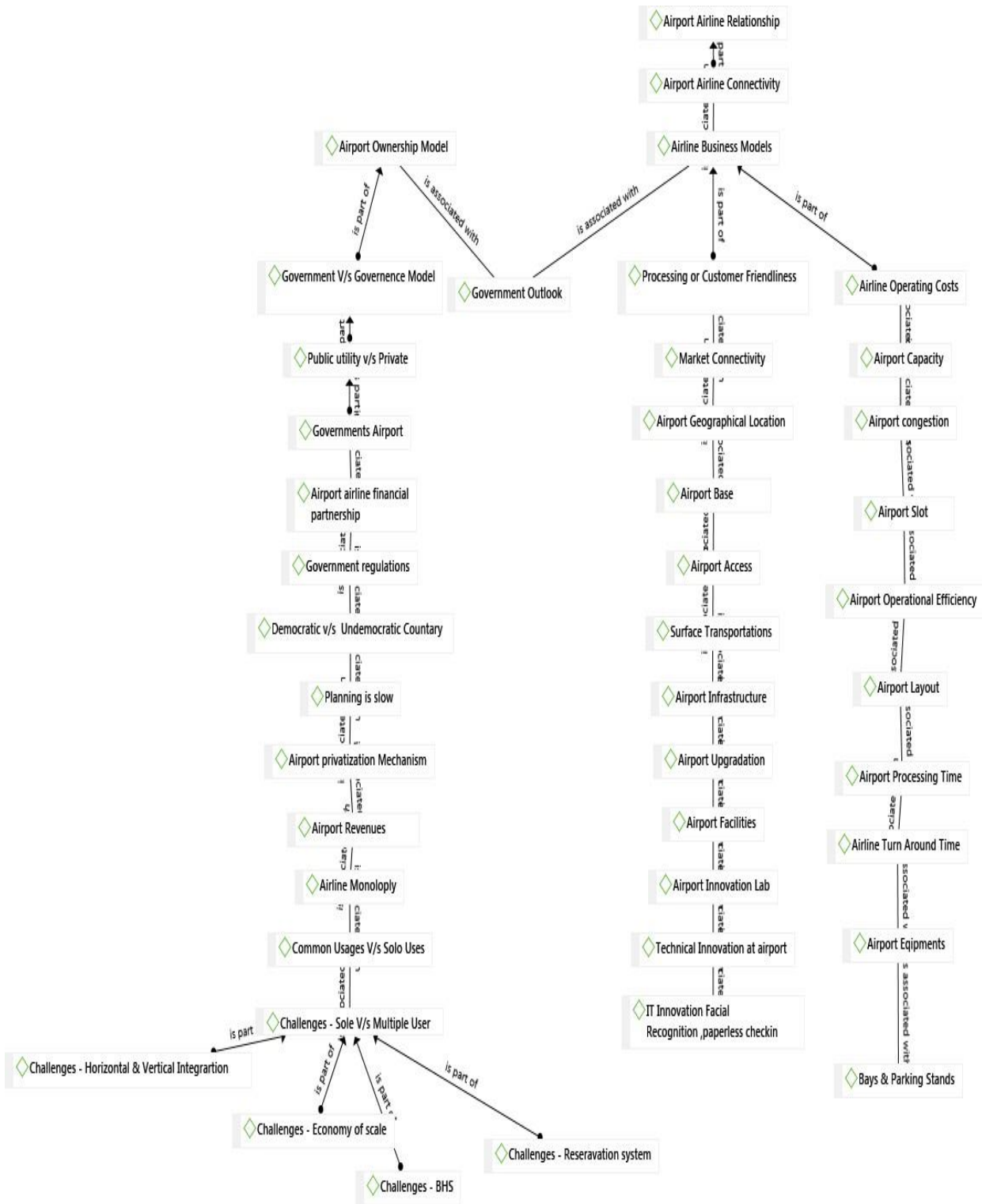


Figure 5.3: QN – Airport Airline Relationship

5.3.3 Regulatory framework impact on LCC sustainability

The sub-constructs illustrated from interview data such as Civil Aviation Policy, Route Dispersal Guidelines, Bilateral Agreement, Regulatory Compliance and Regional Connectivity Scheme etc. Selected quotations from the interviews are listed below: -

“In a competitive market generally LCC will prefer to have to cut their cost, how much cost they can cut, some operational cost they can cut some airport facility they can cut but beyond that people will not agree for this. so, they have limitations that's why you see there is no difference in prices of LCC and FSC, so regulatory issue are influencing the LCC” - Senior Regulatory Expert

"Regulatory place a huge role because you see the ATF fuel cost is very high in India. So, under Udaan scheme they have subsidized that, and we have taken the best out of it I would say. It was SpiceJet who adapted to their strategy instead they following or supporting SpiceJet what we do we adapt very fast try to understand what Government wants and work in that way, so regulation is same for everyone to SpiceJet to IndiGo to everybody, then you have to adopt it, and we adopted fast” - Senior General Manager (SGM)- Commercial

“I think lots of leads to be desired from a regulatory framework, While Things happened in a few years, but I think a lot still needs to be done especially for 5:20 rules but in reality now the abolish but it is still there, only you can't grow so many aircraft at a point of time, no it was not abolished it was changed to 0 20. 5/20 was meant for 5 years 20 aircraft, and now it has been changed to 0 years and 20-year graph in reality what happens to grow 20 aircraft you can't do it overnight you can't do it in one year or two years, show, in reality, you can do it less than three or four years, so it is moreover same only if you see the current operator it was done with a certain intent, but the outcome is not that lucrative.”- Senior Vice President (Network Planning and Revenue)

"When any sector is opened for private participation all want to operate on metro cities nobody wants to go to a rural area, so government decided that those who go to rural area consumer gets a cheaper call rate" - Senior Regulatory Expert

"Unfortunately, Indian regulatory Framework is like Indian airports "one-size-fits-all" so that means, they have the same rule for the pilot, i.e. FDTL flight duty regulation certain kind of regulations, so it doesn't help the airline to come cheap" – Airline /Airport Senior Expert

From the above quotations, it is quite evident from an interview that new civil aviation policy has been relaxation for airline in terms of bringing down the tax-based cost for airlines, bringing down VAT on ATF and reduced fare. Also, it brings ease in airline operating requirements for the international sector. Civil aviation policy also impacts on Foreign Trade Policies in terms of Export and import. Foreign Direct Investment (FDI), Airport Investment, Government taxes and revenues, which directly correlates with airline operating cost and profitability.

"Traffic rights government gives according to their priority; regional connectivity is an issue suppose some airline wants to go to the regional airport they go just to make breakeven they want minimum customers, so they need minimum a such number of pax to breakeven otherwise you will make a loss"- Senior Regulatory Expert.

"There is a lot of other areas weather airport charges secondary airports, are not being available, HAL Airport has been shut down from the commercial location when there is no capacity in Bangalore airport, similarly Delhi, so a lot of secondary Airports are being shut down, and this is the policy issue, so many things need to be done from regular device "-Senior Vice President (Network Planning and Revenue)

"Somewhere two-third is taken by the defence so defence you can't touch in India, but they may not be using so much. so why I am saying there are 550 commercial planes and there are no so many fighters in India, so how come and they are not doing the commercial flying" – Airline /Airport Senior Expert

"For an airline operation many things are crucial like cost, there is a cost to it, high operational cost, taxes and fuel it is highly influenced by the government so in such a situation when there is high cost (High cost of oil and taxes) aircraft also, so airline should factor all these prices including employee cost as well assuming employee cost is in their control, but fuel prices are not in their control, government taxes are beyond control"- Senior Regulatory Expert.

"Flight comes from Hyderabad to Agra it cannot come directly due to restriction, so how much fuel is wasting, how much time it is consuming. it is a national asset you monopolize some sector for security reason it's perfect, but at the same time it has a good economic utilization as nationals have to grow, GDP has to grow, so I think it's time now to liberalize this and gives more airspace for commercial airlines"- Senior Regulatory Expert

"Aviation policy now has started looking at regional routes, which may not be LCC but that is to connect the regional connectivity because government realize that connectivity in the region, smaller cities, towns will boost aviation" – Airline /Airport Senior Expert.

From above quotations, it is evident that LCC airlines are working in a very regulated environment in India, Traffic rights, i.e. to land in a particular country for commercial purpose and flight restriction because of protected airspace, slots right, airport operational issues, cultural sites and heritage preservation cause airline operations very challenging and hence impacting its financial performances.

"The problem is not only in aviation if you go to any other sector like telecom the major user of the airspace or spectrum is Defense, they are using it for security purpose no problem, but it has an economical usage so it should be liberalized" - Senior Regulatory Expert.

"There are a lot of regulations restrictions, is the right word, on the airspace. Two-third of the Indian airspace is not available so if we need to grow 30% of airspace to 300 percentage growth will not happen that means if there is a route for Delhi Bombay" – Airline/Airport, Senior Expert.

"Like apart from separate subsidy fund should be available and that fund should compensate the loss of the operator so in UDAN scheme certain part of this is covered but not fully so in UDAN they have given some slab system etc. and RDG is also there, and that should be further liberalized"- Senior Regulatory Expert.

From the interview observations and views of airline experts, it is very evident that Regional connectivity is the prime agenda for the Government to boost regional air transport and aviation development. Government has launched UDAAN scheme for making air travel cheaper and within reach of the common man. Government is also boosting airlines to operate domestically providing subsidy and VGF (Viability Gap Funding) also developing secondary airports for LCC airlines.

"A regulatory restriction there are those restrictions which have to be relooked, the policymakers are still very defence-oriented" – Airline /Airport Senior Expert so these ways connectivity in a rural area can be improved"- Senior Regulatory Expert.

"There are MRO setups in India; many airlines are going abroad go empty and come empty still they are saying it is cheaper because of high taxes here getting an aircraft repaired in India is expensive than going abroad so these are the constraints" - Senior Regulatory Expert.

“Pilot flying for Jet or IndiGo except there is Boeing and Airbus, but there is a market trend of Salary, it is the same, there is no regulatory (I am not saying reduce safety), but there is no flexibility which could help reduced cost to airlines” – Airline /Airport Senior Expert.

From above quotations and the observations from the interview highlighted as Indian Government is still Pro defence aviation-oriented and regulatory liberalization is not there in India. Ease of doing business, the airline operating permit and preconditions, Economic regulations with DGCA and BCAS (Security and Safety regulatory bodies) also impact airline financial health. The regulator has made a 1-year contract for the pilot hiring that is hurting LCC in the Indian market as they are receiving aeroplanes per week. However, the pilot shortage is there in the global market as well as the Indian market. The airline also imposes a significant cost in aircraft maintenance requirements by regulators which ultimately impacts the operating cost of airline in India. The detailed analysis is listed below as:

<i>ICC</i>	<i>Sub-Constructs</i>	<i>Categories</i>	<i>Focused Code</i>	<i>Observation</i>	<i>Evidence of Data Triangulation</i>
Regulatory Framework	Civil Aviation Policy	Regulatory Structure	Civil Aviation Policy	New Civil Aviation policy has been relaxation for airline in terms of bringing down the tax-based cost for airlines, bringing down VAT on ATF and reduced fare. Also, it brings ease in airline operating requirements for the international sector. Civil aviation policy also impacts on Foreign Trade Policies in terms of Export and import, Foreign Direct Investment (FDI), Airport Investment, Government taxes and revenues which directly correlates with airline operating cost and profitability.	Ministry (MoCA) Reports, Civil Aviation Policy Document 2019, Consultancies Reports, Researcher Own Observations
	Route Dispersal Guidelines		Regional Connectivity Schemes	Regional connectivity is the prime agenda for the Government to boost regional air transport and aviation development. Government has launched UDAAN scheme for	

				making air travel cheaper and within reach of the common man. Government is also boosting airlines to operate domestically providing subsidy and VGF (Viability Gap Funding) also developing secondary airports for LCC airlines.	Researcher Own Observations
	Bilateral Agreements		Bilateral Agreements	LCC airlines are working in a very regulated environment in India, Traffic rights, i.e. to land in a particular country for commercial purpose and flight restriction because of protected airspace, slots right, airport operational issues, cultural sites and heritage preservation cause airline operations very challenging and hence impacting its financial performances.	Airport Economic Regulatory Authority RDGs – Route Dispersal Guidelines, web documents on the intranet, Ministry (MoCA) Reports, New Civil Aviation Policy Document 2019, Ministry of Defense web material, researcher observation.
	Regulatory Compliance		Regulatory Compliance	Indian Government is still Pro defence aviation-oriented, and regulatory liberalization is not there in India.	DGCA & BCAS Websites, Ministry Documents, web documents on the intranet, Ministry (MoCA) Reports, New Civil Aviation Policy Document

				<p>Ease of doing business, the airline operating permit and preconditions, Economic regulations with DGCA and BCAS (Security and Safety regulatory bodies) also impact airline financial health. The regulator has made a 1-year contract for the pilot hiring that is hurting IndiGo as they are receiving aeroplanes per week, but the pilot shortage is there in the global market as well as the Indian market. The airline also imposes a high cost in aircraft maintenance requirements by regulators which ultimately impacts the operating cost of airline in India.</p>	<p>2019, Ministry of Defense web material, field notes and researcher observation</p>
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Table 5.5: Regulatory Framework

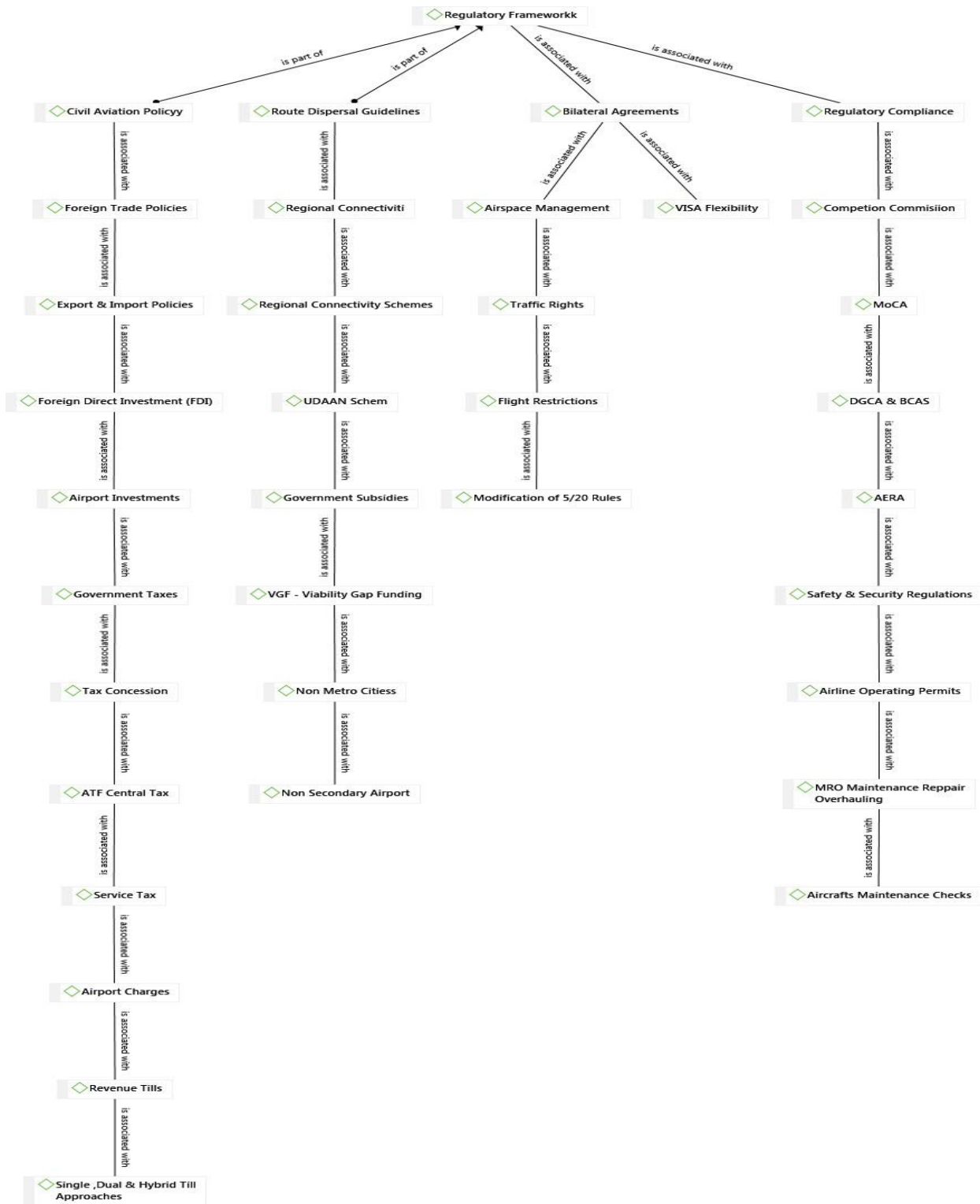


Figure 5.4: QAN -Regulatory Framework

5.3.4 Airline Strategies and Linkage with Business Model

The sub-constructs illustrated from interview data such as partners, Airline activities, airline resources, carrier revenue streams, value proposal, buyer relationship, airline channels, customer segmentation, cost structure and airline revenue streams Selected quotations from the interviews are listed below: -

"The idea is to keep costs structurally low, for example, the airline stocks no hot food on board and has no loyalty program. Every expense has to be justified without losing a single customer. This is our religion, and it serves us well."- Manager (Commercial Planning)

"LCC initially did not fly cargo. If you talk about European countries, LCC don't fly because the turnaround time is more. However, here in India, we have made it such an efficient model that in 30 minutes' time we offload almost three tonnages of cargo and load almost 3 tonnages of cargo in belly space of the aircraft. Fifteen mints loading and 15 mint loading, so efficiency is there which has done well for us. Roughly around 365 Cr is revenue generated by cargo"- Senior General Manager (SGM)- Cargo

"We want to reduce our distribution cost as an airline as a part of overall cost reduction so how would you do that, so let's see your distributor into the website you are also distributing through GDS and through travel agencies .so as a strategy this year will go through the direct channel which is website and mobile app and call centre and Adopt certain policies which will discourage people coming through travel agencies and rather encourage them to come to my website so strategy at a functional level so which is trying to achieve the overall goal"- Senior Vice President (Network Planning and Revenue)

Traditionally, airline worked with travel agents, but we have lifted that model, we have a direct contract with market players, for example, Today E-commerce is on the boom, Instead of E-commerce coming from agents, we directly have a

contract with them, ECOM and TDDC. These are the companies to whom we have direct contact with them. What happened, today you give around 10 12 % to your agent as commission part, we have taken out that and give direct deal with companies, we are the only airline in India with 100 percentages advanced money. In the cargo we take advance payments, another airline is on credit. Our risk factor is zero. Apart from that, we have come up with door to door model also, where we have some 200 trucks, we do B To B, and that also contributes to revenue 7 to 8 crores revenue per month" - Senior General Manager (SGM)-Cargo.

It is quite evident from above experts' quotations that SpiceJet has secure connections with industry partners like aircraft manufacturer company SpiceJet, Logistics Partners, Freight Agencies, GDS Distribution System, MRO and Maintenance Partners, Travel and Tourism enterprises, Car Rentals and Hotels, GSA etc. SpiceJet core strategies of expansion and diversified business-like cargo, logistics, catering, Distribution Strategies, Maintenance strategies are based on the reliable partner's association.

*"Sustainability is very simple. Airline profit margins are very low, and unfortunately, most of the airlines do not concentrate where most of the money is spent. Because most of the senior leaders or managers come from a good generic management background, not from the core aviation competent background"-
Senior Airline Airport Expert*

"So in airline, core money remains in technical areas into fuel, into maintenance contracts, leasing contracts, into training contracts, They are technical by nature, to understand them will take time, so people try and avoid that. IndiGo is making a smart move regarding the same" – Senior Aviation Business Consultant.

"There are a lot of studies are done before launching a route; once we started the route, we never close that route. That shows poor planning if the change is there. So, after 2015 we have not shut down any station. And as we mentioned in the last

34 months, we are getting profits, and we are listed company"- Senior General Manager (SGM)- Cargo

"Under UDAAN scheme, we have the pioneer to fly in Tier 23 and Tier4 cities, we fly to maximum tier 3 n tier4 cities why because we got the equipment that no other airline has got, that equipment is Q400, which we can fly (78 seater aircraft) and it requires 800 Meters of the runway, we are flying that to maximum stations, we have almost ten airports in India, and we are planning to have 30 more airports across India. In terms of expansion of SpiceJet, we have already ordered 200 aircraft and 50 Bombardier, so these 50 bombardiers will be flying under UDAAN scheme in tier 3 and tier 4 cities"- Senior General Manager (SGM)- Cargo.

"Load factor is now around 98% which is the highest today. It has been 98 percentages for more than 7 8 months; this shows that the customer has a lot of trust and faith in us. Out OTP is also 97 percentages, on-time performance, so if we maintain the OTP and customer trust, so that again results in repeatability of a customer travelling on SpiceJet flights. That makes every kind of difference"- Senior General Manager (SGM)- Cargo.

" Bulk aircrafts orders brings down the aircraft purchasing costs and single type of aircraft results in lower training costs and maintenance costs bringing cost saving efficiencies for airline "- Senior Regulatory Expert.

"We were the first to pioneer in having the direct customer, so obviously if you have direct customer, agents get rattled and disturb, so we decided that we will not disturb that. So we have added amazon, then DTDC, then ECOM. So, we did it in a phased manner. The whole bottom line kept on increasing but at the same time agents were not dissatisfied, so the market did go down. We cargo much VAL cargo, which is high-value cargo, that we targeted, we identify two or three agents, gave them the responsibilities of giving us tonnage cargo in the local

market, so today we do around 100 tonnages of VAL. which generates around 2.5 Cr of revenue"- Senior General Manager (SGM)- Cargo

"Cost is one of the keys, then market standing is second, on-time performance, your contract servicing, regulatory compliances, these are some key requirement for an airline, IndiGo is doing right mark"- Senior Airport Airline Expert

It is quite evident from that experts' statements SpiceJet is achieving "On-Time Performance with operational efficiency. SpiceJet has achieved this by a collaborative approach within its stakeholders, including customers. Crew Multitasking, quick turnaround time, performance automation, effective fleet scheduling, integrated communication, flight performance monitoring are the major strategies to achieve on time performance.

"SpiceJet bought Bombardier Q-400's to operate on Tier -2 & Tier -3 cities through regional connectivity but these types of aircrafts have more maintenance and fuel costs resulting on cost burden to spicejet" – Airport Airline Senior Expert.

"Cost-cutting is primarily on fuel part, we do fuel hedging, apart from that there is another cost, I mean regarding tight checks, audits done, we do have internal and external auditors that are very severe process, so leakages are less"- Airport Airline Senior Expert

SpiceJet is very oriented towards economy of scale concept in terms of supplying more seat, fuel hedging, and lower operating cost all thanks to its low-cost strategies, i.e. Single Fleet Type, higher aircraft utilization, more great capacity, more destination, market tapping, low maintenance cost due to younger fleet size, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and fleet planning.

"Operations, customer feedback, plays a very important role, customer feedback is taken from many sources travel agents, travel portals, they are also customers, they bring business to us so that taken very seriously, it is taken very seriously what customer is saying it is happening in the right direction or not. We have the tools we monitor, maybe 50 travel agents, five travel portals, you get to know what the reality is, what needs to be done, then the course correction is done automatically. Ultimately it is customer feedback, based on that we do that" - Airport Airline Senior Expert

IndiGo follow a policy of network mirroring. It means they launch flights where other airlines are already present to drive their rivals out with low pricing. As competition withdraws from specific routes, they increase prices and get profit. Recently, Go Air going international with launch flights to Phuket and Male. IndiGo shockingly also after a few days did the same thing with similar launch dates. They will never let others flourish"- Senior Regulatory Expert

"Cost-cutting along with CRM is primarily on fuel part, we do fuel hedging, apart from that there are other costs, I mean regarding tight checks, audits done, we do have internal and external auditors that is the very severe process, so leakages are less" - Airport Airline Senior Expert

"Employees has always been taken care of. No organization can flourish until unless you don't care of employees. If employees are comfortable, growth is there for them, their growth n their comfort both are taken care of. We have a lot of incentive and promotions for the employee, and we always believe that employee should grow, we do not take punitive actions until unless the employee is found to be major negligent, or mischief"- Senior General Manager (SGM)- Commercial.

SpiceJet value proposition lies in Common man orientation, Strong Customer Service, Flexi and discounted fares and on-time performance with elite travel experience. SPICEJET has created value by offering the lowest fares having one

type of aircraft (Boeing) with low operating and maintenance cost. Through staff behavioural training, they maintain a strong relationship with the customer with remarkable service.

"Airport ready for up-gradation is crucial, government invest in airport up-gradation, we bring in the bigger equipment also, but at least the connectivity part we provide under UDAAN scheme that is the main goal"- Senior General Manager (SGM)- Commercial

"You renegotiate this contract by 5 paise bring it down, but the money lies in fuel hedging, money lies in engine power by our contracts, so that means you must understand the technicalities of the things which does not come easy. So, what happens is that the core money continuous to be lost and the fringe, top layer only you keep scrapping which is a thin layer, and you think that you are doing it" – Senior Airport and Airline Expert.

SpiceJet essential resources are capital, aircraft fleet, airport bases, empowered highly trained and professional staff, strong management team, strong brand and image, profitable routes and active schedules, innovative revenue management and immense inventory with business sense., Aircraft Bulk order, Aircraft Utilization, competitive airport slots, Employee professional growth appreciation, aggressive promotions, route planning along with strong inventory management are the major strategies developed based on resources.

"I mention we want the common man to fly, so obviously we work according to that where there is scope for the common man, and the number of pax is there we launched the flight. Like many of the station, we are pioneer in that, and we got an excellent response. To mention, Delhi Dehradun, Pondicherry – Hyderabad, Huge traffic is there; we keep on exploring the traffic pattern, we find much scope in tier 2 tier3 tier 4 cities where the pax want to fly and willing to pay" - Airport Airline Senior Expert.

"There are very few who understand the cargo as a revenue generator activity. However, those are premier carriers, they have freighters, and the world operates differently. If you talk about china, so china has got, to name the airline, SAF airline got 51 freighter aircraft, that is the kind of e-commerce in China. China Alibaba has got eight sister companies, all of them contribute revenue to SAF" - Senior General Manager (SGM)- Commercial

"SpiceJet opted brilliant strategy to fasten the processing time and reducing turnaround time by using passenger friendly ramp for boarding processing " - Senior Airport Airline Expert

"Airport lounge service has initiated by SpiceJet with an exclusive catering menu and budget carrier has highest aircraft utilization which bring revenue to the airline pocket. The operational proactiveness and financial grip results into successful business model for the airline"- Manager (Commercial Planning)

"No loyalty programs. Again, wonderful thought. People look at prices than loyalty. So chuck loyalty and keep fares low" – Senior Regulatory Expert.

SpiceJet significant revenues come from passenger sales, cargo and logistics revenues and associated business-like hotels and retail brands. Significant strategies to enhance sales /tickets through innovative marketing, revenue management, growth and expansion strategy through partnership and expansion. The detailed analysis is tabulated below:

<i>ICC</i>	<i>Sub-Constructs</i>	<i>Categories</i>	<i>Focused Code</i>	<i>Observation</i>	<i>Observation</i>
Airline Strategies and Linkage with Business Model	Airline Partners	Airline Strategies and Linkage with Business Model	Key Partners	<p>SpiceJet has secure connections with industry partners like aircraft manufacturer company SpiceJet, Logistics Partners, Freight Agencies, GDS Distribution System, MRO and Maintenance Partners, Travel and Tourism enterprises, Car Rentals and Hotels, GSA etc.</p> <p>SpiceJet core strategies of expansion and diversified business-like cargo, logistics, catering, Distribution Strategies, Maintenance strategies are based on the reliable partner's association.</p>	SpiceJet Annual Report 2019, AMADEUS & SITA Report, Annual Presentations, Web reports freight, Airline Websites, Field Notes and own Researcher observation.
	Airline Activities		Airline Key Activities	<p>SpiceJet is also achieving "On-Time Performance with operational efficiency. SpiceJet has achieved this by a collaborative approach within its stakeholders, including customers. Crew Multitasking, quick turnaround time, performance automation, effective fleet scheduling, integrated communication, flight performance monitoring are the major strategies to achieve on time performance.</p>	Spice Jet annual report 2019, Industry Reports, IATA analysis, Annual Presentations, Web reports freight, Airline Websites, Field Notes and own researcher observation.

	Key Resources		Airline Resources	SpiceJet essential resources are capital, aircraft fleet, airport bases, empowered highly trained and professional staff, strong management team, strong brand and image, profitable routes and active schedules, innovative revenue management and immense inventory with business sense., Aircraft Bulk order, Aircraft Utilization, competitive airport slots, Employee professional growth appreciation, aggressive promotions, route planning along with strong inventory management are the major strategies developed based on resources.	Field Notes and own researcher observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019. Operational KPI – Key Performance Indicator industry publications.
	Key-Value Propositions		Value Proposition	SpiceJet value proposition lies in Common man orientation, Strong Customer Service, Flexi and discounted fares and on-time performance with elite travel experience. SpiceJet has created value by offering the lowest fares having one type of aircraft (Boeing) with low operating and maintenance cost. Through staff behavioural training, they maintain a strong relationship with the customer with remarkable service.	Field Notes and Researcher's observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019. Customer Survey Results 2018-19, Industry reports (IATA, CAPA).
	Airline Customer Relationship		Customer Relationship Management	SpiceJet maintains high-value customer relation by Automated and Impersonal customer-oriented strategies in term of effective CRM (Customer Relationship Management). Innovative product development, marketing, customer feedback and suggestions, customer call centre and secure complaint monitoring unit along with	Field notes, researcher observations, Customer feedback results available on the web, industry reports, SpiceJet annual reports 2018,2019.

				customer-oriented staff training analysis are few of the strategies towards the same.	
	Airline Channels		Airline Channels	SpiceJet airline key channels are Sales, Distribution and communication through which they are gaining competitive advantage in the market. OTA, Ex web and web-based sales distribution are key strategies adopted by the SpiceJet.	Field Notes and Researcher observation, Travel portal reports, Website data, Annual Report 2019, Corporate presentations 2019.SITA industry report.
	Customers Segmentations		Passenger Segmentation	Price sensitive young customer of SpiceJet are majorly in the age bracket of 20-45 years. FareDE bundling, Dynamic pricing, Discounted and Flexi fares are the significant strategies SpiceJet airline is building competitive advantage.	Field Notes, Researcher Observation, SpiceJet booking websites, SpiceJet Annual Report 2019, Passenger Traffic data from MoCA & DGCA, Passenger profiling report, Tariff Publications etc.
	Airline Cost Structure		Airline Costs	SpiceJet is very oriented towards the economy of scale concept in terms of supplying more seat, fuel hedging, and lower operating cost all thanks to its low-cost strategies, i.e. Single Fleet Type, higher aircraft utilization, more great capacity, more destination, market tapping, low maintenance cost due to younger fleet size, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and fleet planning.	Field Notes and researcher observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019, CAPA & KPMG consultancy Reports, Web Data, IATA Industry outlook.
	Airline		Airline Revenue	SpiceJet significant revenues come from passenger sales, cargo and logistics revenues	Field Notes and Researcher own observation, Financial Reports and

	Revenue Streams		Streams	and associated business-like hotels and retail brands. Significant strategies to enhance sales /tickets through innovative marketing, revenue management, growth and expansion strategy through partnership and expansion.	Balance Sheets , Website data , Annual Report 2019, Corporate presentations 2019,CAPA & KPMG consultancy Reports, Web Data , IATA Industry outlook.
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Table 5.6: Strategic Airline linkage with Business Mode

5.3.5 LCC KEY FEATURES

The sub-constructs illustrated from interview data such as Cost leadership, Innovative Marketing and Sales, Dynamic Pricing and Revenue Management, Simplicity in business Model, Stakeholder Management Skill competency, Strategic Decision Making and Government Support etc. Selected quotations from the interviews are listed below: -

"Key CSF for an LCC airline are Airline operations-To take care of the customer, customer-centric airline-customer demand, needs, service quality and satisfaction. Sales and Marketing-Customer and niche market you want to enter. Market forces drive revenue Management to a certain extent, after that if you can take care of the customer, the customer will pay for that .it is not that customer will not pay. There are certain level which market forces can drive after that how the airline is doing" Senior General Manager (SGM)- Commercial

"Airports have to be upgraded, once they are upgraded more pax will fly, and it will help any airline including LCC" Senior General Manager (SGM)- Commercial

"I think a couple of things, brand, marketing, customer service and that is key how people perceive you, so the brand image is essential, that is one of the key factors then the network, network / reach how many places is you can fly to what is your schedule what is the depth you have how much how many options you will get to the customer if you have one flight in a day in the particular sector whether your competition has a ten flights in a day, obviously the customer will go to the 10th Rights Day kind of airline because if he misses one flight we can book the alternate one I think that pricing is always important but I will come back to the main point pricing is not the main thing from a success point of view what matters is how you manage your brand, marketing is important, and your network is

important I think these two are the key things then you can manage"- Senior Vice President (Network Planning and Revenue)

"Revenue management, they are doing good they can also promote ancillary revenue because some airports like Cochin airport is 72% non-aero revenue so the airline can also do something like this, they should evaluate further good marketing model to make out good ancillary revenue". Senior Airport Regulatory Expert

Run the airline as an airline, not as a supermarket. So that means the people with core competence have to take core airline decisions, rest of them can be outsourced, can be done by the third party, those contracts, service contracts, revenue management. These are core to the airline; they cannot be you know kind of, much dilution is happening at that level. Nothing wrong but it is not taking it to the next level it is only bringing it down. So that is the only thing. Senior Airport Expert

"Differentiation in the prices of LCC and FSC because if you see the cost of an airline, it is beyond their control like fuel costs, so that restrict them to create any pricing advantage than FSC because if you select LCC then what will be your preference, so price should be low, but there is no differentiation in prices".

Senior Airport Regulatory Expert

"Price is what LCC should look into, but for that, all these regulations need to be removed like high taxes and all if that is gone LCC have a better future"- Senior Airport Regulatory Expert.

<i>ICC</i>	<i>Sub-Constructs</i>	<i>Categories</i>	<i>Focused Code</i>	<i>Observation</i>	<i>Evidence of Data Triangulation</i>
LCC Key Features	Cost Leadership	LCC Key features	Cost Leadership	Operating cost is a significant criterion for LCC airline profitability and benchmarked as CASM (Cost Available Seat Mile). Higher aircraft utilization hours, Higher Stage Lengths, Economy of Scale, Crew hiring, Efficient fleet and network planning along with new-gen aircraft engines. Fuel optimization through Software. Being thin margin business, the key for sustainable business model is lower operating cost.	Field Notes and researcher observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019, CAPA & KPMG consultancy Reports, Web Data, IATA Industry outlook.
	Strategic Decision Making		Strategic Decision Making	Strategic Decision making for an LCC airline is crucial for success .i.e. Network decision, product decision, revenue and pricing decisions, distribution, personnel decisions, organizational decisions, operating decisions, Fleet Planning and rotation, Fleet Assignment decision, market-driven decisions etc. Data-Driven Decision Making is critical for sustainability. Decision making helps SpiceJet to integrate the functioning and to generate more revenue through effective route planning, fuel trip planning, scheduling, revenue	Technical reports, SpiceJet Annual reports, Operational KPI studies, Web base data , field notes and researcher observations.

				management etc.	
	Revenue Management		Revenue Management	Being oligopolistic market, dynamic pricing and revenue /yield management are crucial for the airline. It allows the buffer to the airline in terms of seat bookings at different fare levels at the highest ticket price. At given air traffic growth projection, the dynamic pricing will be game-changer.	Field Notes and Researcher observation, Financial Reports and Balance Sheets, Website data, Annual Report 2019, Corporate presentations 2019, CAPA & KPMG consultancy Reports, Web Data, IATA Industry outlook.
	--		Simplicity in Business Model	In India, the simple airline business model without any complexity and multilayer with essential services along with customer services is sustainable. The transparency in the business model is critical to communicate your business vision to end-users.	Field Notes and Researcher Observations, Annual reports are silent on the issue.
	Stakeholder Management		Stakeholder Management	Efficient stakeholder management is interloped in airline business model sustainability. SpiceJet enjoys a good relationship with its primary and secondary shareholders, customers and government agencies. It helps in reducing cost and enhance system efficiency. SPICEJET is playing the entire competitive game on strong stakeholder management, a good relationship with aircraft manufacturer BOEING, maintenance contractors, MRO, Refuelers, software developers and	Field Notes and Researcher own observation, Financial Reports and Balance Sheets , Website data , Annual Report 2019, Corporate presentations 2019, KPMG Consultancy Reports, Web Data , IATA Industry outlook.

				passengers keeps airline sustainable. Stakeholders and reliable partnership results into lower unit cost of SpiceJet in terms of fleet cost, ground handling fuel cost etc.	
	Skill Competency		Skill Competency	Globally airline industry is facing talent shortage being domain-specific industry. Also, the lean organization structure allows the staff to participate in decisions making and empower them to decide in critical situations. SpiceJet has dedicated training wing for the staff training and empowerment. Empowered employees contribute to strategic decisions also contribute to reducing cost as training outsourcing is expensive for an airline also provides edge to make revenue.	SpiceJet Annual Report, 2019. Web Data, Training Report, Field Notes and Observations.

	Government Support		Government Support	Government support is vital for the boost of aviation, especially the airline industry in India. Infra development, Airport investments, public-private partnership, flexible regulations, VISA relaxation, foreign trade policy and interstate regulatory compliances along with ease of doing business in India are directly correlated with airline sustenance in India. At present, Government is defence oriented, and policymaking is skewed towards defence, but liberalization in regulations make the LCC business model more sustainable in the Indian context. For example, SpiceJet airline survival is the story of government success during crisis @ 2015.	Field Notes and Researcher Observations, Published and Web-based data, Civil Aviation Policy ministry policy formations and framework reports.
	Innovative Sales and Marketing		Innovative Sales and Marketing	Innovative marketing and sales are vital for the airline business. Marketing mix with product diversification, price promotions, tickets distribution, brand image, product innovations and aggressive sales strategies and policies helps to have a more significant number of passengers flying with the airline hence provide a competitive advantage to sustain in the airline industry. SpiceJet is using the word of mouth and social media marketing along with branding too seriously with catchy slogans.	SpiceJet corporate Presentations, Marketing reports, web based data, SpiceJet annual reports, Field notes and Observation

5.4 FINDINGS AND DISCUSSION

This section discusses the findings from empirical data analysis on airline strategic planning and management practices of the LCC airline SpiceJet. It furthers the role of airport and regulatory framework on LCC business model sustainability. Also, it includes findings and discussion regarding various LCC strategies linkage with its business model and holistically the key critical success factors mandatory for LCC sustainability in the Indian context

5.4.1 LCC Airline Critical Success Factors

The following categories were illustrated by detailed data analysis which contributes to CSF of a LCC in the Indian context.

- A. Airline Strategy Planning and Implementation
- B. Airline and Airport Connectivity
- C. Regulatory Framework
- D. Airline Strategies and Linkage with Business Model
- E. LCC Key features

Earlier literature on critical success factors of low-cost carriers has identified five major categories, as discussed in the review of the literature section. Evidence of all these five primary contributing factors, including two (2) new subcategories, i.e. Government Challenges and Transparent Business Model was recorded in data analysis.

Earlier literature on strategic planning and implementation has acknowledged sub construct as Strategy Review, Business Environment Scanning, Strategy Formulation, Strategy Implementation, Strategy Monitoring, and Strategy Renew (Course Correction). Business model hybridization is an excellent methodology for an aircraft to accomplish economic lead and viability However, this expansion strategy is not propped up by product proliferation (Barbot, 2008). There is evidence of all constructs from the analysis of data that are listed above. From interview data, it is quite evident from policy documents that SpiceJet airline's objective is profitability through low cost. Based on airline internal and external scanning along with interview analysis,

most of the *strategy formulation* is done by higher Management @ EXCOM (Executive Committee) level. Then further dropped down to departmental level through the Head of the departments. Every activity at the departmental level represents the SOP from the corporate level to the end department.

This case study has found the evidence that based on strategic vision and plan; *organizational goals are developed* and discussed at EXCOM committee meetings and well looped in by departmental goals. Every individual is assigned job roles, and individual goals over performance are measured. Airline Goal Sheet, competency Mapping, Concept Map-based domain training are various tools regarding the same. As indicated by the airline managers /experts, *Strategy Monitoring* is done through an automated Tracking System by external and In-house Stakeholders, including customer's feedback and suggestions. Task notifications and Task trackers are used for employee quantitative Tracking. Also, experts shared that *Airline Strategy Committee* does airline strategic renew based on the Stakeholders Meeting discussion followed by a course correction / Re correction through the departmental meeting.

Earlier literature on Airline and Airport Connectivity has identified with sub-constructs such as Airport Infrastructure, Airport Operational Efficiency, Airline Operating Cost, Airline Airport Financial Partnership, and Government Outlook. There is a pressure from LCC airlines on the airport managing bodies to reduce the airport use fees and redress the forfeit by ameliorating the non-aeronautical income (**Humphreys, 2006**). This investing study has originated the evidence of all these elements through the practical evidence of airport airline financial partnership is missing from the Indian context as per airline experts. As per interview data analysis, Airport Operational Efficiency has an impact on airline Turn Around Time (TAT) and ground time which ultimately has a huge correlation with airline operating cost.

Better infrastructure also helps the airline in branding and uplifting customer service and passenger experience. As per the official statement by SpiceJet chairman “Other than ATF cost, different additional charges, UDF and sharp R&N along with landing charges at air terminals bring total costing configuration of carriers nonviable”. As per airline experts, financial partnerships with airports will take some time in the Indian context as it is a highly capital-intensive project to build a dedicated terminal for an airline. **(Mark Hansen, 2013)** pointed out the importance of punctuality and on-time performance (OTP). If failed in maintaining the same, it mitigates the income and market-share of an air-carrier. Due to delays at the air terminal, significant costs, namely crew, fuel, and maintenance costs, increase. Such costs do not include the buffer costs viz. insurance and depreciation, rental and lease, ownership of the aircraft.

The experts also shared that Government monopolistic thinking and government policy is not supporting the airline investment as it will bring specific risk to the market rationality, unlike other parts of the globe without anti-competitive pricing. The study emerged with one new subcategory named as government outlook/challenges. Challenges in terms of the dedicated terminal - Common user V/s Solo User, Voters Concern, Democratic and undemocratic issues, Vertical and horizontal integration from industry side are major for the Government towards airline airport financial interfusion.

Earlier literature on regulatory framework as mentioned in the section of literature review 2.6.6 has recognized with sub construct, i.e. Civil Aviation Policy, Regional Connectivity Schemes, Bilateral Agreements, and Regulatory Compliance. This case study has found evidence that Regional connectivity is the prime agenda for the Government to boost regional air transport and aviation development. New Civil Aviation policy has been relaxation for airlines in terms of bringing down the tax-based cost for airlines, bringing down VAT on ATF (Air Turbine Fuel).

The Government has done significant works in the aviation division, which incorporates a few activities such as allotment of INR 480 Crores is in the

financial year 2019. It is anticipated that the fund will be used in constructing new air terminals, expanding operations inside the UDAN scheme, and increasing the capacity of the airline's network, decreasing expenses in the business. Security should be diminished. In a will to expand the FDI limit as far as possible, Indian Domestic Carrier has planned to establish a centre point for maintenance, repair, and overhaul (MRO) works just as to loan and rent 49% of the current aeroplanes.

As per airline experts, LCC airlines are working in a very regulated environment in India. Traffic rights, i.e. to land in a particular country for commercial purpose and flight restriction because of protected airspace, slots right, airport operational issues, cultural sites, and heritage preservation cause airline operations very challenging and, hence impacting its financial performances. Likewise, gentrification in traveller explicit responsibility(s) will decrease the explicit aircraft charges and the other way around for given reasonable rate of return and prediction of business volumes (travellers, cargo, and so forth.). **(ICAO, Airport Economic Manual, 2006).**

This study could find out the evidence that regulatory compliance is playing a crucial role in airline sustainability. Indian Government is still pro-defence aviation-oriented, and regulatory liberalization is not there in India. Ease of doing business, an airline operating permit and preconditions, Economic regulations with DGCA, and BCAS (Security and Safety regulatory bodies) also impact airline financial health and sustainability in airline business model in India. The civil aviation ministry ,Airport Authority and , the DGCA are the regulators in terms of operations, authority, aircraft purchasing and various circulars. Impacting LCC airline operations . (SpiceJet, 2018-19).

Earlier literature on the LCC business model and strategic linkage as discussed in section 2.6.7 has recognized with sub-constructs like Airline Partners, Passenger Segmentation ,Value Proposition, Customer Relationship Management, Key Activities, Key Resources, Airline Costs, Airline Channels, and Revenue Streams. As per the experts' interview analysis, it is quite evident that SpiceJet has secure connections with industry partners like aircraft

manufacturer company SpiceJet, Logistics Partners, Freight Agencies, GDS Distribution System, MRO, and Maintenance Partners, Travel and Tourism enterprises. Car Rentals and Hotels, GSA etc. As a role of its worldwide expansion plan, SpiceJet contracted a memorandum of understanding on web and code sharing pacts to Emirates Airlines.

This permits SpiceJet travellers from India to utilize consistent interchanges in Europe, Africa, the United States, and the Middle East utilizing the UAE's large airline system. While this agreement will extraordinarily help travellers going on both airline systems, it will essentially expand the organization's operating revenue (Annual Report 2018-19). IATA association empowers carriers to execute world finest procedures and advancements and give a top-notch experience each time a traveller flies with us. IATA additionally gives a stage to working intimately with other carrier individuals and exchanging codes and agreements with collaborated airlines to extend their air network systems. SpiceJet joined forces with Amadeus as the primary worldwide sales associate for different fares accessible through the Amadeus Travel Platform. Just because, SpiceJet has collaborated with affiliates to reach travellers around the globe, feature their products around the world, access new markets and accomplices, and extend their client base. (Corporate Presentation & Annual Report 2018-19)

SpiceJet is also achieving "On-Time Performance with operational efficiency. As per airline experts, SpiceJet has achieved this by a collaborative approach within its stakeholders, including customers. It is quite evident from airline experts interview analysis that SpiceJet's key resources are capital, aircraft fleet, airport bases, empowered highly trained and professional staff, strong management team, strong brand and image, profitable routes and effective schedules, innovative revenue management and immense inventory with business sense.

Through web portals and website along with policy documents analysis, it is quite visible that SpiceJet's value proposition lies in Common man flying

orientation, Strong Customer Service, Flexi and discounted fares, and on-time performance with elite travel experience. **Airline policy document** reads "We endeavour to give our visitors a sheltered, agreeable and exceptional journey with a superior experience. Augment the flight involvement in SpiceMax individual bookings for development corresponding flights for a problem-free encounter. SpiceJet has created value by offering the lowest fares having one type of aircraft (Boeing) with low operating and maintenance costs. Also, the analysis resulted in SpiceJet maintain high-value customer relations by Automated and Impersonal customer-oriented strategies in terms of effective CRM (Customer Relationship Management).

Inventive resolutions are given to reinforce the information that drives decision-making as far as programmed rostering to upgrade crew arranging with advanced oriented crew and fleet supervision to improve the efficiency of the team. Client-driven Airport is crowding, and flight postponements data is given by personal correspondence. Crew individuals are additionally enhancing their everyday exercises by creative arrangement as far as computerized data delivered by SpiceJet. Robotized Baggage Reconciliation System (BRS) has upgraded the ongoing tracking activity of mismanaged luggage to boost client satisfaction. (**SpiceJet Annual Report 2018-19**) .

This study could find out evidence that SpiceJet airline's key channels are sales, distribution, and communication through which they are gaining competitive advantage in the market. OTA, Ex web, and Web-based sales distribution are key strategies adopted by the SpiceJet. At the corporate level, forceful tenders for regional connectivity routes UDAAN (Ude Desh Ka Aam Nagarik) have raised, and new air-system spokes have been presented. This guarantees immense potential in developing markets and empowers the SpiceJet brand to profit from the compensations in the coming years. With the starter of SpiceClub, the brand has figured out how to offer its clients the most extreme advantages and rewards for itineraries. (**SpiceJet, 2018-19**)

This case study could find evidence that SpiceJet is very oriented towards cost-cutting through the economy of scale concept in terms of supplying more seats, fuel hedging, and lower operating cost by practising its low-cost strategies. It is quite evident from the interview's analysis that SpiceJet's significant revenues come from passenger sales, cargo, and logistics revenues, and associated business-like hotels and retail brands. SpiceClub is the new time of a dynamic loyalty program. The target of this program is to address the issues of clients and make a large and solid client base, concentrated on expanding the number of straight bookings and invigorating extra sales. In-flight entertainment setup – Spikeingage, gives an alluring scope of entertaining in-flight content to improve the air-travel experience for clients. The special services and products, for example, U First ((priority check-in, priority baggage), visas, Seat + Meals, MyFlexi plan, and gift vouchers have acknowledged a colossal reaction from our clients. SpiceVacations.com is an excellent travel platform that provides customized travel bundles at viable costs for leisure and business tourists. Spice Experiences is a newly introduced activity gateway at Spice Vacations that lists a wide variety of entertaining activities, easy pick-up and drop to air terminals and nearby conveyance support to SpiceJet clients. (SpiceJet, 2018-19) (SpiceJet, 2018-19)

Earlier literature on features of the low-cost airlines has identified with sub construct as Cost Leadership, Strategic Decision Making, Revenue Management, Innovative Sales and Marketing, Stakeholder Management, Skill Competency, and Government Support. A new subcategory has emerged from the analysis titled "Business Model Simplicity". In India, simple business model without complexity and multilayer with essential services along with customer services is sustainable.

The transparency in the business model is critical to communicate your business vision to end-users. IndiGo airline business model is straightforward

with cost leadership focus, and customers are also involved in their strategic vision and helping the airline to achieve the on-time performance. Transparency in the business model not only limited to passengers or stakeholders but also about sharing the information, collaboratively joint initiatives, and better productivity in terms of strategic alliances or partnerships. If passengers will close to what airline is doing it means, they will be involved in benchmarking the airline and loyal to the offerings. It also adds simplicity in the business model without any multi-layer complication in perceiving the services. Transparency in the business model will drive down to strategy and tactical pricing, which can be treated as a vehicle to drive passenger's behaviour while benefitting partners, stakeholders, and other associated service providers also.

The study could find evidence that Operating cost is a major criterion for LCC airline profitability and benchmarked as CASM (Cost Available Seat Mile). Strategic Decision making for an LCC airline is crucial for successive. Network decision, product decision, revenue and pricing decisions, distribution, personnel decisions, organizational decisions, operating decisions, Fleet Planning and rotation, Fleet Assignment decision, market-driven decisions, etc. Data-Driven Decision Making is key to sustainability.

Lessening costs and keeping up an ideal cost structure are basic and are a significant region of corporate intercession in price-sensitive marketplaces. The firm has concentrated on computerization, workforce advancement, expanded effectiveness, and productive utilization of resources for diminishing costs consistently. B737 MAX low-fuel aeroplane and fuel-controlled flights reduce fuel and operating expenses while lessening sound and ozone-depleting substance outflows. Furthermore, the firm utilizes different mileage strategies, including fuel inclusion and the utilization of light seats. It enhances the productivity of significant duties, for example, decreasing freight handling, aeroplane procurement and support expenses, and training expenses. (Spicejet, 2018-19)

Airline experts also shared that being an oligopolistic market, dynamic pricing, and revenue /yield management is crucial for the airline. SpiceJet continually strives to track route planning and flight path closely.

The new subcategory that emerged from the interview analysis highlight that the simple airline business model without any complexity and multilayer with essential services along with customer services is sustainable. Also, Efficient stakeholder management is interloped in airline business model sustainability. IndiGo enjoys a good relationship with its primary and secondary shareholders, customers, and government agencies. The case study could find out evidence that SpiceJet airline hires very professional and competent staff. Also, the lean organization structure allows the staff to participate in decisions making and empower them to decide in critical situations.

The firm propelled the Optimized Recruitment Process and Personnel Management System. Additionally, Spice Star Academy recruited 2,564 extremely competent experts for developing the skills of the cabin staff. Spice Star Academy propelled the carrier's first such activity in June 2018. Spice Star Academy awards the degree in Bachelor of Business Administration with various universities in India. The institution encourages proficiency in the candidates by yielding top-notch training which leads to providing the airline with excellent human resources. The institute also encourages the flight attendants to develop their skill. (SpiceJet, 2018-19). Innovative marketing and sales are critical to the airline business.

Evidence was found that marketing mix with product diversification, price promotions, ticket distribution, brand image, product innovations, and aggressive sales strategies and policies helps to have increased passenger load factor hence provide a competitive edge. As per expert's interview analysis, government support is vital for the boost of aviation, especially the airline industry in India. Infra development, Airport investments, public-private partnership, flexible regulations, VISA relaxation, foreign trade policy, and interstate regulatory compliances along with ease of doing business in India

are directly correlated with airline sustenance in India. By the law, AERA's officials cover supervision and obsession of fares for aerospace administrations, client charges, and observing of significant air terminals execution principles. (AERA, 2019). The aviation sector is held by changes in universal unrefined petroleum costs and foreign exchange rates. These variables seriously influenced the aircraft's income throughout the year. The fuel prices have tumbled forcefully this year because of lower oil costs. Yet, LCCs have their immediate expense structure to overcome the difficulties of the functional condition .At present, the Government is defence-oriented, and policymaking is skewed towards defence, but liberalization in regulations make the LCC business model more sustainable in the Indian context.

5.5 CASE STUDY FINDINGS

The literature review has evident the constructs and sub-constructs verified in the empirical analysis of data collected through aviation and airline experts in India. Section 5.3 illustrated the detailed discussions, observations and findings as:

The case study finding is penned down below:

- *Findings related to RQ 1 (How LCC airline plan and practice business model and strategy to sustain?)*
- ***SpiceJet airline objective*** is profitability through low-cost operations and higher revenues, customer friendliness and achieves Highest Load Factor that projects in it are mission and policy documents.
- Most of the *strategy formulation is done by* higher Management as “Commercial Meeting”. Corporate strategy formulation is dropped down to business-level mainly by C level (Chief Commercial Officer, Chief Information Officer, etc.) ranking. Then further dropped down to departmental level through Head of the departments. Every activity at departmental level represents the SOP from the corporate level to the end department. Ex- for a new route selection, the mutual decision is

being taken by sales and revenue by analyzing the profitability of that route.

- *Dependent on the types of strategic level*, i.e. Corporate level strategies include corporate growth, Range and Diversity, business expansion. Business Level Strategies includes Catering Service Agreements, Contract Management, Lean Distribution System, Lean Organization Structuring. Functional Strategies includes Operational Strategies, Marketing Strategies and Financial Strategies along with firm scanning, i.e. SpiceJet key strength is Brand, Ancillary Revenue, Cargo Revenue. SpiceJet key opportunities are International Market Potentials, Market Size, A, Chartering Business. SpiceJet critical Threats are from competition, regulatory framework, Political Structure, Staff Poaching, etc.; the strategies are formed.
- Based on strategic vision and plan, organizational goals are developed and discussed at *Commercial Meeting* and well looped in by departmental goals. Every individual is assigned job roles, and individual goals over performance are measured. Airline Goal Sheet, competency Mapping, Concept Map-based domain training are various tools regarding same.
- *Strategy monitoring* is done through monthly/Bi-Monthly review of individual projects Assigned to each department by the Special projects team. Airline strategic renew done by Airline Strategy Committee based on the Stakeholders Meeting discussion followed by a course correction / Re correction through the departmental meeting.
- *Findings related to RQ 2 (How airport influence LCC Strategies)*
 - Airport infrastructure is "One Size Fits All" concept means there is no dedicated terminal for low-cost airlines, no secondary airports are there in India, but SpiceJet is focusing now on UDAN scheme and provide connectivity to Tier 2 and Tier 3 cities, and it has significant routes in UDAN schemes compared to SpiceJet and others

- 12 - 15 % of the operating cost is due to airport charges for an airline. Airport as an airline Base, airport charges, parking stands and gates, communication systems, airports slots has directly correlated with airline operating cost. Airport choice for an airline also has a significant impact on capacity utilization and demand.
 - Airport Operational Efficiency has an impact on airline Turn Around Time and ground time which ultimately has a huge correlation with the airline operating cost as aircraft on the ground is a liability for an airline and aircraft in the air is asset generating revenue for the airline. It also impacts the maximum aircraft utilization hours per day, which is the benchmark for the airline profitability in Low-Cost airliners.
 - Financial partnership with the airport will take some time in the Indian context as it is a highly capital-intensive project to build a dedicated terminal for an airline. Today, the size of SpiceJet airline is not that huge to infuse around 2000 crores for a dedicated terminal along with breakeven point challenge, return on that considerable investment and of course, coupled with government challenges. Government monopolistic thinking and Government policy are not supporting the airline investment as it will bring specific risk to the market rationality, unlike another part of the globe without anti-competitive pricing.
- *Findings related to RQ 3 (How regulatory framework influence LCC Strategy?)*
 - New Civil Aviation policy has been relaxation for the airline in terms of bringing down the tax-based cost for airlines, bringing down VAT on ATF and reduced fare. Also, it brings ease in airline operating requirements for the international sector. Civil aviation policy also impacts on Foreign Trade Policies in terms of Export and import, Foreign Direct Investment (FDI), Airport Investment, Government taxes and revenues which directly correlates with the airline operating cost and profitability.

- Regional connectivity is the prime agenda for the Government to boost regional air transport and aviation development. Government has launched UDAAN scheme for making air travel cheaper and within reach of the common man. Government is also boosting airlines to operate domestically providing subsidy and VGF (Viability Gap Funding) also developing secondary airports for LCC airlines.
 - LCC airlines are working in a very regulated environment in India, Traffic rights, i.e. to land in a particular country for commercial purpose and flight restriction because of protected airspace, slots right, airport operational issues, cultural sites and heritage preservation cause airline operations very challenging and hence impacting its financial performances.
 - Indian Government is still Pro defence aviation-oriented, and regulatory liberalization is not there in India.
 - Ease of doing business, the airline operating permit and preconditions, Economic regulations with DGCA and BCAS (Security and Safety regulatory bodies) also impact airline financial health. The regulator has made a 1-year contract for the pilot hiring that is hurting SpiceJet as they have aircraft order in hand, but the pilot shortage is there in the global market as well as the Indian market. The airline also imposes a high cost in aircraft maintenance requirements by regulators which ultimately impacts the operating cost of an airline in India.
- *Findings related to RQ 4 (What are the different LCC strategies and how it is linked with the LCC business model)*
 - SpiceJet has secure connections with industry partners like aircraft manufacturer company SpiceJet, Logistics Partners, Freight Agencies, GDS Distribution System and Maintenance Partners, Travel and Tourism enterprises, Car Rentals and Hotels, GSA etc. SpiceJet core strategies of expansion and diversified business-like cargo, logistics,

catering, Distribution Strategies, Maintenance strategies are based on the reliable partner's association.

- SpiceJet is also achieving "On-Time Performance with operational efficiency. SpiceJet has achieved this by a collaborative approach within its stakeholders, including customers. Crew Multitasking, quick turnaround time, performance automation, effective fleet scheduling, integrated communication, flight performance monitoring are the major strategies to achieve on-time performance.
- SpiceJet essential resources are capital, aircraft fleet, airport bases, empowered highly trained and professional staff, strong management team, strong brand and image, profitable routes and active schedules, innovative revenue management and immense inventory with business sense., Aircraft Bulk order, Aircraft Utilization, competitive airport slots, Employee professional growth appreciation, aggressive promotions, route planning along with strong inventory management are the major strategies developed based on resources.
- SpiceJet value proposition lies in Common man flying orientation, Strong Customer Service, Flexi and discounted fares and on-time performance with elite travel experience. SPICEJET has created value by offering the lowest fares having one type of aircraft (Boeing) with low operating and maintenance cost. Through staff behavioural training, they maintain a strong relationship with the customer with remarkable service.
- SpiceJet maintains high-value customer relation by Automated and Impersonal customer-oriented strategies in term of effective CRM (Customer Relationship Management). Innovative product development, marketing, customer feedback and suggestions, customer call centre and secure complaint monitoring unit along with customer-oriented staff training analysis are few of the strategies towards the same.

- SpiceJet airline key channels are Sales, Distribution and communication through which they are gaining competitive advantage in the market. OTA, Ex web and web-based sales distribution are key strategies adopted by the SPICEJET.
- SpiceJet passenger target is young professional with higher price sensitivity. Fare DE bundling, Dynamic pricing, Discounted and Flexi fares are the significant strategies SpiceJet airline is building competitive advantage. SpiceJet is very oriented towards cost-cutting through an economy of scale concept in terms of supplying more seat, fuel hedging, and lower operating cost all thanks to its low-cost strategies, i.e. Single Fleet Type, higher aircraft utilization, more great capacity, more destination, market tapping, low maintenance cost due to younger fleet size, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and fleet planning.
- SpiceJet significant revenues come from passenger sales, cargo and logistics revenues and associated business-like hotels and retail brands. Significant strategies to enhance sales /tickets through innovative marketing, revenue management, growth and expansion strategy through partnership and expansion.

5.6 CONCLUDING REMARKS:

The analysis highlights the key critical success factors of SpiceJet airlines; it's strategy formulation and implementation, along with various LCC strategies and business model correlation. The study also results in finding the crucial role of airports in terms of LCC sustainability along with regulatory framework impact with regards to the Indian context.

Further, interviewees indicate that the key for LCC sustainable business model is lower operating cost, strategic decision making, dynamic pricing and revenue management along with simple airline business, effective stakeholder management, lean organization structure, Innovative marketing and sales and government support.

CHAPTER 6

CROSS CASE ANALYSIS AND FINDINGS

6.1 INTRODUCTION

Cross-Case analysis of Critical Success factors across IndiGo Airline and SpiceJet Airlines cases is presented in this chapter, along with findings and discussion. The first section explains the resemblances and differences amongst case studies with main observations. The comparison of findings has illustrated in terms of critical success factors and strategy formulation & planning across IndiGo and SpiceJet airlines. Propositions suggesting *LCC airline strategic planning and implementation, airline airport relationship, regulatory framework impacts on airlines sustainability, LCC strategies linkage with the business model and critical success factors* are established.

6.2 RESEMBLANCES AND DIFFERENCES BETWEEN CASES

Table 6.1 depicts the comparison of both airlines, i.e. IndiGo and SpiceJet, for reference purpose. In this analysis, data investigated across both cases (IndiGo Airlines and SpiceJet Airlines) to identify resemblances and variances in *LCC airline strategic planning and implementation, airline airport relationship, regulatory framework impacts on airlines sustainability, LCC strategies linkage with the business model and critical success factors*.

The below tables illustrate the necessary information in term of operations, hubs and key revenue figures along with showcasing the visible USP's of both the leading carriers.

Table 6.1: Business verticals of the largest domestic Low-Cost carriers

INDIAN LCC CARRIERS	IATA: ICAO:	IATA: ICAO:
Foundation	2005	2004 (Royal Airways)
Commenced Operations	4 th August 2006	23rd May 2005
Hubs	Delhi International Airport Limited (DIAL) -New Delhi	Delhi International Airport Limited (DIAL)
Fleet Size	298	118
Destinations	83	58
Parent Company	InterGlobe Aviation Limited	SpiceJet Limited
Traded as	BSE:539448 NSE: INDIGO	BSE: 500285 NSE: SPICEJET
Head Quarters	Gurgaon -India	Gurgaon -India
Key People	Mr. Rahul Bhatia Mr. Rakesh Gangwal	Mr. Ajay Singh
Revenue (2019)	INR 29821.37 Crore	INR 3002.34 Crores
Total Assets (2019)	INR 12809.37 Crore	INR 623.90 Crore
Website	https://www.goIndiGo.in/	http://www.SpiceJet.com/

Followed by recognizing resemblances and differences, intuition into the concepts mentioned above by generalizing results of study.

Table 6.2: Particulars of resemblances and differences

<i>Categories - Empirical data (Case Study-1 and Case Study-2)</i>	<i>Focused codes - Empirical data (Case Study- 1) IndiGo Airlines</i>	<i>Observation on Data Analysis (Case Study-1) IndiGo Airline</i>	<i>Focused codes from empirical data (Case Study 2) SpiceJet Airlines</i>	<i>Observation on Data Analysis (Case Study-2) SpiceJet Airline</i>	<i>Cross –Case Analysis Observations</i>
Strategy Planning and Implementation	Strategic Review	IndiGo airline objective is profitability through low-cost operations, customer friendliness approach with On-Time performance that projects in its mission and policy documents.	Strategic Review	SpiceJet airline objective is profitability through low-cost operations and higher revenues, customer friendliness and achieves the highest Load Factor that projects in its mission and policy documents.	Both airlines objective is profitability through lower operating cost and generating higher revenue. The same can be traced back through airline’s policy available on the intranet; airlines policy document; field notes and researcher observations. audio records and field notes of interviews;
	Business	IndiGo key strength is Low operating cost, positive image, High Stakeholder Value, Fleet and Network, Highly motivated staff with multitasking skills IndiGo key weakness is Non-	Business	SpiceJet key strength is Brand, Ancillary Revenue, Cargo Revenue. SpiceJet key weakness is Management Change. SpiceJet key opportunities are	Both airline key resources are fleets, airport bases, routes and network depth and staff. Both airlines are expanding in terms of gaining domestic and international market share.

	<p>Environment Scanning</p>	<p>Innovations, Large Aircraft Orders, Ancillary Revenue</p> <p>IndiGo key opportunities are International Market Potentials, Market Size, Ancillary Revenue, Cargo Market Potential, Chartering Business. IndiGo key Threats are from competition, regulatory framework, Political Structure, Staff Poaching etc.</p>	<p>Environment Scanning</p>	<p>International Market Potentials, Market Size, A, Chartering Business.</p> <p>SpiceJet key Threats are from competition, regulatory framework, Political Structure, Staff Poaching etc.</p>	<p>Both airlines have similar threats from the regulatory framework, political structure and higher competition.</p> <p>Same can be tracked through Audio records and field notes of interviews; airline data is available on intranet regarding internal and external scanning; Airline company report 2019, policy document; field notes.</p>
	<p>Levels of Strategies</p>	<p>Corporate level strategies include corporate growth, Range and Diversity etc. Business Level Strategies includes Catering Service Agreements, Contract Management, Lean Distribution System, Lean Organization Structuring. Functional Strategies includes Operational Strategies, Marketing Strategies and Financial Strategies.</p>	<p>Levels of Strategies</p>	<p>Corporate level strategies include corporate growth, Range and Diversity, business expansion. Business Level Strategies includes Catering Service Agreements, Contract Management, Lean Distribution System, Lean Organization Structuring. Functional Strategies includes Operational Strategies, Marketing Strategies and</p>	<p>Both airlines form different strategies at the corporate level, Business Level and Functional level.</p> <p>Same can be verified through Audio records and field notes of interviews; Annual Report is silent on the issue, Researcher observation in term of meeting attendance.</p>

				Financial Strategies.	
	Strategy Formulation	Most of the strategy formulation is done by higher Management, EXCOM (Executive Committee level. Corporate strategy formulation is dropped down to business-level mainly by C level (Chief Planning Officer, Chief Commercial Officer, Chief Information Officer, etc.) ranking. Then further dropped down to departmental level through Head of the departments. Every activity at departmental level represents the SOP from the corporate level to the end department.	Strategy Formulation	Most of the strategy formulation is done by higher management as "Commercial Meeting". Corporate strategy formulation is dropped down to business-level mainly by C level (Chief Commercial Officer, Chief Information Officer, etc.) ranking. Then further dropped down to departmental level through Head of the departments. Every activity at departmental level represents the SOP from the corporate level to the end department. Ex- for a new route selection mutual decision is being taken by sales and revenue by analyzing the profitability of that route.	Both the airlines, strategy formulation, is dependent on current market forces, competition, financial buffer and resources. It is majorly discussed and form at a higher level. IndiGo strategy formulation is done by EXCOM (Executive Committee Meeting) while SpiceJet does it through "Commercial Meeting". Annual Report is silent on the issue, Researcher observation in term of meeting attendance are the evidence of data triangulation.
	Strategy Implementation	Based on strategic vision and plan, organizational goals are developed and discussed at EXCOM committee meetings	Strategy Implementation	Based on strategic vision and plan, organizational goals are developed and discussed at Commercial Meeting meetings	IndiGo implement the strategies having been discussed in EXCOM meeting, dropped down by c suite

		and well looped in by departmental goals. Every individual is assigned job roles, and individual goals over performance are measured. Airline Goal Sheet, competency Mapping, Concept Map-based domain training are various tools regarding same.		and well looped in by departmental goals. Every individual is assigned job roles, and individual goals over performance are measured. Airline Goal Sheet, competency Mapping, Concept Maps based domain training are various tools regarding same.	executives to respective Head of Departments and then HoD discuss with their departmental staff and hence individual goals setting is done. Both airlines use competency mapping and goal sheet regarding same. Annual Report is silent on the issue, Researcher observation in term of meeting attendance
	Strategy Monitoring	Strategy monitoring is done through automated Tracking System by external and In-house Stakeholders, including customers feedbacks and suggestions. Task notifications and Task trackers are used for employee quantitative Tracking.	Strategy Monitoring	Strategy monitoring is done through monthly/Bi-Monthly review of individual projects Assigned to each department by Special projects team	Both airlines do monitor the strategy implementation, though IndiGo Airline does it by an automated tracking system (Each system and Each employee tracker basis) while spice jet monitors it through monthly/Bi-monthly meetings amongst department and across departments. Audio records and field notes of interviews. Annual Report is silent on the

					issue, Researcher observation in term of meeting attendance.
	Strategy Renewal	Airline strategic renew done by Airline Strategic Committee based on the Stakeholders Meeting discussion followed by a course correction / Re correction through the departmental meeting.	Strategy Renewal	Airline strategic renew done by Airline Strategy Committee based on the Stakeholders Meeting discussion followed by a course correction / Re correction through the departmental meeting.	Both airline strategy renewal /course correction is done by Airline Strategic Committee based on stakeholder meetings and departmental meetings outcome. Audio records Annual Report is silent on the issue, Researcher observation in term of meeting attendance.
Airline Airport Relationship	Airport Infrastructure	Airport infrastructure is "ONE SIZE FITS ALL" concept means there is no dedicated secondary airports are there in India, basic services and infrastructural resources like NAVAIDS, Terminal facilities, Kerbside Assistance, Airport Accessibility is minimal so airline can't operate from the stations. Moreover, Airports slots are very costly for the congested airports like Delhi and Mumbai as there is limited	Airport Infrastructure	Airport infrastructure is "ONE SIZE FITS ALL" concept means there is no dedicated secondary airports are there in India, but SpiceJet is focusing now on UDAN scheme and provide connectivity to Tier 2 & 3 cities, and it has significant routes in UDAAN schemes compared to IndiGo and others	Airport Infrastructure plays a vigorous role in both the airline profitability in terms of lowering operating cost, enhancing the customer travel experience and market connectivity. Evidence of data Triangulations: Audio records and field notes of interviews; airlines report, airport operating data available on the intranet; Airport Connections

		scope for expansion hence the scarcity of resources which results into higher airport charges resulting higher operating cost for low-cost airlines. Better infrastructure also helps the airline in branding and uplifting customer service and passenger experience.			Details through the intranet, Civil Aviation Policy Documents, Indigo airline policy and annual report document. MYTP (Multiyear Tariff Planning) Documents of MIAL & DIAL (Mumbai & Delhi International Airport)
	Airport Operational Efficiency	Airport Operational Efficiency has an impact on airline Turn Around Time and ground time which ultimately has a huge correlation with airline operating cost as aircraft on the ground is a liability for an airline and aircraft in the air is asset generating revenue for the airline. It also impacts the maximum aircraft utilization hours per day, which is the benchmark for the airline profitability in Low-Cost airlines.	Airport Operational Efficiency	Airport Operational Efficiency has an impact on airline Turn Around Time and ground Time which ultimately has a huge correlation with airline operating cost as aircraft on the ground is a liability for an airline and aircraft in the air is asset generating revenue for the airline. It also impacts the maximum aircraft utilization hours per day, which is the benchmark for the airline profitability in Low-Cost airlines.	Airport operational efficiency is crucial in terms of reducing airline Turn Around Time which ultimately is the critical parameter for an airline to sustain in the market. Lower turn around also helps the airlines in keeping their aircraft in air /airborne for a greater number of hours which outcome in more revenue for an airline. Evidence of data triangulation includes audio records and field notes of interviews; airlines report, airport

					operating data available on the intranet; Airport Connections Details through the intranet, Civil Aviation Policy Documents, LCC airline policy and annual report document. MYTP (Multiyear Tariff Planning) Documents of MIAL & DIAL (Mumbai & Delhi International Airport).
	Airline Airport Financial Partnership	Financial partnership with the airport will take some time in the Indian context as it is a highly capital-intensive project to build a dedicated terminal for an airline. Today, the size of IndiGo airline is not that huge to infuse around 2000 crores for a dedicated terminal along with breakeven point challenge, return on that considerable investment and of course, coupled with government challenges. Government monopolistic thinking and Government policy are not	Airline Airport Financial Partnership	Financial partnership with the airport will take some time in the Indian context as it is a highly capital-intensive project to build a dedicated terminal for an airline. Today, the size of IndiGo airline is not that huge to infuse around 2000 crores for a dedicated terminal along with breakeven point challenge, return on that considerable investment and of course, coupled with government challenges. Government monopolistic thinking and Government	<p>In the Indian context, none of the airlines has a financial partnership with airport operators, though the model works well in another part of the world.</p> <p>If an airline gets its dedicated terminal at the airport then, of course, it's a vast scope of enhancing revenue and lowering down operating cost like parking, hanger, slots etc. However, due to regulatory framework and governmental</p>

		supporting the airline investment as it will bring specific risk to the market rationality, unlike another part of the globe without anti-competitive pricing.		policy are not supporting the airline investment as it will bring specific risk to the market rationality, unlike another part of the globe without anti-competitive pricing.	policies, thin margined airlines business right now are not in a position of sustain that massive investment. Evidence includes audio records and field notes of interviews; researcher own observations and airlines annual reports available on the intranet; LCC airline policy document regarding financial data, financial reports; field notes etc.
	Airline Operating Cost	12 - 15 % of the operating cost is due to airport charges for an airline. Airport as an airline Base, airport charges, parking stands and gates, communication systems, airports slots has directly correlated with airline operating cost. Airport choice for an airline also has a huge impact on capacity utilization and demand.	Airline Operating Cost	12 - 15 % of the operating cost is due to airport charges for an airline. Airport as an airline Base, airport charges, parking stands and gates, communication systems, airports slots has directly correlated with airline operating cost. Airport choice has a significant influence on capacity utilization and demand.	For both the airlines about 12 - 15 % of operating cost is due to airport charges operating cost is too correlated with the airport in terms of, airport slots, airport charges, hanger charges, passenger service charges, Aerodrome Ground Lighting AGL) charges, communication systems and terminal usage charges. Evidence includes Audio records and field notes of

					interviews; airlines reports regarding operating cost, fuel costs, operating agreements available on the intranet; LCC airline operational documents; field notes, Airport Economic Regulatory Authority (AERA), MYTP (Multiyear Tariff Planning) Documents of MIAL & DIAL (Mumbai & Delhi International Airport)
	Government Challenges	Common user V/s Solo User, Voters Concern, Democratic and undemocratic issues, Vertical and horizontal integration from industry side are a major challenge for the government towards airline airport interfusion. Few operational challenges are towards reservation systems, catering, Baggage Handling Systems and stakeholder management side.	Government Challenges	Common user V/s Solo User, Voters Concern, Democratic and undemocratic issues, Vertical and horizontal integration from industry side are a major challenge for the government towards airline airport interfusion. Few operational challenges are towards reservation systems, catering, Baggage Handling Systems and stakeholder management side.	Government outlook in terms of airline association has also its own challenges like irrational competition, favoured policies, dedicated reservation systems and capacity handling issues in terms of common v/s solo usages. Audio records and field notes of interviews; CAPA Consultancies Reports, Ministry of Civil Aviation

					(MoCA) Strategic Objectives, Ministry webinars etc.
Regulatory Framework	Civil Aviation Policy	New Civil Aviation policy has been relaxation for airline in terms of bringing down the tax-based cost for airlines, bringing down VAT on ATF and reduced fare. Also, it brings ease in airline operating requirements for the international sector. Civil aviation policy also impacts on Foreign Trade Policies in terms of Export and import, Foreign Direct Investment (FDI), Airport Investment, Government taxes and revenues which directly correlates with airline operating cost and profitability.	Civil Aviation Policy	New Civil Aviation policy has been relaxation for airline in terms of bringing down the tax-based cost for airlines, bringing down VAT on ATF and reduced fare. Also, it brings ease in airline operating requirements for the international sector. Civil aviation policy also impacts on Foreign Trade Policies in terms of Export and import, Foreign Direct Investment (FDI), Airport Investment, Government taxes and revenues which directly correlates with airline operating cost and profitability.	For both the airlines, India regulatory framework has a huge correlation in terms of sustainability. New Civil aviation policy has helped both the airlines to bring its cost down in terms of lower fuel /ATF cost along with operational requirements in International sectors. Same can be verified through Ministry (MoCA) Reports, Civil Aviation Policy Document 2019, Consultancies Reports, Researcher Own Observations.
	Regional Connectivity	Regional connectivity is the prime agenda for the government to boost regional air transport and aviation development. Government has	Regional Connectivity	Regional connectivity is the prime agenda for the government to boost regional air transport and aviation development. Government has	Both the airlines are being benefited by boosted regional connectivity in terms of launching new routes and more frequencies in domestic

		launched UDAAN scheme for making air travel cheaper and within reach of the common man. Government is also boosting airlines to operate domestically providing subsidy and VGF (Viability Gap Funding) also developing secondary airports for LCC airlines.		launched UDAAN scheme for making air travel cheaper and within reach of the common man. Government is also boosting airlines to operate domestically providing subsidy and VGF (Viability Gap Funding) also developing secondary airports for LCC airlines.	sectors. Under the UDAAN scheme, both the airlines have been allocated significant share of domestic routes, subsidies, with seaplane routes to SpiceJet. The evidence can be tracked through UDAAN web documents on the intranet, Ministry (MoCA) Reports, DGCA reports, New Civil Aviation Policy Document 2019, Airport Authority of India Report 2018, CAPA Consultancy Reports and Researcher Own Observations.
	Bilateral Agreements	LCC airlines are working in a very regulated environment in India, Traffic rights, i.e. to land in a particular country for commercial purpose and flight restriction because of protected airspace, slots right, airport operational issues, cultural sites and heritage preservation cause airline operations very challenging and hence	Bilateral Agreements	LCC airlines are working in a very regulated environment in India, Traffic rights, i.e. to land in a particular country for commercial purpose and flight restriction because of protected airspace, slots right, airport operational issues, cultural sites and heritage preservation cause airline	Both the Airline's financial performance is affected by bilateral agreements in terms of supplying seats, offerings services, partnership scopes, flying rights, flight restrictions and airspace usages. Airlines are operating in a very regulated environment, and

		impacting its financial performances. IndiGo recently a partnership with Turkish Airline to tap the international market through enhanced route depth is also under bilateral agreement.		operations very challenging and hence impacting its financial performances.	demand /supply offerings are impacted by these agreements. Evidence of data triangulation: Airport Economic Regulatory Authority RDGs – Route Dispersal Guidelines, web documents on the intranet, Ministry (MoCA) Reports, New Civil Aviation Policy Document 2019, Ministry of Defense web material, researcher observation.
	Regulatory Compliance	Indian Government is still Pro defence aviation-oriented, and regulatory liberalization is not there in India. Ease of doing business, the airline operating permit and preconditions, Economic regulations with DGCA and BCAS (Security and Safety regulatory bodies) also impact airline financial health. The regulator has made a 1-year contract for the pilot hiring that	Regulatory Compliance	Indian Government is still Pro defence aviation-oriented, and regulatory liberalization is not there in India. Ease of doing business, the airline operating permit and preconditions, Economic regulations with DGCA and BCAS (Security and Safety regulatory bodies) also impact airline financial health. The regulator has made a 1-year contract for the pilot hiring	For both the airlines, the Indian market is very regulated, and liberalization is not there, hence compliance is strict so as doing business in India. Rigid regulatory compliance, defence-oriented government outlook, higher ATF taxes, tight margins, the limited scope of maintenance and MRO facilities impacts the

		is hurting IndiGo as they are receiving aeroplanes per week. However, the pilot shortage is there in the global market as well as the Indian market. The airline also imposes a high cost in aircraft maintenance requirements by regulators which ultimately impacts the operating cost of an airline in India.		that is hurting IndiGo as they are receiving aeroplanes per week. However, the pilot shortage is there in the global market as well as the Indian market. The airline also imposes a high cost in aircraft maintenance requirements by regulators which ultimately impacts the operating cost of airline in India.	sustainability of LCC airliners. Evidence of data triangulation includes DGCA & BCAS Websites, Ministry Documents, web documents on the intranet, Ministry (MoCA) Reports, New Civil Aviation Policy Document 2019, Ministry of Defense web material, field notes and researcher observation.
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Airline Strategies and Linkage with Business Model	Airline Partners	IndiGo has secure connections with industry partners like aircraft manufacturer company AIRBUS, GDS Distribution System, MRO and Maintenance Partners, Travel and Tourism enterprises, Car Rentals and Hotels, GSA etc. IndiGo major strategies like “Sale and Lease Back”, Aircraft Bulk Order Strategy, Aircraft Purchase Strategies, Airport Slots strategies, Distribution Strategies,	Airline Partners	SPICEJET has secure connections with industry partners like aircraft manufacturer company SPICEJET, Logistics Partners, Freight Agencies, GDS Distribution System, MRO and Maintenance Partners, Travel and Tourism enterprises, Car Rentals and Hotels, GSA etc. SpiceJet core strategies of expansion and diversified business-like cargo, logistics, catering, Distribution	Both airlines have powerful industry partners helping airlines to sustain. IndiGo has a competitive advantage in term of strong partnership with AIRBUS and GDS partner Travel port. At the same time, SpiceJet is competitive in terms of strong partnership with BOEING and diversified businesses Spice Retail and Spice X Press logistics.
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		Maintenance strategies are based on the reliable partner's association.		Strategies, Maintenance strategies are based on the strong partner's association.	Evidence can be tracked through Airline Annual Report 2019, TravelPort Report, Annual Presentations, Web reports freight, Airline Websites, Field Notes and Researcher observation.
	Airline Key Activities	Indigo aircrafts are fitted with latest avionics and communication system to have the real time information and communication channel to speed up the process and lowering the turn around time and faster boarding.	Airline Key Activities	SpiceJet is also achieving "On-Time Performance with operational efficiency. SpiceJet has achieved this by a collaborative approach within its stakeholders, including customers. Crew Multitasking, quick turnaround time, performance automation, effective fleet scheduling, integrated communication, flight performance monitoring are the major strategies to achieve o time performance.	Both the airlines are focusing on "On-Time Performance" through quick turnaround time, multitasking, performance automation, active fleet, route and Network Planning with a customer focus. SPICE Airline also operates dedicated freighters for tapping the cargo market. Evidence can be followed through Airline annual report 2019, Industry Reports, IATA analysis, Annual Presentations, Web reports freight, Airline Websites, Field Notes and own

					researcher observation.
	Airline resources	IndiGo key resources are capital, aircraft fleet, airport bases, empowered highly trained and professional staff, strong management team, strong brand and image, profitable routes and effective schedules, innovative revenue management and immense inventory with business sense. Aircraft leasing Back strategy, Aircraft Utilization, competitive airport slots, Employee professional growth appreciation, aggressive promotions, route planning along with strong inventory management are the major strategies developed based on resources.	Airline resources	SpiceJet essential resources are capital, aircraft fleet, airport bases, empowered highly trained and professional staff, strong management team, strong brand and image, profitable routes and active schedules, innovative revenue management and immense inventory with business sense., Aircraft Bulk order, Aircraft Utilization, competitive airport slots, Employee professional growth appreciation, aggressive promotions, route planning along with strong inventory management are the major strategies developed based on resources.	Both airlines are building their sustainability on crucial resources like fleet, staff, brand image, capital, dynamic pricing with low fares with profitable routes and active fleet schedules. The same observation can be influenced by Field Notes and Researcher own observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019. Operational KPI – Key Performance Indicator industry publications.
	Value Proposition	IndiGo value proposition lies in Strong Customer Service, Flexi fares and OTP with elite customer delight. IndiGo has created value by offering the	Value Proposition	SPICEJET value proposition lies in Common man orientation, Strong Customer Service, Flexi and discounted fares and on-time performance	Both the airlines value proposition is through Low Fares, Elite Customer Services with on Time performance.

		lowest fares having one type of aircraft with low operating and maintenance cost. Through staff behavioural training, they maintain a strong relationship with the customer with remarkable service.		with elite travel experience. SPICEJET has created value by offering the lowest fares having one type of aircraft (Boeing) with low operating and maintenance cost. Through staff behavioural training, they maintain a strong relationship with the customer with remarkable service.	Same can be tracked through Field Notes and Researcher own observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019. Customer Survey Results 2018-19, Industry reports (IATA, CAPA).
	Customer Relationship Management	IndiGo maintain high-value customer relation by Automated and Impersonal customer-oriented strategies in term of effective CRM (Customer Relationship Management). Innovative product development, marketing, customer feedback and suggestions, customer call centre and secure complaint monitoring unit along with customer-oriented staff training analysis are few of the	Customer Relationship Management	SPICEJET maintain high-value customer relation by Automated and Impersonal customer-oriented strategies in term of effective CRM (Customer Relationship Management). Innovative product development, marketing, customer feedback and suggestions, customer call centre and secure complaint monitoring unit along with customer-oriented staff training analysis are few of the	Both airlines are very particular regarding impersonal and automated Customer relationship management. Customer complaints and suggestions are well appreciated and bring customer as their stakeholder in obtaining higher performance. The same can be evident through Field notes, researcher observations, Customer feedback results

		strategies towards the same.		strategies towards the same.	available on web, industry reports, Indigo & SpiceJet annual reports 2018,2019.
	Airline Channels	IndiGo airline key channels are Sales, Distribution and communication through which they are gaining competitive advantage in the market. OTA (like Sky scanner /Wego), strong GDS (Global Distribution Systems) development (Travelport), Ex web and Web-based sales distribution are key strategies adopted by the market leader.	Airline Channels	SPICEJET airline key channels are Sales, Distribution and communication through which they are gaining competitive advantage in the market. OTA, Ex web and Web-based sales distribution are key strategies adopted by the SPICEJET.	Both airlines are using secure sales communication and distribution channels, i.e. GDS, Web Based and Sky scanner. The same can be tracked through Field Notes and Researcher observation, Travel portal reports, Annual Report 2019, Corporate presentations 2019.SITA industry report. TravelPort Web Data.
	Passenger Segmentations	Price Sensitive young passenger along with business passenger segment. Fare DE bundling, Dynamic pricing, Flexi fares are the significant strategies IndiGo airline is building competitive advantage.	Passenger Segmentations	Young passenger having low budget and lower surplus are the key segment in passenger. Fare DE bundling, Dynamic pricing, Discounted and Flexi fares are the major strategies SpiceJet airline is building competitive advantage.	Both the airlines target young, price-sensitive, working professionals' passengers having high price sensitivity. The same can be tracked through Field Notes, Researcher Observation, IndiGo booking websites, IndiGo Annual Report 2019,

					Passenger Traffic data from MoCA & DGCA, Passenger profiling report, Tariff Publications etc.
	Airline Cost structure	IndiGo operates with industry lowest CASK (cost per available seat kilometer) among the Indian carriers, thanks to its low-cost strategies, i.e. Single Fleet Type, higher aircraft utilization, base flights same-day return, low maintenance cost due to younger fleet size, the outcome of sale and leaseback, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and frequencies.	Airline Cost structure	SpiceJet is very oriented towards Economy of scale concept in terms of supplying more seat, fuel hedging, and lower operating cost all thanks to its low-cost strategies, i.e. Single Fleet Type, higher aircraft utilization, more great capacity, more destination, market tapping, low maintenance cost due to younger fleet size, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and fleet planning.	Both the airlines low cost strategies oriented towards Single Fleet Type, higher aircraft utilization, more intense capacity, more destination, market tapping, low maintenance cost due to younger fleet size, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and fleet planning. The same can be tracked through Notes and Researcher own observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019,

					CAPA & KPMG consultancy Reports, Web Data, IATA Industry outlook.
	Airline Revenue Stream	IndiGo significant revenues come from passenger sales, aircraft sublease, ancillary and consultancy services. Significant strategies to enhance sales /tickets through innovative marketing, revenue management, growth and expansion strategy through partnership and code-sharing agreement.	Airline Revenue Stream	IndiGo major revenues come from passenger sales, cargo and logistics revenues and associated business-like fashion outlets and retail brands. Major strategies to enhance sales /tickets through innovative marketing, revenue management, growth and expansion strategy through partnership and expansion.	IndiGo significant revenue comes from pax sales and aircraft sale and leases out while SpiceJet revenue comes from pax sales along with cargo and diversified businesses like SpiceJet fashion, retail and logistics. The same can be tracked through Field Notes and Researcher own observation, Financial Reports and Balance Sheets, Website data, Annual Report 2019, Corporate presentations 2019, CAPA & KPMG consultancy Reports, Web Data, IATA Industry outlook.

Critical Success	Cost Leadership	Operating cost is a major	Cost Leadership	Operating cost is the major	To sustain in the Indian
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Factors		<p>criterion for LCC airline profitability and benchmarked as CASM (Cost Available Seat Mile). IndiGo Airlines is a leader in terms of CASM or low operating cost and maintaining low cost through aircraft sale and lease out method, higher aircraft utilization hours, Higher Stage Lengths, By Hours Maintenance Contract, Economy of Scale, Crew hiring, Efficient fleet and network planning along with new-gen aircraft engines. Fuel optimization through Software. Being thin margin business, the key for sustainable business model is lower operating cost.</p>		<p>criteria for LCC airline profitability and benchmarked as CASM (Cost Available Seat Mile). Higher aircraft utilization hours, Higher Stage Lengths, Economy of Scale, Crew hiring, Efficient fleet and network planning along with new-gen aircraft engines. Fuel optimization through software. Being thin margin business, the key for sustainable business model is lower operating cost.</p>	<p>market, both the airlines are building strategies to get a competitive advantage through lower operating cost.</p> <p>Evidence of data triangulation includes: Field Notes and Researcher own observation, Airline Training Reports, Website data, Annual Report 2019, Corporate presentations 2019, CAPA & KPMG consultancy Reports, Web Data, IATA Industry outlook</p>
	Innovative Sales and Marketing	<p>Innovative marketing and sales are critical to the airline business. Marketing mix with product diversification, price promotions, tickets distribution, brand image, product innovations and aggressive</p>	Innovative Sales and Marketing	<p>Innovative marketing and sales are critical to the airline business. Marketing mix with product diversification, price promotions, tickets distribution, brand image, product innovations and</p>	<p>Both the airlines are indulging in innovative marketing and sales strategies which helps to have a higher number of passengers flying with the airline hence provide a competitive advantage to</p>

		sales strategies and policies helps to have a higher number of passengers flying with the airline hence provide a competitive advantage to sustain in airline industry.		aggressive sales strategies and policies helps to have a higher number of passengers flying with the airline hence provide a competitive advantage to sustain in airline industry. SpiceJet is using the word of mouth and social media marketing along with branding too seriously with catchy slogans.	sustain in airline industry in the Indian market. SpiceJet and Indigo airlines corporate Presentations, Marketing Reports, web-based data, IndiGo annual reports, Field notes and Observation.
	Revenue Management	Being oligopolistic market, dynamic pricing and revenue /yield management are crucial for the airline. It allows the buffer to the airline in terms of seat bookings at different fare levels at the highest ticket price. At given air traffic growth projection, the dynamic pricing will be game-changer.	Revenue Management	Being oligopolistic market, dynamic pricing and revenue /yield management are crucial for the airline. It allows the buffer to the airline in terms of seat bookings at different fare levels at the highest ticket price. At given air traffic growth projection, the dynamic pricing will be game-changer.	Both the airlines are very concern towards revenue management strategy and dynamic pricing, which ultimately provide the maximization of passenger surplus to cover the operating expenses and required margin to sustain in the market. The same can be tracked through Field Notes and Researcher observation, Financial Reports and Balance Sheets, Website data, Indigo Annual Report 2019, Corporate presentations 2019,

					CAPA & KPMG consultancy Reports, Web Data, IATA Industry outlook
	Stakeholder Management	Efficient stakeholder management is interloped in airline business model sustainability. IndiGo enjoys a good relationship with its primary and secondary shareholders, customers and government agencies. It helps in reducing cost and enhance system efficiency. IndiGo good relationship with aircraft manufacturer AIRBUS, maintenance contractors, MRO, Refuelers, software developers and passengers keeps airline sustainable.	Stakeholder Management	Efficient stakeholder management is interloped in airline business model sustainability. SpiceJet enjoys a good relationship with its primary and secondary shareholders, customers and government agencies. It helps in reducing cost and enhance system efficiency. SPICEJET is playing the entire competitive game on strong stakeholder management, a good relationship with aircraft manufacturer BOEING, maintenance contractors, MRO, Refuelers, software developers and passengers keeps airline sustainable.	Both the airlines have powerful stakeholder management which results in lowering the operating cost and increase the revenue potential in terms of sales and services hence crucial for sustainability. The same can be tracked through Field Notes and Researcher observation, Financial Reports and Balance Sheets, Website data, Annual Report 2019, Corporate presentations 2019, KPMG Consultancy Reports, Web Data, IATA Industry outlook.
	Skill Competency	Globally, airline industry is facing a talent shortage being domain-specific industry. IndiGo airline hires very professional and competent	Skill Competency	Globally airline industry is facing talent shortage being domain-specific industry. Also, the lean organization structure allows the staff to	As Indian market is facing talent crunch, both the airline's focus is on retaining and recruiting key domain professionals. They have a

		staff. Also, the lean organization structure allows the staff to participate in decisions making and empower them to decide in critical situations. IndiGo has its dedicated Training Centre to hone the professional skills of the staff.		participate in decisions making and empower them to decide in critical situations. SPICEJET has dedicated training wing for the staff training and empowerment.	vision for the future, capable of being a potential asset to company, empowerment through authority and training to make them capable of taking critical strategic decisions. For the same, both airlines train their staff @ dedicated training centres at respective headquarters. The same can be verified through Indigo Annual Report 2019. Web Data, Training & Development Report , Field Notes and Researcher Observations.
	Strategic Decision Making	Strategic Decision making for an LCC airline is crucial for success. i.e. Network decision, product decision, revenue and pricing decisions, distribution, personnel decisions, organizational decisions, operating decisions, Fleet Planning and rotation, Fleet Assignment decision, market-driven decisions etc. Data-	Strategic Decision Making	Strategic Decision making for an LCC airline is crucial for success. i.e. Network decision, product decision, revenue and pricing decisions, distribution, personnel decisions, organizational decisions, operating decisions, Fleet Planning and rotation, Fleet Assignment decision, market-driven decisions etc. Data-	Both the airlines are taking millions of decisions in a day. i.e. Network decision, product decision, revenue and pricing decisions, distribution, personnel decisions, organizational decisions, operating decisions, Fleet Planning and rotation, Fleet Assignment decision etc. Airlines sustainability is highly

		Driven Decision Making is key to sustainability.		Driven Decision Making is vital for sustainability.	dependent on the right decision at the right time hence crucial for the airline. The same can be tracked through Technical reports, Indigo and SpiceJet Airlines Annual report, Operational KPI studies, Web base data, field notes and researcher observations.
	Simplicity in Business Model	In India, the simple airline business model without any complexity and multilayer with essential services along with customer services is sustainable. The transparency in the business model is critical to communicate your business vision to end-users. IndiGo airline business model is straightforward with cost leadership focus, and customers are also involved in their strategic vision and actually helping the airline to achieve	Simplicity in Business Model	In India, the simple airline business model without any complexity and multilayer with essential services along with customer services is sustainable. The transparency in the business model is vital to communicate your business vision to end-users. SpiceJet has a business model that is one of the best to sustain in the Indian context.	The transparency, communication and decisions in the business model are vital to communicating the business vision to end-users. Both the airlines have a very suitable business model to sustain in future. The same can be tracked through Field Notes and Researcher Observations; Annual reports are silent on the issue.

		the on-time performance.			
	Government Support	Government support is vital for the boost of aviation, especially the airline industry in India. Infra development, Airport investments, public-private partnership, flexible regulations, VISA relaxation, foreign trade policy and interstate regulatory compliances along with ease of doing business in India are directly correlated with airline sustenance in India. At present, government is defence oriented, and policymaking is skewed towards defence, but liberalization in regulations make LCC business model more sustainable in the Indian context.	Government Support	Government support is vital for the boost of aviation, especially the airline industry in India. Infra development, Airport investments, public-private partnership, flexible regulations, VISA relaxation, foreign trade policy and interstate regulatory compliances along with ease of doing business in India are directly correlated with airline sustenance in India. At present, government is defence oriented, and policymaking is skewed towards defence, but liberalization in regulations make the LCC business model more sustainable in the Indian context. For example, SPICEJET airline survival is the story of government success during airline crisis in the year 2015.	Both the airliners are seeking government support in terms of subsidies, infra development, Airport investments, public, private partnership, flexible regulations, VISA relaxation, foreign trade policy and interstate regulatory compliances along with ease of doing business in India. SpiceJet got its revival in 2015 because of government support only. Hence it helps the airline to sustain in the Indian context. The same can be evident through Field Notes and Researcher Observations, Published and Web-based data, Civil Aviation Policy ministry policy formations an

By illustrating Table (6.2), the pivot observations are concise as given under: -

RQ1:

Both airlines strategy formulation is dependent on current market forces, competition, financial buffer and resources. It is majorly discussed and form at a higher level BOARD meeting. IndiGo strategy formulation is done by EXCOM (Executive Committee Meeting) while SpiceJet does it through “Strategic Team C Level “along with “Commercial Meeting”.

Both LCC airlines objective is profitability through lower operating cost and generating higher revenue. Both essential airline resources are fleets, airport bases, routes and network depth and staff. Both airlines are expanding in terms of gaining domestic and international market share Airlines has similar threats from the regulatory framework, political structure and higher competition Both airlines form different strategies at the corporate level, Business Level and Functional level.

IndiGo implement the strategies having been discussed in EXCOM meeting, dropped down by c level guys to respective Head of Departments and then HoD discuss with their departmental staff and hence individual goals setting is done. Airlines use competency mapping and goal sheet regarding same.

Both airlines do monitor the strategy implementation, though IndiGo Airline does it by an automated tracking system (Each system and Each employee tracker basis) while spice jet monitors it through monthly/Bi-monthly meetings amongst department and across departments.

Both airline strategy renewal /course correction is done by Airline Strategic Committee based on stakeholder meetings and departmental meetings outcome.

RQ 2:

Airport Infrastructure plays a vital role in both the airline profitability in terms of lowering operating cost, enhancing the customer travel experience and market connectivity. Airport operational efficiency is crucial in terms of reducing airline Turn Around Time which ultimately is the critical parameter

for an airline to sustain in the market. Due to the regulatory implications in delays, the major integral component is counted for passenger cost, including additional overheads on passenger loading arrangements in case of delays. **(ITA, 2000)** defines various costs as a result of schedule disruption, improper and offscale of operational efficiency at significant hubs in terms of missed flight connection, minimum connecting time prolonged timeslot and cancellations of flights.

Lower turn around also helps the airlines in keeping their aircraft in air /airborne for a higher number of hours which outcome in more revenue for an airline. LCC airlines are pushing the airport operators to lower down the airport charges and compensate the loss by the enhancing of non-aeronautical revenue. **(Humphreys, 2006)** .

In the Indian context, none of the airlines has a financial partnership with airport operators, though the model works well in another part of the world. If an airline gets its dedicated terminal at the airport then, of course, it is an excellent scope of enhancing revenue and lowering down operating cost like parking, hanger, slots etc. However, due to regulatory framework and governmental policies, thin margined airlines business right now is not in a position of sustain that massive investment. **(Mark Hansen, 2013)** highlighted the role of on-time performance (OTP) and punctuality, failing in maintaining the same, resulting in downscaling the market share and revenue of an airline. Fuel, crew and maintenance costs emerged as the high costs due to delay at airport excluding the buffer costs, i.e. aircraft ownership, lease and rental, depreciation and insurance etc

For both the airlines about 12 - 15 % of operating cost is due to airport charges operating cost is too correlated with the airport in terms of, airport slots, airport charges, hanger charges, passenger service charges, Aerodrome Ground Lighting AGL) charges, communication systems and terminal usage charges. Government outlook in terms of airline association has also its challenges like irrational competition, favoured policies, dedicated reservation systems and capacity handling issues in terms of common v/s solo usages. –
New category

RQ 3:

For both the airlines, India regulatory framework has a huge correlation in terms of sustainability.

New Civil aviation policy has helped both the airlines to bring its cost down in terms of lower fuel /ATF cost along with operational requirements in International sectors. Both the airlines are being benefited by boosted regional connectivity in terms of launching new routes and more frequencies in domestic sectors. Under the UDAAN scheme, both the airlines have been allocated major share of domestic routes, subsidies, with seaplane routes to SpiceJet. Also, upscaling in pax specific charge(s) result in reduction for the airline charges and vice-versa. **(ICAO, Airport Economic Manual, 2006).**

Both the Airline's financial performance is affected by bilateral agreements in terms of supplying seats, offerings services, partnership scopes, flying rights, flight restrictions and airspace usages Airlines are operating in a very regulated environment, and demand /supply offerings are impacted by these agreements. For both the airlines, the Indian market is very regulated, and liberalization is not there, hence compliance is strict so as doing business in India. AERA's authority shelters regulation and fixation of tariffs for monitoring airports, aeronautical services and airport user charges **(AERA, 2019).**

Rigid regulatory compliance, defence-oriented government outlook, higher ATF taxes, tight margins, the limited scope of maintenance and MRO facilities impacts the sustainability of LCC airliners.

RQ- 4:

Both the airlines have firm industry partners helping airlines to sustain.

IndiGo has a competitive advantage in term of strong partnership with AIRBUS and GDS partner Travelport (IndiGo, 2018-19) while SpiceJet is competitive in terms of strong partnership with Boeing and diversified businesses Spice Retail and Spice X Press logistics. Both the airlines are focusing on "On-Time Performance" through quick turnaround time,

multitasking, performance automation, active fleet, route and Network Planning with a customer focus. SpiceJet Airline also operates dedicated freighters for tapping the cargo market. SpiceJet signed a MoU on internet and code-sharing contracts with Emirates airline. This allows SpiceJet passengers from India to use seamless communications in Europe, Africa, the United States and the Middle East using the UAE's extensive network result in benefiting passengers travelling on both airlines which eventually enhanced revenue for the airline.(Annual Report 2018-19).IATA partnership helpful in building strategic alliances and global platform for the airline to operate with common or shared services with expanded network. SpiceJet partnered with Amadeus as the first global sales partner for various fares available through Amadeus Travel Platform. SpiceJet has partnered with resellers to reach tourists around the world, showcase their products worldwide, gain access to new markets and partners, and expand their customer base. (Corporate Presentation & Annual Report 2018-19)

Both airlines are building their sustainability on key resources like fleet, staff, brand image, capital, dynamic pricing with low fares with profitable routes and active fleet schedules. Both the airlines value proposition is through Low Fares, Elite Customer Services with on Time performance.

Both airlines are very particular regarding impersonal and automated Customer relationship management. Customer complaints and suggestions are well appreciated and bring customer as their stakeholder in obtaining higher performance. The innovative solution is provided to strengthen the data-driven decision making in terms of automatic rostering to enhance crew planning with digital-oriented crew and fleet management to enhance the productivity of the crew. Customer-centric Airport congestion and flight delays information is provided by personal communication, and crew members are also improving their day to day activities by innovative solution in terms of digital information provided by SpiceJet. Automated Baggage Reconciliation System (BRS) has improved the real-time tracing the process of mishandled baggage to enhance the customer delight (**SpiceJet Annual Report 2018-19**)

Indigo annual report states “Customer oriented policies and activities are on top priority with effective CRM to provide customer delight to IndiGo passengers with sense of service in employees too” (IndiGo, 2018-19)

Both airlines are using secure sales communication, and distribution channels, i.e. GDS, Web Based and Sky scanner, Both the airlines target young, price-sensitive, working professionals' passengers having high price sensitivity. Airline annual report confirmed the same stating " Airline has different platform and tools for customer support and call center facilities which connects to the passenger experience”.

Both the airlines low cost strategies oriented towards Single Fleet Type, higher aircraft utilization, more intense capacity, more destination, market tapping, low maintenance cost due to younger fleet size, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and fleet planning.

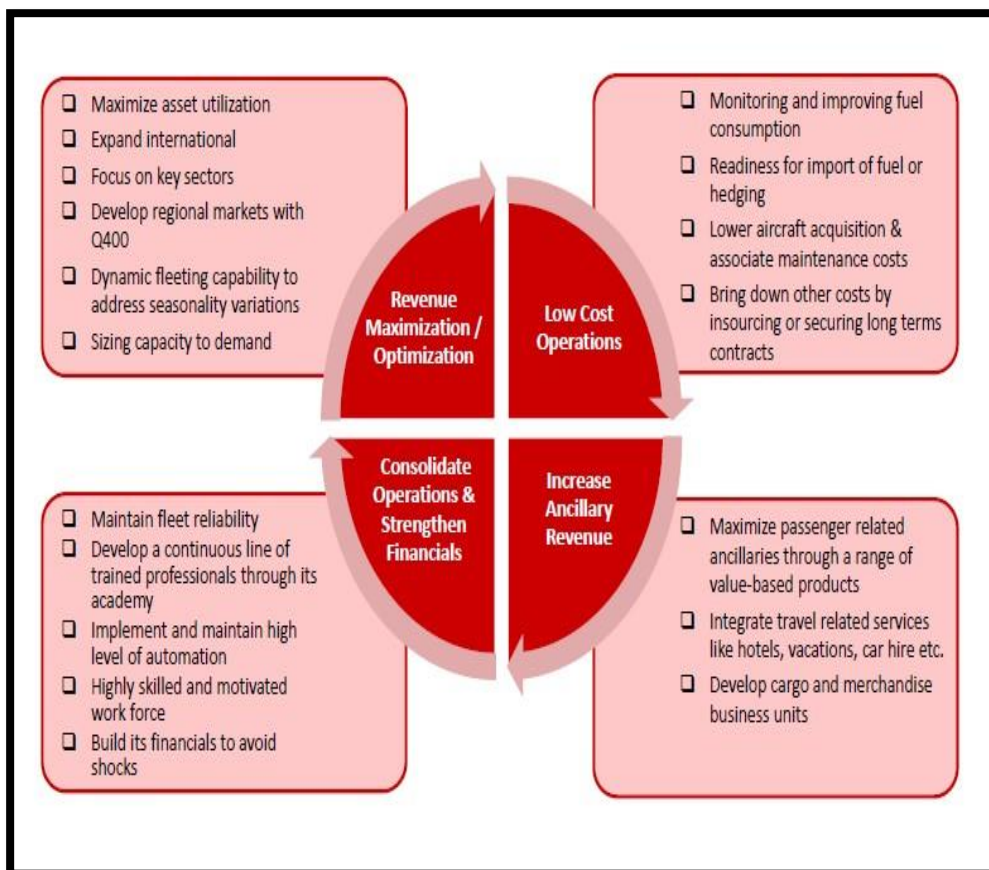


Figure 6.1.1: SpiceJet Corporate Strategies

Sources: Corporate Presentation 2019

The exclusive offering in terms of U First having priority in baggage checking ,meal preferences and boarding along with MyFlexi plan for economic passengers. SpiceVacations.com acts as dedicated travel portal for the destinations holidays in terms of combo deals or product bundling. Spice Vacations offers a wide range of entertainment events, convenient airport transfers and local transport to the convenient destinations of SpiceJet customers. (SpiceJet, 2018-19)

Data-Driven Decision Making is critical for the sustainability also confirmed through Indigo airline official guide as “Complex network and communication with web network is foundation of the IndiGo” (IndiGo, 2018-19). IndiGo significant revenue comes from pax sales and aircraft.

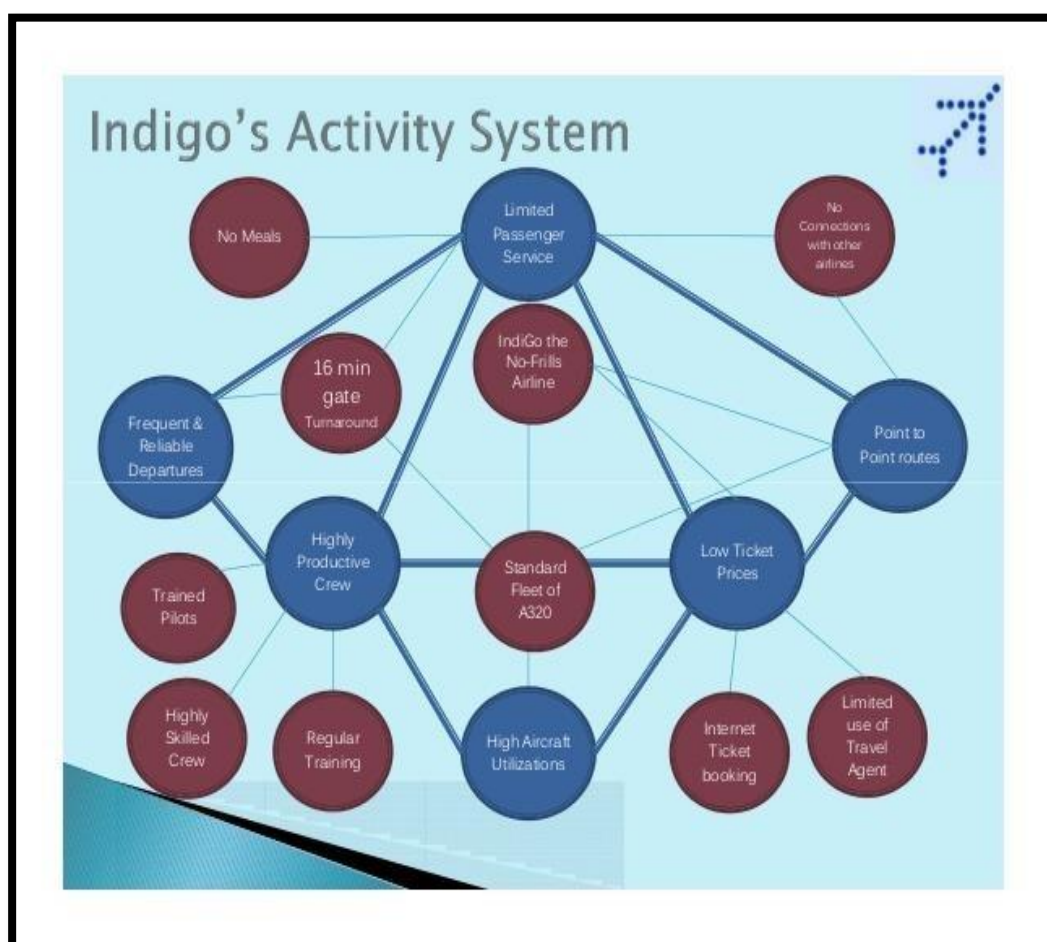


Figure 6.1.2: Indigo Operational Strategies Linkage with Business Model

Sources: CAPA

sale and lease out while SpiceJet revenue comes from pax sales along with cargo and diversified businesses like SpiceJet fashion, retail and logistics.

RQ -5:

To sustain in the Indian market, both the airlines are building strategies to get a competitive advantage through lower operating cost. Both the airlines are indulging in innovative marketing and sales strategies which result in higher load factor hence provide a competitive edge in the Indian market. Both the airlines are very concern towards revenue management strategy and dynamic pricing, which ultimately provide the maximization of passenger surplus to cover the operating expenses and required margin to sustain in the market.

Both the airlines have powerful stakeholder management which results in lowering the operating cost and increase the revenue potential in terms of sales and services hence crucial for sustainability. As the Indian market is facing a talent crunch, both the airline's focus is on retaining and recruiting key domain professionals. They have a vision for the future, capable of being a potential asset to the company, empowerment through authority and training to make them capable of taking critical strategic decisions. Airline annual report states "Airline training aspect is strong in terms of crew alert, fuel saving and conservation practices by ground ,pilot and engineering staff".

For the same, both airlines train their staff dedicated training centers at respective headquarters. As per annual airline reports " IndiGo is powered by employees and strongly believe in employee empowerment through automated HR and training system with focus on work life balance"

The airline launched Optimized Recruitment Process and Personnel Management System also Spice Star Academy Recruitment of 2,564 Highly Qualified Specialists, Skill Progress Training, Cabin Staff Training, Spice Star Academy launched the airline's first such initiative in June 2018. - Spice Star Academy offers Bachelor of Business Administration with a number of universities. The academy promotes talent through first-class training

programs to provide airlines with the best quality resources. The academy facilitates skills development for potential and emerging flight attendants (SpiceJet, 2018-19)

Both the airlines are taking millions of decisions in a day. i.e. Network decision, product decision, revenue and pricing decisions, distribution, personnel decisions, organizational decisions, operating decisions, Fleet Planning and rotation, Fleet Assignment decision etc. Airlines sustainability is highly dependent on the right decision at the right time hence crucial for profitability.

The transparency, communication and decisions in the business model are critical to communicating the business vision to end-users. Both the airlines have a very suitable business model to sustain in future Both the airlines are seeking government support in terms of subsidies, Infra development, Airport investments, public, private partnership, flexible regulations, VISA relaxation, foreign trade policy and interstate regulatory compliances along with ease of doing business in India.

SpiceJet got its revival in 2015 because of government support only. Hence it helps the airline to sustain in Indian context., the same is penned down in annual airline reports as “The operational, policy formations, management and governing structure impact the business of airlines in India where DGCA,AAI and MOCA regulates the commercial aviation”. At present, government is defence oriented, and policymaking is skewed towards defence, but liberalization in regulations make LCC business model more sustainable in the Indian context.

6.3 CROSS CASE ANALYSIS

Based on the literature, five major empirical categories were identified, and the same was evident by cross-case study analysis. The empirical categories,

ie. *LCC airline strategic planning and implementation, airline airport relationship, regulatory framework impacts on airlines sustainability, LCC strategies linkage with the business model and critical success factors* are confirmed through the analysis along with two novel categories are arisen from this study. Cross-case comparison of evident processes and categories are illustrated in Table 6.3. In the following table, 1 represent the existence of the category in that case whereas '0' marked for the absence. The variation amongst both cases is characterized as shaded cells.

Table 6.3: Cross Case Comparison

Categories	Focused codes from empirical data (Case Study- 1 and Case Study -2)	Case Study -1	Case Study -2
Empirical data (Case Study-1 and Case Study-2)		INDIGO AIRLINES	SPICEJET AIRLINES
Strategy Planning and Implementation	<i>Strategic Review</i>	<i>1</i>	<i>1</i>
	<i>Business Environment Scanning</i>	<i>1</i>	<i>1</i>
	<i>Levels of Strategies</i>	<i>1</i>	<i>1</i>
	<i>Strategy Formulation</i>	<i>1</i>	<i>1</i>
	<i>Strategy Implementation</i>	<i>1</i>	<i>1</i>
	<i>Strategy Monitoring</i>	<i>1</i>	<i>0</i>
	<i>Strategy Renewal</i>	<i>1</i>	<i>1</i>
Airline Airport Relationship	<i>Airport Infrastructure</i>	<i>1</i>	<i>1</i>
	<i>Airport Operational Efficiency</i>	<i>1</i>	<i>1</i>
	<i>Airline Airport Financial Partnership</i>	<i>0</i>	<i>0</i>

	<i>Airline Operating Cost</i>	1	<i>1</i>
	<i>Government Challenges</i>	1	<i>1</i>
Regulatory Framework	<i>Civil Aviation Policy</i>	1	<i>1</i>
	<i>Regional Connectivity</i>	1	<i>1</i>
	<i>Bilateral Agreements</i>	1	<i>1</i>
	<i>Regulatory Compliance</i>	1	<i>1</i>
Airline Strategies and Linkage with Business Model	<i>Airline Partners</i>	1	<i>1</i>
	<i>Airline Key Activities</i>	1	<i>1</i>
	<i>Airline resources</i>	1	<i>1</i>
	<i>Value Proposition</i>	1	<i>1</i>
	<i>Customer Relationship Management</i>	1	<i>1</i>
	<i>Airline Channels</i>	1	<i>1</i>
	<i>Passenger Segmentations</i>	1	<i>1</i>
	<i>Airline Cost structure</i>	1	<i>1</i>
	<i>Airline Revenue Stream</i>	1	<i>1</i>
LCC Key features	<i>Cost Leadership</i>	1	<i>0</i>
	<i>Innovative Sales and Marketing</i>	1	<i>1</i>
	<i>Revenue Management</i>	1	<i>1</i>
	<i>Stakeholder Management</i>	1	<i>1</i>
	<i>Skill Competency</i>	1	<i>1</i>

	<i>Strategic Decision Making</i>	1	1
	<i>Simplicity in Business Model</i>	1	1
	<i>Government Support</i>	0	1

The below-mentioned propositions were developed based on these illustrations

LCC airline Business Strategy Planning and Implementation:

- ***P1: Strategy formulation approach of inside out is more likely to be used in LCC airline strategic management in India***

Evidence was found for both airlines' strategy formulation is dependent on current market forces, competition, financial buffer and resources. It is majorly discussed and form at a higher-level BOARD meeting. IndiGo strategy formulation is done by EXCOM (Executive Committee Meeting) while SpiceJet does it through “Strategic Team C Level “along with “Commercial Meeting”. Also, prominent evidence was found for both LCC airlines objective is profitability through lower operating cost and generating higher revenue Both airline resources are fleets, airport bases, routes and network depth and staff. Both airlines are expanding in terms of gaining domestic and international market share Airlines has similar threats from the regulatory framework, political structure and higher competition Both airlines form different strategies at the corporate level, Business Level and Functional level.

- ***P2: Qualitative tracking through system trackers is most likely to be used to monitor the strategic implementation in the Indian airline industry***

Evidence was found for both airlines do monitor the strategy implementation. However, IndiGo Airline does it by an automated tracking system (Each system and Each employee tracker basis) while

spice jet monitors it through monthly/Bimonthly meetings amongst department and across departments.

P3: Strategy renewal is most likely to be cast-off to do course correct in the airline industry--Evidence was found for both airlines strategy renewal /course correction is done by Airline Strategic Committee based on stakeholder meetings and departmental meetings outcome.

- **P4: Airline Strategic management in terms of formulation, implementation and monitoring is most likely to be used to define the business model process of low-cost airliners in India-** Evidence was found for both airlines business model process is defined in terms of strategy formulation, implementation and monitoring. IndiGo strategy formulation is done by EXCOM (Executive Committee Meeting) while SpiceJet does it through “Strategic Team C Level “along with “Commercial Meeting”. Also, prominent evidence was found for both LCC airlines objective is profitability through lower operating cost and generating higher revenue Both airline key resources are fleets, airport bases, routes and network depth and staff. Both airlines form different strategies at the corporate level, Business Level and Functional level.

LCC Airline and Airport Relationship:

- ***P5: Airport choice positively influence the airline operational efficiency/profitability-*** Airport Infrastructure plays a vital role in both the airline profitability in terms of lowering operating cost, enhancing the customer travel experience and market connectivity. Airport operational efficiency is crucial in terms of reducing airline Turn Around Time which ultimately is the critical parameter for an airline to sustain in the market. Lower turn around also helps the airlines in keeping their aircraft in air /airborne for a higher number of hours which outcome in more revenue for an airline.

- **P 6: Airport operational efficiency positively influence LCC operating cost** - Evidence were found for both airlines that airport Infrastructure plays an important role in both the airline profitability in terms of lowering operating cost, enhancing customer travel experience and market connectivity. Airport operational efficiency is crucial in terms of reducing airline Turn Around Time which ultimately is the critical parameter for an airline to sustain in the market. Lower turn around also helps the airlines in keeping their aircraft in air /airborne for a higher number of hours which outcome in more revenue for an airline.
- **P 7: the scale of LCC operation positively influences airport airline financial partnership in terms of the dedicated terminal-** In the Indian context, evidence was found that none of the airlines has a financial partnership with airport operators, though the model works well in another part of the world. If an airline gets its dedicated terminal at the airport then, of course, it is a vast scope of enhancing revenue and lowering down operating cost like parking, hanger, slots etc. Though due to regulatory framework and governmental policies, thin margined airlines business right now is not in a position of sustain that massive investment.
- **P 8: Airline operating cost optimization is most likely to be used to make LCC business model more feasible** - Evidence was found for both airlines regarding 12 - 15 % of operating cost is due to airport charges. Operating cost is too correlated with the airport in terms of, airport slots, airport charges, service contracts, hanger charges, passenger service charges, Aerodrome Ground Lighting (AGL) charges, communication systems and terminal usage charges.
- **P 9: Airport airline financial partnership in terms of services, operations, infrastructure and business diversification, is least likely to be used by government due to public utility monopolization-** Evidence was found for both airlines that Government outlook in terms of airline association also has its own challenges like irrational

competition, favoured policies, dedicated reservation systems and capacity handling issues in terms of common v/s solo usages.

Regulatory framework impact on LCC sustainability

- ***P 10: Civil aviation policy positively influence the regional connectivity scheme in India*** - Evidence was found for both airlines that New Civil aviation policy has helped both the airlines to bring its cost down in terms of operating permit, Foreign direct investment, Export and Import policies lower fuel /ATF cost along with operational requirements in International sectors.
- ***P 11: UDAAN scheme positively influences regional connectivity on Indian routes.*** - Evidence was found for both airlines are being benefited by boosted regional connectivity in terms of launching new routes and more frequencies in domestic sectors. Under the UDAAN scheme, both the airlines have been allocated major share of domestic routes, subsidies, with seaplane routes to SpiceJet
- ***P 12: Bilateral Traffic rights and agreements positively influence low-cost airline financial performance in the Indian market-*** Evidence were found for both airlines that financial performance is affected by bilateral agreements in terms of supplying seats, offerings services, partnership scopes, flying rights, flight restrictions and airspace usages Airlines are operating in a very regulated environment, and these agreements impact demand/supply offerings. For both the airlines, the Indian market is very regulated, and liberalization is not there, hence compliance is robust so as doing business in India.
- ***P 13: Regulatory framework is most likely to be used to benchmark SARP/SOP and regulatory compliance to help low-cost airline sustainable*** - Evidence were found for both airlines that rigid and non-liberalized regulatory compliance, defence-oriented government outlook, higher ATF taxes, tight margins, the limited scope of

maintenance and MRO facilities impacts the sustainability of LCC airliners.

Airline Strategies and Linkage with Business Model

- ***P 14: Airline key industry partners positively influence the airline business model in India.*** - Evidence was found for both airlines that IndiGo has a competitive advantage in term of strong partnership with AIRBUS and GDS partner Travelport. At the same time, SpiceJet is competitive in terms of strong partnership with BOEING and diversified businesses Spice Retail and Spice X Press logistics.
- **P 15: Airline key activities are most likely to be used to benchmark LCC business model** - Evidence was found for both airlines are focusing on "On-Time Performance" through quick turnaround time, multitasking, performance automation, active fleet, route and Network Planning with a customer focus. SpiceJet Airline also operates dedicated freighters for tapping the cargo market.
- ***P 16: Airline resources are most likely to be used to build competitive advantage, and survival strategies in the Indian airline industry-*** Evidence were found for both airlines, building their sustainability on key resources like fleet, staff, brand image, capital, dynamic pricing with low fares with profitable routes and active fleet schedules.
- **P 17: Value Propositions and Customer Relationship Management are likely to be connected with LCC airline business model-** Evidence was found for both airlines, the value proposition is through Low Fares, Elite Customer Services with on Time performance. Both airlines are very particular regarding impersonal and automated Customer relationship management. Customer complaints and suggestions are well appreciated and bring customer as their stakeholder in obtaining higher performance.

- **P 18: Passenger segmentation is most likely to be used to identify the additional surplus to gain more revenue and value-added services-** Evidence was found for both airlines target young, price-sensitive, working professional's passengers having high price sensitivity. Both airlines are using secure sales communication and distribution channels, i.e. GDS, Web Based and Sky scanner for the sustainable business model.
- ***P 19: Airline cost structure is most likely to be used to define the low-cost business model in the Indian context.*** Evidence was found for both airlines low-cost strategies oriented towards Single Fleet Type, higher aircraft utilization, more intense capacity, more destination, market tapping, low maintenance cost due to younger fleet size, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and fleet planning.
- ***P 20: Airline revenue positively influence the business model overall strategies to sustain in the Indian market-*** Evidence was found for both airlines that IndiGo significant revenue comes from pax sales and aircraft sale and leaseback. In contrast, SpiceJet revenue comes from pax sales along with cargo and diversified businesses like SpiceJet fashion, retail and logistics.

Critical Success Factors for LCC

- ***P 21: LCC Critical Success factors positively influence the sustainability of low-cost carrier (LCC) in India*** - Evidence was found for both airlines to sustain in the Indian market, both the airlines are building strategies to get a competitive advantage through lower operating cost. Both the airlines are indulging in innovative marketing and sales strategies which helps to enhance the load factor of airline resulting in higher revenue. Both the airlines are very concern towards

revenue management strategy and dynamic pricing, which ultimately provide the maximization of passenger surplus to cover the operating expenses and required margin to sustain in the market.

Both the airlines have powerful stakeholder management which results in lowering the operating cost and increase the revenue potential in terms of sales and services hence crucial for sustainability. As Indian market is facing talent crunch, both the airline's focus is on retaining and recruiting key domain professionals who have a vision for the future, capable of being a potential asset to the company, empowerment through authority and training to make them capable of taking critical strategic decisions

. For the same, both airlines train their staff at dedicated training centers at respective headquarters. Both the airlines are taking millions of decisions in a day .i.e. Network decision, product decision, revenue and pricing decisions, distribution, personnel decisions, organizational decisions, operating decisions, Fleet Planning and rotation, Fleet Assignment decision etc. Airlines sustainability is highly dependent on the right decision at the right time hence crucial for the transparency, communication and decisions in business model is key to communicate the business vision to end-users.

Both the airliners have a very suitable business model to sustain in future Both the airliners are seeking government support in terms of subsidies, infra development, Airport investments, public, private partnership, flexible regulations, VISA relaxation, foreign trade policy and interstate regulatory compliances along with ease of doing business in India. SpiceJet got its revival in 2015 because of government support only. Hence it helps the airline to sustain in the Indian context.

6.4 CROSS CASE FINDINGS REGARDS TO RESEARCH QUESTIONS

Summary of cross-case study findings is illustrated below as:

Findings related to RQ 1: How an LCC airline plan and execute its strategies?

LCC airlines strategy formulation is dependent on current market forces, competition, financial buffer and resources. It is majorly discussed and form at a higher level BOARD meeting. LCC Airline strategy formulation is done by EXCOM (Executive Committee Meeting) or “Strategic Team C Level “along with “Commercial Meeting” discussion. LCC airlines core objective is profitability through lower operating cost and generating higher revenue .

Both airline key resources are fleets, airport bases, routes and network depth and staff. LCC airlines are expanding in terms of gaining domestic and international market share, LCC airlines have similar threats from the regulatory framework, political structure and higher competition LCC airlines form different strategies at the corporate level, Business Level and Functional level

.LCC airlines implement the strategies having been discussed in an executive committee meeting, dropped down by c level guys to respective Head of Departments, and then HoD discuss with their departmental staff and hence individual goals setting is done. Airlines use competency mapping and goal sheet regarding same. LCC airlines do monitor the strategy implementation, though by automated tracking system (Each system and Each employee tracker basis) and through monthly/Bimonthly meetings amongst department and across departments.

LCC airline strategy renewal /course correction is done by Airline Strategic Committee based on stakeholder meetings and departmental meetings outcome.

Findings related to RQ 2: How airports are impacting the sustainability of Low-Cost carriers?

Airport Infrastructure plays a vital role in LCC airline profitability in terms of lowering operating cost, enhancing the customer travel experience and market connectivity.

Airport operational efficiency is crucial in terms of reducing airline Turn Around Time which ultimately is the critical parameter for an airline to sustain in the market. Lower turn around also helps the airlines in keeping their aircraft in air /airborne for a higher number of hours which outcome in more revenue for an airline.

In the Indian context, none of the airlines has a financial partnership with airport operators, though the model works well in another part of the world. If an airline gets its dedicated terminal at the airport then, of course, it is a vast scope of enhancing revenue and lowering down operating cost like parking, hanger, slots. However, due to regulatory framework and governmental policies, thin margined airlines business right now are not in a position of sustain that massive investment.

For LCC airliners, about 12 - 15 % of the operating cost is due to airport charges. Operating cost is too correlated with the airport in terms of, airport slots, airport usage charges, landing Fee, hanger charges, passenger service charges, Aerodrome Ground Lighting (AGL) charges, communication systems and terminal usage charges.

Government outlook in terms of airline financial association has also its challenges like irrational competition, favored policies, dedicated reservation systems and capacity handling issues in terms of common v/s solo usages.

Findings related to RQ 3: How the regulatory framework of the country (India) is impacting LCC airlines sustainability?

Indian regulatory framework has a huge correlation in terms of sustainability. New Civil aviation policy has helped LCC airlines to bring its cost down in

terms of regional connectivity, Foreign Direct Investment, Import Export policies, lower fuel /ATF cost along with operational requirements in International sectors. Low-Cost airlines are being benefited by boosted regional connectivity in terms of launching new routes and more frequencies in domestic sectors. Under the UDAAN scheme, LCC airlines have been allocated significant share of domestic routes, subsidies, with seaplane routes to SpiceJet.

LCC Airlines financial performance is affected by bilateral agreements in terms of supplying seats, offerings services, partnership scopes, flying rights, flight restrictions and airspace usages Airlines are operating in a very regulated environment, and these agreements impact demand/supply offerings. For the LCC airlines, the Indian market is very regulated, and liberalization is not there, hence compliance is robust so as doing business in India. Rigid regulatory compliance, defence-oriented government outlook, higher ATF taxes, tight margins, the limited scope of maintenance and MRO facilities impacts the sustainability of LCC airlines in India.

Findings related to RQ 4: What are the various airline strategies and how it is linked with the business model?

IndiGo has a competitive advantage in term of strong partnership with AIRBUS and GDS partner Travelport. At the same time, SpiceJet is competitive in terms of strong partnership with BOEING and diversified businesses Spice Retail and Spice X Press logistics. LCC airlines are focusing on "On-Time Performance" through quick turnaround time, multitasking, performance automation, active fleet, route and Network Planning with a customer focus. SpiceJet Airline also operates dedicated freighters for tapping the cargo market. The Cost Available Seat Kilometer (CASK) is used to measure the airline unit cost to operate each seat mile offered and considered by dividing total cost by Available Seat Miles (ASM) whereas Revenue Available Seat Kilometer (RASK) is used to measure the airline revenue generated by an airline per seat by flying one kilometer. Indigo is a market leader in CASK and RASK, whereas SpiceJet is also maintaining the same as evident from managers responses.

LCC airlines has firm industry partners helping airlines to sustain

ITEM	INDUSTRY BENCHMARKING MATRIX	SPICEJET AIRLINE	INDIGO AIRLINE
Capacity (ASK)	NA	9.1 Billions	25.8 Billion
Total Income from Operations	NA	30021 (B)	298217.08 (B)
Expenses	NA	28836 (B)	299707.55 (B)
EBITDAR Margin	NA	26%	19.70%
Total RASK	NA	4.63	3.91
Total CASK	NA	4.24	3.69
Ex Fuel CASK	NA	1.51	2.11
Load Factor	95%	91%	87.6 %%%
Turn Around Time	25 Minutes	30 Minutes	25 Minutes
Average Stage Length	1560 Km	940 KM	1020 Km
Average Fleet Age	5 Years	9.1 Years	5.5. Years
Aircraft Utilization Hours	15 Hours	12.2 Hours	12.9 Hours
On-Time Performance	99.6	96.50%	81.60%
Dispatch Reliability	NA	99.62%	99.87%
Flight Cancellation Rate	NA	0.80%	2.40%
TABLE 6.4 – Airline Operating & Financial Benchmarking Metrix Published Sources @2019			

Excluding Fuel CASK is also standard to measure the cost efficiency as fuel cost is typical for the airline, Ex Fuel CASK provides a more robust picture of airline cost efficiency. Load factor is defined as aircraft capacity utilization and calculated by total passengers divide by total seats available multiplied by 100. SpiceJet maintains high load factors (market leader) during 2019 and filled more aircraft with passengers as recorded through airline managers responses.

Turn around time is considered as the total time taken for ramp handling activities and calculated by difference amongst aircraft "chokes on" to "chokes off ".LCC airlines are mainly focusing on reducing turn around time as the aircraft is a liability on the ground and there are various costs to ground time

including aircraft type, parking, ramp charges, airport slots charges, fuel expenses etc. As per Official Airline Guide (AOG), the reduction in 13 % (8 Minutes) in total turn around can result in an extra flight per day, resulting in revenue enhancement for an airline. IndiGo airline is the market leader in turn around, and by using the specialized tracking software, multitasking and highly skilled operational staff, the airline is cutting ground cost.

IndiGo airline average turnaround time is 25 minutes, whereas SpiceJet is maintaining it under 30 minutes with the help of efficient ground handling and aircraft selections. Average stage length of SpiceJet airline is 940 KM whereas for Indigo is 1020 KM. It is a very crucial component to check the miles flown efficiency measure as average distance flown per aircraft departure. Lower the stage length for an LCC airline, the average fuel cost and base cost can be reduced effectively, and airline can work on point to point economies. SpiceJet has lower stage length means their aircraft can fly to a destination and come back to base, reducing the outstation /base charges plus increased aircraft rotations resulting in more revenue.

The stage length also results in effective route planning, and cost-cutting measure for low-cost airlines and Indian LCC leaders (IndiGo & SpiceJet Airlines) are doing the same as mentioned by managers. The on-time performance also affects customer satisfaction and cost structure of low-cost airline, especially transfer & transit flight connections. It also depicts the usage of slots effectively and measured as departure and arrival performance. SpiceJet is a leader in OTP performance during 2019 and maintained OTP of 96.50 % whereas Indigo maintained OTP of 81.60 %. The industry benchmarked OTP is recorded of Ryan Air as 99.6 % resulting in higher customer delight, less missed connection and faster boarding resulting in lower turnaround time which further contributes to less cost and more revenue to the airline as recorded from interviewers' responses also.

Moreover, dispatch reliability and flight cancellation rate also affect costs as delayed flights add-on the ground cost and flight cancellation has also base cost, passenger cost and add-on cost along with hotel and refund amounts.

Indigo maintain the dispatch reliability 99.87% whereas SpiceJet dispatch reliability is recorded as 99.60 %, which ultimately results in higher aircraft utilization. The term aircraft utilization is a refined measure of aircraft productivity and represented in block hours per day means total flying hours by aircraft. Higher the block hours, higher the revenue and lower cost as aircraft in airborne condition generate revenue whereas on the ground it is treated ad liability in term of various airport charges and ground cost.

<u>KEY PARTNERS</u>	<u>KEY ACTIVITIES</u>	<u>VALUE PROPOSITIONS</u>	<u>CUSTOMER RELATIONSHIP</u>	<u>CUSTOMER SEGMENTS</u>
BOING /AIRBUS	Air Transport		Impersonal & automated	Price Sensitive
IT Solution Providers	Fleet Planning	Low Fares, Elite Customer Services with on Time performance	Customer relationship management	Young
Travel & Tourism Enterprises	Route & Network Planning		(CRM Strategies)	Business Executive
MRO & A/C Maintenance Providers	Pricing & Revenue Planning		<u>CHANNELS</u>	
Logistics Partners	Ground Handling Services	(Brand Building through Investment in IT Innovation/Employee Empowerment/Training & Development of successor ,Skill Upgradation	Website, portal, sales communication & distribution channels i.e. GDS , Web Based & Sky scanner	(Revenue Management/Dynamic Pricing)
(Sale & Lease Back Strategy)	<u>KEY RESOURCES</u>		(Sales Strategy /Distribution Strategies)	
Diversified Business verticals	Fleet, Seaplanes, staff, brand image, capital, dynamic pricing with low fares with profitable routes and effective fleet schedules plus effective airport slots			
<u>COST STRUCTURE:</u>			<u>REVENUE STREAMS:</u>	
Fuel Charges , Airport Charges , Distribution Cost, Maintenance Cost, TQ +YR Taxes			Revenue- Passenger Sales plus Value based ancillary services/ Integrated travel related services/Developing cargo and merchandize business	
Cost Strategies - Fuel Hedging ,Effective Fleet ,Route & Network Planning Fuel Hedging/Bulk orders of aircraft/ Contract Negotiations/Fleet Monitoring /Tracking/Collaborative Decision making through OCC /Multitasking / Same day return / Airport Slot Utilization			Strategy - Product Development, Meal on Air, Cargo Freighter Purchasing/Strategy - Meal on Air, Cargo Freighter Purchasing	

Figure 6.1.3: LCC Airline Strategies Linkage with Business Model

As per annual report 2019, average aircraft utilization of IndiGo recorded as Indian industry best as 12.9 Hours where SpiceJet average aircraft utilization recorded 12.2 hours per service day as compared to industry average 10.40 Hours. Keeping aircraft airborne for more time generates more revenue, and the same strategy has been adopted by both the airlines to have shared pie. The high costs of the low-cost airline include aircraft purchase and lease along

with aircraft maintenance cost, which typically is 13 -15 % of total operating cost for a low-cost airline.

Through sale and leaseback method, IndiGo airline maintains average fleet age of aircraft as low as 5.5 years resulting in less maintenance cost and higher reliability, the same has been recorded for SpiceJet airline as 9.1 years which result into higher maintenance cost for SpiceJet as recorded through airline managers. The mentioned strategies have been evident through the manager responses, and the same has been verified through various industry reports and annual reports of airlines.

LCC airline building their sustainability on crucial resources like fleet, staff, brand image, capital, dynamic pricing with low fares with profitable routes and active fleet schedules. LCC airlines value proposition is through Low Fares, Elite Customer Services with on Time performance. LCC airline is very particular regarding impersonal and automated customer relationship management. Customer complaints and suggestions are well appreciated and bring customer as their stakeholder in obtaining higher performance.

LCC airlines are using strong sales communication, and distribution channels, i.e. GDS, Web Based and Skyscanner, Both the airlines target young, price-sensitive, working professionals' passengers having high price sensitivity. LCC airlines low-cost strategies oriented towards Single Fleet Type, higher aircraft utilization, more intense capacity, more destination, market tapping, low maintenance cost due to younger fleet size, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and fleet planning. LCC airlines significant revenue come from pax sales and aircraft sale and lease out along with cargo and diversified businesses related to aviation.

Findings related to RQ 5: What are the innumerable critical success factors of the low-cost carrier in the Indian context.

To endure in the Indian marketplace, LCC airlines are building strategies to get a competitive advantage through lower operating cost. The airlines are

indulging in innovative marketing and sales strategies which helps to higher load factor for airline resulting in more revenue margins. LCC airlines are very concern towards revenue management strategy and dynamic pricing, which ultimately provide the maximization of passenger surplus to cover the operating expenses and required margin to sustain in the market.

LCC airlines have powerful stakeholder management which results in lowering the operating cost and increase the revenue potential in terms of sales and services hence crucial for sustainability. As Indian market is facing talent crunch, LCC airlines focus is on retaining and recruiting key domain professionals. They have a vision for the future, capable of being a potential asset to the company, empowerment through authority and training to make them capable of taking critical strategic decisions. For the same, LCC airline trains their staff @ dedicated training centers at respective headquarters.

LCC airlines are taking millions of decisions in a day. Network decision, product decision, revenue and pricing decisions, distribution, personnel decisions, organizational decisions, operating decisions, fleet Planning and rotation, fleet Assignment decision etc. Airlines sustainability is highly dependent on the right decision at the right time hence crucial for the airline. The transparency, communication and decisions in the business model are essential to communicate the business vision to end-users. LCC airliners have a very suitable business model to sustain in future with the government support in terms of subsidies, infra development, airport investments, public-private partnership, flexible regulations, VISA relaxation, foreign trade policy and interstate regulatory compliances along with ease of doing business in India. Hence it helps the airline to sustain in the Indian context.

6.5 CONCLUSION

This section illustrated the cross-case analysis of IndiGo & SpiceJet were presented discussed in detail in this chapter. The chapter elaborated the resemblances and differences amongst these two case studies in element. The

findings from the two cases were compared in terms of *LCC airline strategic planning and implementation, airline airport relationship, regulatory framework impacts on airlines sustainability, LCC strategies linkage with the business model and critical success factors* are also developed.

All the initial conceptual constructs related to airline critical success factors and airline strategy planning and management emerged from the review of literature were witnessed in IndiGo and SpiceJet Airlines. Even the commonness of all the sub-constructs from literature can be recorded through study. Cross-case comparisons outcome indulge inferences followed by propositions transformation with 20 propositions. Next chapter concludes the study with main research findings.

CHAPTER 7

CONCLUSIONS

7.1 INTRODUCTION

The chapter concludes and analyses the results, including the outcomes of this investigation. This chapter depicts the impacts of this research on industry practices and theory in detail. First, Section (7.2) covers the theoretical framework developed including propositions with regards to Qualitative Associative Networks (QAN) for low-cost carrier critical success factors, LCC strategy planning and practices, airline strategies selection processes, and the relationship between the airport and regulatory framework in the sustainability of low-cost carrier in India. Section (7.3) covers the embryonic categories of events along with the thorough contribution to theory (Section 7.4) and practice listed in Section (7.5). The limitations of this study and the scope for future research is concluded in this chapter under Section 7.6 and Section 7.7.

7.2 THEORETICAL FRAMEWORK

The extensive review of literature in earlier chapters specifies the theoretical framework and depicts the basic models for critical success factors of the low-cost carrier business model in India. Initial conceptual constructs and sub-constructs for LCC airline business model strategy planning and implementation are discussed in the earlier literature review section. Further, the relationship between airport and LCC airline in business model sustainability, regulatory framework impact on LCC sustainability and strategy linkage with the LCC business model is also presented in the study. The conceptual framework is presented in this section by integrating the conclusions of the research study for critical success factors of the low-cost carrier business model.

7.2.1 Critical Success Factors of Low-Cost Carrier (LCC) Business Model

The review of literature enlisted conceptual constructs which form the basis for the low-cost carrier business model (Section 2.6) as illustrated in Table 7.1. The literature sanctions the constructs referring airline strategy planning and implementation practices along with critical success factors for an LCC business model. Empirical data in this research study resulted in five categories which include the two new sub-categories that emerged out from the analysis, i.e. Government Challenges and Transparent Business Model listed below as :

- *Strategy Planning and Implementation*
- *Airline Airport Relationship*
- *Regulatory Framework*
- *Airline Strategies and Linkage with Business Model*
- *LCC Airline Key Features*

Table 7.1: Categories contributing to LCC Critical Success Factors

Initial Conceptual Construct	Sub Constructs	Categories from empirical data	Focused code from empirical data
<i>Strategy Planning and Implementation</i>	Strategic Review	<i>Strategy Planning and Business Model</i>	Airline Objective Policy and Mission
	Business Environment Scanning		Airline Environmental Scanning
	Levels of Strategies		Corporate, Business and Functional Strategies
	Strategy Formulation		Strategy Formulations
	Strategy Implementation		Strategy Implementation
	Strategy Monitoring		Strategy Monitoring
	Strategy Renewal		Course-Correction
<i>Airline Airport Relationship</i>	Airport Infrastructure	<i>Airline Airport Connectivity</i>	Airport Infrastructure
	Airport Operational Efficiency		Airport Operational Efficiency
	Airline Airport Financial Partnership		Airline Airport Financial Partnership
	Airline Operating		Airline Operating Cost

	Cost		
	NIL		Government Challenges
Regulatory Framework	Civil Aviation Policy	Regulatory Structure	Civil Aviation Policy
	Route Dispersal Guidelines		Regional Connectivity Schemes
	Bilateral Agreements		Bilateral Agreements
	Regulatory Compliance		Regulatory Compliance
Airline Strategies and Linkage with Business Model	Airline Partners	Airline Strategies and Linkage with Business Model	Key Partners
	Airline Activities		Airline Key Activities
	Key Resources		Airline Resources
	Key-Value Propositions		Value Proposition
	Airline Customer Relationship		Customer Relationship Management
	Airline Channels		Airline Channels
	Customers Segmentations		Passenger Segmentation
	Airline Cost Structure		Airline Costs
	Airline Revenue Streams		Airline Revenue Streams
LCC Key Features	Cost Leadership	LCC Key Features	Cost Leadership
	Strategic Decision Making		Strategic Decision Making
	Revenue Management		Revenue Management
	NIL		Simplicity in Business Model
	Stakeholder Management		Stakeholder Management
	Skill Competency		Skill Competency
	Government Support		Government Support
	Innovative Sales and Marketing		Innovative Sales and Marketing

Derivation of two new sub-categories from this research investigation is mentioned in Table 7.1 as :

1. Governmental Challenges in Airport Airline Financial Partnership
2. Transparency in LCC Business Model

In India, the government has some significant challenges for airline airport financial partnership in term of the dedicated terminal - Common User V/s Solo User, Voters Concern, Democratic and un-democratic issues, Vertical

and horizontal integration from the industry. Few operational challenges are towards reservation systems, catering, baggage handling systems and stakeholder management side.

The simple airline business model without any complexity and multilayer with essential services along with customer services is sustainable. The transparency in the business model is critical to communicate the business vision to end-users. IndiGo and SpiceJet, the two most sustainable LCC in India, airline business model are very simple with cost leadership focus, and customers are also involved in their strategic vision and helping the airline to benchmark the On-Time Performance (OTP).

As illustrated in Table 7.1, review of literature on airline strategy planning and implementation covers strategy review, Business Environment Scanning, Levels of Strategies, Strategy Formulation, Strategy Implementation, Strategy Monitoring and Strategy Renewal. The critical findings based upon empirical data analysis are LCC airlines strategy formulation is dependent on current market forces, competition, financial buffer and resources. It is majorly discussed and form at a higher level BOARD meeting. LCC airlines core objective is profitability through lower operating cost and generating higher revenue. Airline essential resources are fleets, airport bases, routes and network depth and staff. LCC airlines are expanding in terms of gaining domestic and international market share, LCC airlines have similar threats from the regulatory framework, political structure and higher competition LCC airlines form different strategies at functional/departmental level, business level and corporate level. LCC airlines implement the strategies having been discussed in an executive committee meeting, dropped down by 'C' level executives to respective Head of Departments and then HoD discuss with their departmental staff and hence individual goals setting is done. Airlines use competency mapping and goal sheet regarding same. LCC airlines do monitor the strategy implementation, though by automated tracking system (Each system and Each employee tracker basis) and through monthly/Bi-monthly meetings amongst department and across departments. Airline Strategic Committee does LCC airline strategy renewal /course correction based on stakeholder meetings and departmental meetings outcome.

Review of literature, as illustrated in Table 7.1, focused on airport airline relationship enlists airport infrastructure, airport operational efficiency, airline airport financial partnership and airline operating cost. The key findings based on empirical data analysis are Airport Infrastructure plays a vital role in LCC airline profitability in terms of lowering operating cost, enhancing the customer travel experience and market connectivity. Airport operational efficiency is crucial in terms of reducing airline Turnaround Time which ultimately is the critical parameter for an airline to sustain in the market. Lower turn around also helps the airlines in keeping their aircraft in air /airborne for a higher number of hours which outcome in more revenue for an airline. In the Indian context, none of the airlines has a financial partnership with airport operators, though the model works well in another part of the world. If an airline gets its dedicated terminal at the airport then, of course, it's a vast scope of enhancing revenue and lowering down operating cost like parking, hanger, slots. However, due to regulatory framework and governmental policies, thin margined airlines business right now are not in a position of sustain that massive investment. For LCC airliners, about 12 - 15 % of the operating cost is due to airport charges. Operating cost is too correlated with the airport in terms of, airport slots, airport usage charges, landing Fee, hanger charges, passenger service charges, Aerodrome Ground Lighting (AGL) charges, communication systems and terminal usage charges.

Review of literature, as illustrated in Table 7.1, focused on regulatory framework enlists civil aviation policy, route dispersal guidelines, bilateral agreements and regulatory compliance. The key findings based on LCC airlines are focusing on "On-Time Performance" through quick turnaround time, multitasking, performance automation, active fleet, route and network planning with a customer focus. SpiceJet Airline also operates dedicated freighters for tapping the cargo market. LCC airline building their sustainability on crucial resources like fleet, staff, brand image, capital, dynamic pricing with low fares with profitable routes and active fleet schedules. LCC airlines value proposition is through Low Fares, Elite Customer Services with On-Time Performance. Empirical data analysis shows that the Indian regulatory framework has a huge correlation in terms of

sustainability. New civil aviation policy has helped LCC airlines to bring its cost down in terms of regional connectivity, foreign direct investment, Import Export policies, lower fuel /ATF cost along with operational requirements in International sectors. Low-cost airlines are being benefited by boosted regional connectivity in terms of launching new routes and more frequencies in domestic sectors.

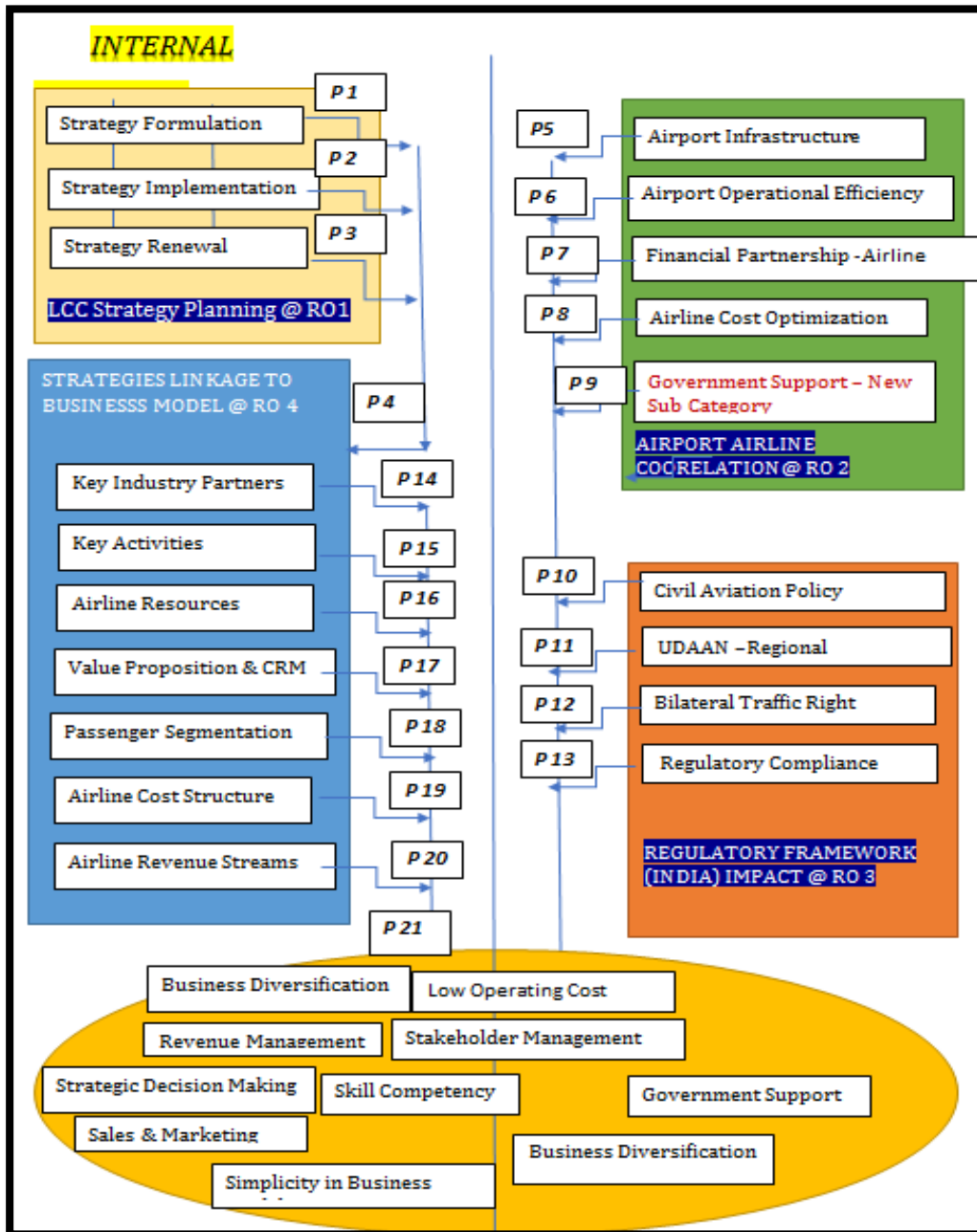


Figure 7.1: LCC CSF FRAMEWORK

Under UDAN scheme, LCC airlines have been allocated significant share of domestic routes, subsidies, with seaplane routes to SpiceJet. LCC Airlines financial performance is affected by bilateral agreements in terms of supplying seats, offerings services, partnership scopes, flying rights, flight restrictions and airspace usages Airlines are operating in a very regulated environment, and demand /supply offerings are impacted by these agreements. For the LCC airlines, the Indian market is very regulated, and liberalization is not there, hence compliance is strict so as doing business in India. Rigid regulatory compliance, defence-oriented government outlook, higher ATF taxes, tight margins, the limited scope of maintenance and MRO (Maintenance and Repair Overhauling) facilities impacts the sustainability of LCC airlines in India.

Review of literature as illustrated in Table 7.1, focused on airline strategic linkage with business model covers airline partners, key resources, airline activities, key-value propositions, airline customers relationship, airline channels, airline cost structure and airline revenue streams. The key findings based on empirical data analysis are LCC airlines has firm industry partners helping airlines to sustain. IndiGo has a competitive advantage in term of strong partnership with AIRBUS and GDS partner Travelport. At the same time, SpiceJet is competitive in terms of strong partnership with BOEING and diversified businesses Spice Retail and Spice X Press logistics.

LCC airline is very particular regarding impersonal and automated customer relationship management. Customer complaints and suggestions are well appreciated and bring customer as their stakeholder in obtaining higher performance. LCC airlines are using strong sales communication, and distribution channels, i.e. GDS, Web Based and Skyscanner, Both the airlines target young, price-sensitive, working professionals' passengers having high price sensitivity. LCC airlines low-cost strategies oriented towards Single Fleet Type, higher aircraft utilization, more great capacity, more destination, market tapping, low maintenance cost due to younger fleet size, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and fleet planning. LCC airlines significant revenue come from pax sales and

aircraft sale and lease out along with cargo and diversified businesses related to aviation.

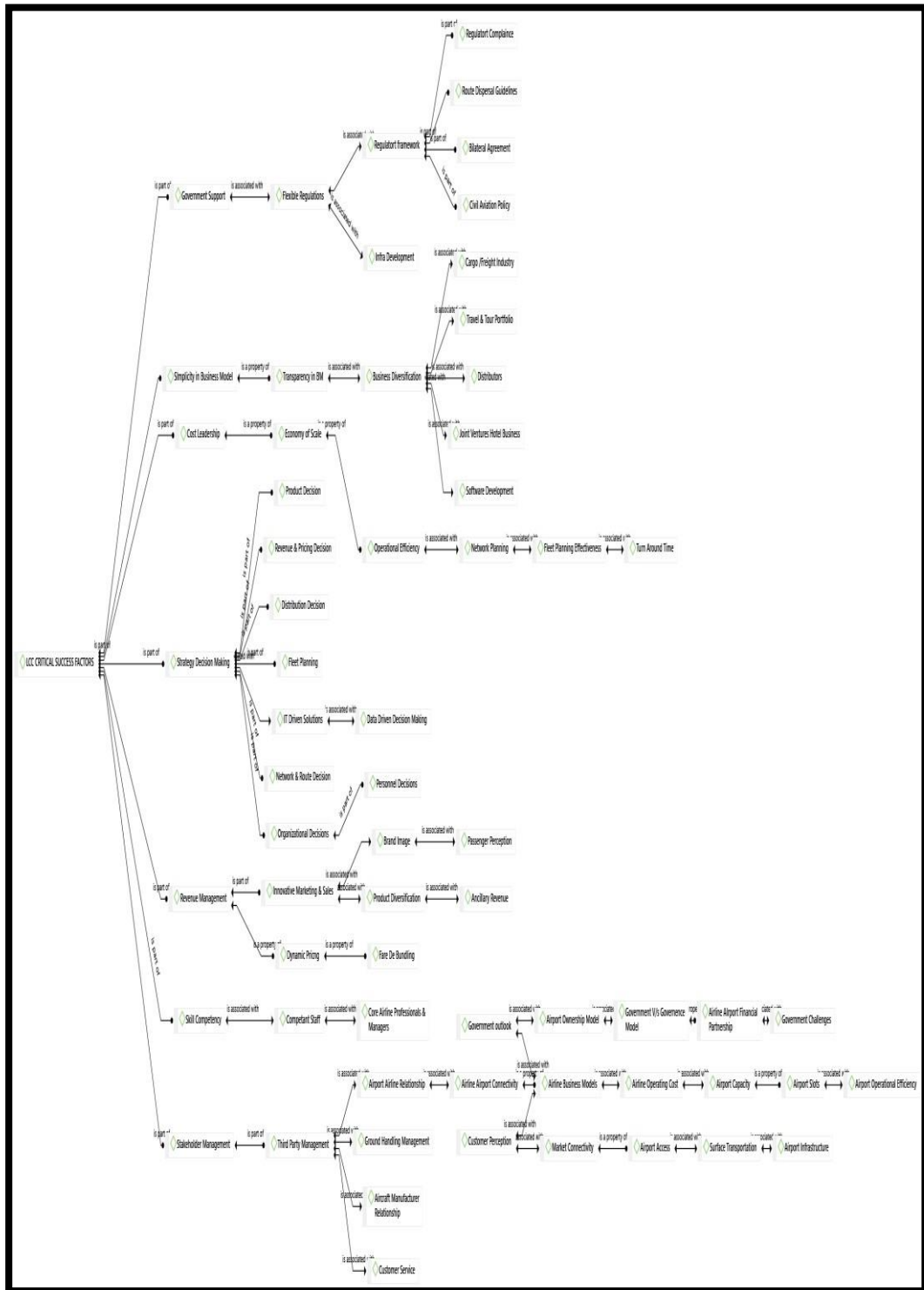


Figure 7.2: QAN Network Diagram for LCC CSF (Composite)

(*Appendix F)

Empirical data resulted in terms of categories contributing to LCC critical success factors and airline strategic management such as Airline strategy planning and implementation, airport airline correlation, regulatory framework, Strategic linkage with LCC business model and critical success factors and crucial roles recognized such as formulation of airline strategy, implementation and strategic course correction along with airport infrastructure and operating cost aspect from an airline point of view and regulatory impact in terms of regional connectivity, civil aviation policy and regulatory compliances. To compare and generalize the empirical results of the two case studies, i.e. IndiGo and SpiceJet Airline, empirical data of both the cases were considered. The logical chain of evidence (Yin 1994; Miles and Huberman, 1994) developed with the help of multiple case studies. In summary, to recognize the chain of validation for the relationships studied based on the framework, cross-case analysis is implied in this study. A specified model for low-cost carrier critical success factors and airline strategic practices planning and execution along with airport and regulatory framework impact is projected in this research study which is depicted in figure 7.1.

7.3 FINDINGS WITH REGARDS TO RESEARCH QUESTIONS

The research questions are articulated to fulfil the objectives of this study. These research questions' summary is presented below as:

Findings related to RQ 1: How an LCC airline plan and execute its strategies?

LCC airlines strategy formulation is dependent on current market forces, competition, financial buffer and resources. It is majorly discussed and form at a higher-level BOARD meeting. LCC Airline strategy formulation is done by EXCOM (Executive Committee Meeting) or “Strategic Team C Level “along with “Commercial Meeting” discussion. LCC airlines core objective is profitability through lower operating cost and generating higher revenue. Both essential airline resources are fleets, airport bases, routes and network depth and staff. LCC airlines are expanding in terms of gaining domestic and international market share, LCC airlines have similar threats from the

regulatory framework, political structure and higher competition LCC airlines form different strategies at a functional level, business level and corporate level.

LCC airlines implement the strategies having been discussed in an executive committee meeting, dropped down by c level guys to respective Head of Departments. Then HoD discusses with their departmental staff, and hence individual goals setting is done. Airlines use competency mapping and goal sheet regarding same. LCC airlines do monitor the strategy implementation, though by automated tracking system (Each system and Each employee tracker basis) and through monthly/Bi-monthly meetings amongst department and across departments. LCC airline strategy renewal /course correction is done by Airline Strategic Committee based on stakeholder meetings and departmental meetings outcome.

Findings related to RQ 2: How airports are impacting the sustainability of Low-Cost Carriers?

Airport Infrastructure plays a vital role in LCC airline profitability in terms of lowering operating cost, enhancing the customer travel experience and market connectivity. Airport operational efficiency is crucial in terms of reducing airline Turn Around Time which ultimately is the critical parameter for an airline to sustain in the market. Lower turn around also helps the airlines in keeping their aircraft in air /airborne for a higher number of hours which outcome in more revenue for an airline.

In the Indian context, none of the airlines has a financial partnership with airport operators, though the model works well in another part of the world. If an airline gets its dedicated terminal at the airport, then it is an excellent scope of enhancing revenue and lowering down operating cost like parking, hanger, slots. However, due to regulatory framework and governmental policies, thin margined airlines business right now are not in a position of sustain that massive investment.

For LCC airliners, about 12 - 15 % of the operating cost is due to airport charges. Operating cost is too correlated with the airport in terms of, airport

slots, airport usage charges, landing Fee, hanger charges, passenger service charges, Aerodrome Ground Lighting (AGL) charges, communication systems and terminal usage charges. Government outlook in terms of airline financial association has also its challenges like irrational competition, favoured policies, dedicated reservation systems and capacity handling issues in terms of common v/s solo usages.

Findings related to RQ 3: How the regulatory framework of the country (India) is impacting LCC airlines sustainability?

Indian regulatory framework has an enormous association in terms of sustainability. New Civil aviation policy has helped LCC airlines to bring its cost down in terms of regional connectivity, Foreign Direct Investment, Import Export policies, lower fuel /ATF cost along with operational requirements in International sectors. Low-Cost airlines are being benefited by boosted regional connectivity in terms of launching new routes and more frequencies in domestic sectors. Under UDAN scheme, LCC airlines have been allocated significant share of domestic routes, subsidies, with seaplane routes to SpiceJet.

LCC Airlines financial performance is affected by bilateral agreements in terms of supplying seats, offerings services, partnership scopes, flying rights, flight restrictions and airspace usages Airlines are operating in a very regulated environment and demand /supply offerings are impacted by these agreements. For LCC airlines, the Indian market is very regulated and non-liberalized. Hence compliance is strict so as doing business in India. Rigid regulatory compliance, defence-oriented government outlook, higher ATF taxes, tight margins, the limited scope of maintenance and MRO facilities impacts the sustainability of LCC airlines in India.

Findings related to RQ 4: What are the various airline strategies and how it is linked with the business model?

LCC airlines has firm industry partners helping airlines to sustain. IndiGo has a competitive advantage in term of strong partnership with AIRBUS and GDS partner Travelport. At the same time, SpiceJet is competitive in terms of

strong partnership with BOEING and diversified businesses Spice Retail and Spice X Press logistics. LCC airlines are focusing on "On-Time Performance" through quick turnaround time, multitasking, performance automation, active fleet, route and network Planning with a customer focus. SpiceJet Airline also operates dedicated freighters for tapping the cargo market.

LCC airline building their sustainability on crucial resources like fleet, staff, brand image, capital, dynamic pricing with low fares with profitable routes and active fleet schedules. LCC airlines value proposition is through low fares, elite customer services with On-Time Performance. LCC airline is very particular regarding impersonal and automated customer relationship management. Customer complaints and suggestions are well appreciated and bring customer as their stakeholder in obtaining higher performance.

LCC airlines are using secure sales communication, and distribution channels, i.e. GDS, Web Based and Sky scanner, Both the airlines target young, price-sensitive, working professionals' passengers having high price sensitivity. LCC airlines low-cost strategies oriented towards Single Fleet Type, higher aircraft utilization, more great capacity, more destination, market tapping, low maintenance cost due to younger fleet size, high turn around resulting in lower airport slots and airport charges, applying economy of scale principle by supplying more seats through higher aircraft rotations and fleet planning. LCC airlines significant revenue come from pax sales and aircraft sale and lease out along with cargo and diversified businesses related to aviation.

Findings related to RQ 5: What are the various critical success factors of the low-cost carrier in the Indian context.

To sustain in the Indian market, LCC airlines are building strategies to get a competitive advantage through lower operating cost. The airlines are indulging in innovative marketing and sales strategies which helps to have a higher number of passengers flying with the LCC airline hence provide a competitive advantage to sustain in the airline industry in the Indian market. LCC airlines are very concern towards revenue management strategy and dynamic pricing, which ultimately provide the maximization of passenger surplus to cover the operating expenses and required margin to sustain in the market.

LCC airlines have powerful stakeholder management which results in lowering the operating cost and increase the revenue potential in terms of sales and services hence crucial for sustainability. As the Indian market is facing talent crunch, LCC airlines focus is on retaining and recruiting key domain professionals. They have a vision for the future, capable of being a potential asset to the company, empowerment through authority and training to make them capable of taking critical strategic decisions. For the same, LCC airline trains their staff @ dedicated training centers at respective headquarters.

LCC airlines are taking millions of decisions in a day. i.e. Network decision, product decision, revenue and pricing decisions, distribution, personnel decisions, organizational decisions, operating decisions, fleet Planning and rotation, fleet Assignment decision etc. Airlines sustainability is highly dependent on the right decision at the right time hence crucial for the airline. The transparency, communication and decisions in the business model are essential to communicate the business vision to end-users. LCC airliners have a very suitable business model to sustain in future with the government support in terms of subsidies, Infra development, airport investments, public-private partnership, flexible regulations, VISA relaxation, foreign trade policy and interstate regulatory compliances along with ease of doing business in India. Hence it helps the airline to sustain in the Indian context.

7.4 SIGNIFICANCE OF THE STUDY

The implication of this research findings is illustrated in this section. Very pivot role of the research study with the contribution to theory, methodology and industry functioning is acknowledged as concerned below:

7.4.1 Theoretical Contribution

This research investigation displays the critical success factors of the low-cost carrier (LCC) business model. This process is based on a set under five major themes, i.e. *LCC airline strategic planning and implementation, airline airport relationship, regulatory framework impacts on airlines sustainability, LCC strategies linkage with the business model and LCC airline key features.*

Two types of sub construct emerge from the study, i.e. governmental outlook and transparency in business which is crucial for critical success factors. Further, a process model is developed for critical success factors of a sustainable business model. This research delivers a full explanation of LCC critical success factors and airline strategy implementation & practices at an organizational level in an intensive industry like the airline industry.

7.4.2 Practical Contribution: Implications for Airline Professionals

The scope of this investigation study is very much acknowledged and appreciated by the aviation experts in India. The conducted research study could provide guidelines and parameters for LCC success factors, formulation of airline strategy, airline strategy selection, implementation, and strategic actions and practices. Therefore, the airline managers can use the study to benchmark the critical success factors and practices in their organizations and their teams to have orientation on the development of strategies. Evidence was also found through the research to monitor and course correction of the strategy implementation. Also, this study helps in understanding the airline and airport correlation ship to enhance the operational efficiency under the regulatory environment to support the LCC airlines to sustain in the Indian market.

7.5 LIMITATIONS OF THE STUDY

This research outcome and conclusions are grounded on an in-depth study of the low-cost airlines in India. Qualitative interpretive orientation was applied to derive the conclusion in this subjective study with restricted generalizability (Klein and Myers, 1999). Critical success factors for LCC sustainability, the relationship between airline and airport, regulatory framework impact on airline sustainability and selection process of strategy and airline strategic practices that are developed in this study are perceptive, i.e. largely on the perception of experts with a high probability of subjective. To overcome and mitigate the subjectivity of interview data, as suggested by Yin (2003) and Eisenhardt (1989), internal & external documentation, along with observations, were utilized for evidence collection.

7.6 SCOPE FOR FUTURE RESEARCH

This research delivers an insightful feed in terms of the critical success factors of the low-cost carrier to sustain in India along with airline strategy planning and implementation. Future research may be progressed and carried on many topics such as a longitudinal study on low cost, LCC business model benchmarking etc. Testing and validation of the propositions, which are developed in this research, may be considered for future research.

- Exploring research is required in terms of the correlation and intensity of strength to measure relationships between airline strategies, selection processes and practices.
- Further other regions, countries and industries can be identified to conduct research studies using a qualitative research approach.
- Further understanding of low-cost airline strategy planning and implementation along with mapping of LCC business models may be developed by Quantitative Associative Networks (QAN)

Few literature gaps emerged through study, and further research can be carried out in the area of critical success factors and strategies selection.

The literature gaps are: -

- Limited literature is available on LCC airline strategy implementation and practice process to achieve sustainable Business Model.
- Limited literature is available on the crucial role of the airport on low-cost carrier airline sustainability.
- Limited literature is available on the Indian regulatory framework impact on LCC sustainability.
- Scanty literature is available on different airline strategies and its linkages to achieve a sustainable business model.
- Scanty literature is available on critical success factors of the low-cost carrier in the Indian context.

REFERENCES

- AERA. (2019, June 10). *Airport Economic Regulatory Authority of India*. Retrieved from aera.gov.in: <http://aera.gov.in/content/>.
- Alderighi, M., Cento, A., & Piga, C. A. (2011). A case study of pricing strategies in European airline markets: The London – Amsterdam route. *Journal of Air Transport Management*, 17(6), 369–373. <https://doi.org/10.1016/j.jairtraman.2011.02.009>
- Andrew, R. (1996). Geography and air transport. *Applied Geography*, 16(4), 360–361. [https://doi.org/10.1016/0143-6228\(96\)80768-5](https://doi.org/10.1016/0143-6228(96)80768-5)
- Ariffin, A. A. M., & Yahaya, M. F. (2013). The relationship between airport image, national identity and passengers delight: A case study of the Malaysian low cost carrier terminal (LCCT). *Journal of Air Transport Management*, 31, 33–36. <https://doi.org/10.1016/j.jairtraman.2013.02.005>
- Aydemir, R. (2012). Threat of market entry and low cost carrier competition. *Journal of Air Transport Management*, 23, 59–62. <https://doi.org/10.1016/j.jairtraman.2012.01.018>
- Barbot, C. (2006). Low-cost airlines, secondary airports, and state aid: An economic assessment of the Ryanair–Charleroi Airport agreement. *Journal of Air Transport Management*, 12(4), 197–203. <https://doi.org/10.1016/j.jairtraman.2006.04.001>
- Barbot, C. (2008). Can low cost carriers deter or accommodate entry? *Transportation Research Part E: Logistics and Transportation Review*, 44(5), 883–893. <https://doi.org/10.1016/j.tre.2007.07.010>
- Barbot, C., D’Alfonso, T., Malighetti, P., & Redondi, R. (2013). Vertical collusion between airports and airlines: An empirical test for the European case. *Transportation Research Part E: Logistics and Transportation Review*, 57, 3–15. <https://doi.org/10.1016/j.tre.2013.01.002>
- Barrett, S. (2004). The Sustainability of the Ryan Air Model . *Journal of Air Transport Management* , 89-98.

- Bilotkach, V. (2007). Complementary versus semi-complementary airline partnerships. *Transportation Research Part B: Methodological*, 41(4), 381–393. <https://doi.org/10.1016/j.trb.2006.06.002>
- Bilotkach, V., Mueller, J., & Németh, A. (2014). Estimating the consumer welfare effects of de-hubbing: The case of Malév Hungarian Airlines. *Transportation Research Part E: Logistics and Transportation Review*, 66, 51–65. <https://doi.org/10.1016/j.tre.2014.03.001>
- Brink, E., Dellve, L., Hallberg, U., Abrahamsson, K. H., Klingberg, G., & Wentz, K. (2006). Constructing grounded theory. A practical guide through qualitative analysis. *International Journal of Qualitative Studies on Health and Well-Being*, 1(3). <https://doi.org/10.3402/qhw.v1i3.4932>
- Brueckner, J. K., Dyer, N. J., & Spiller, P. T. (1992). Fare Determination in Airline Hub-and-Spoke Networks. *The RAND Journal of Economics*, 23(3), 309. <https://doi.org/10.2307/2555865>
- Budd, L., Francis, G., Humphreys, I., & Ison, S. (2014). Grounded: Characterising the market exit of European low cost airlines. *Journal of Air Transport Management*, 34, 78–85. <https://doi.org/10.1016/j.jairtraman.2013.08.002>
- Burgelman, R. A. (1991). Intraorganizational Ecology of Strategy-making and Organizational Adaptation: Theory and Field Research. *Organizational Science*, 2(1), 239–262.
- Button, K. (1998). Infrastructure investment, endogenous growth and economic convergence. *The Annals of Regional Science*, 32(1), 145–162. <https://doi.org/10.1007/s001680050067>
- Button, K. (2012). Low-Cost Airlines: A Failed Business Model? *Transportation Journal*, 51(2), 197. <https://doi.org/10.5325/transportationj.51.2.0197>
- Castillo-Manzano, J. I. (2010). The city-airport connection in the low-cost carrier era: Implications for urban transport planning. *Journal of Air Transport Management*, 16(6), 295–298. <https://doi.org/10.1016/j.jairtraman.2010.02.005>
- Chaharbaghi, K., Fendt, C., & Willis, R. (2003). Meaning, legitimacy and impact of business models in fast-moving environments. *Management Decision*, 41(4), 372–382. <https://doi.org/10.1108/00251740310468013>

- Chang, Y.-C., & Lee, N. (2010). A Multi-Objective Goal Programming airport selection model for low-cost carriers' networks. *Transportation Research Part E: Logistics and Transportation Review*, 46(5), 709–718. <https://doi.org/10.1016/j.tre.2010.01.004>
- Charmaz, K. (2014). *Constructing Grounded Theory* (Rev. ed.). India: SAGE Publications.
- Chesbrough, H. (2007). Business model innovation: it's not just about technology anymore. *Strategy & Leadership*, 35(6), 12–17. <https://doi.org/10.1108/10878570710833714>
- Chesbrough, H. W. (2007b). Why companies should have open business models. *MIT Sloan Management Review*, 48(2): 22-28.
- Chesbrough, H. W., & Rosenbloom, R. S. (2002). The role of the business model in capturing value from innovation: Evidence from Xerox Corporation's technology spinoff companies. *Industrial and Corporate Change*, 11: 533-534.
- Cook. (2004). Evaluating the true cost to airlines of one minute of airborne or ground delay. EuroControl.
- Conrady, R., Fichert, F., & Sterzenbach, R. (2012). *Luftverkehr: Betriebswirtschaftliches Lehr- und Handbuch*. Deutsch: Oldenbourg Wissenschaftsverlag.
- Davenport, H.T. (2006). Competing on Analytics, *Harvard Business Review*, 2-11.
- De Neufville, R. (2008). Low-Cost Airports for Low-Cost Airlines: Flexible Design to Manage the Risks. *Transportation Planning and Technology*, 31(1), 35–68. <https://doi.org/10.1080/03081060701835688>
- de Wit, J. G., & Zuidberg, J. (2012). The growth limits of the low cost carrier model. *Journal of Air Transport Management*, 21, 17–23. <https://doi.org/10.1016/j.jairtraman.2011.12.013>
- Delaplace, M., & Dobruszkes, F. (2015). From low-cost airlines to low-cost high-speed rail? The French case. *Transport Policy*, 38, 73–85. <https://doi.org/10.1016/j.tranpol.2014.12.006>
- DeLong, Thomas J., and Michael Echenberg. (2002). Mercer Management Consulting (A)." Harvard Business School Case 403-009.

- Deutsches Zentrum für Luft- und Raumfahrt, (2010). *Low-cost Monitor 2/2010*, Köln-Porz.
- Dobruszkes, F. (2006). An analysis of European low-cost airlines and their networks. *Journal of Transport Geography*, 14(4), 249–264. <https://doi.org/10.1016/j.jtrangeo.2005.08.005>
- Doganis, R. (2000). *Airline Business in the 21st Century*. London: Taylor & Francis.
- Doganis, R. (2010). *Flying Off Course: Airline Economics and Marketing*. London: Routledge.
- Duliba, K. A., Kauffman, R. J., & Lucas, H. C. (2001). Appropriating Value from Computerized Reservation System Ownership in the Airline Industry. *Organization Science*, 12(6), 702–728. <https://doi.org/10.1287/orsc.12.6.702.10087>
- Dunn, G., (2011). Growth Expectations. In: *Airline Business*, pp.27(7) 28 - 36.
- Fageda, X., & Fernández-Villadangos, L. (2009). Triggering competition in the Spanish airline market: The role of airport capacity and low-cost carriers. *Journal of Air Transport Management*. <https://doi.org/10.1016/j.jairtraman.2008.07.002>
- Field, D. (2008a). Low-cost carriers tweak their models. *Airline Business*, May.
- Flores-Fillol, R. (2009). Airline competition and network structure. *Transportation Research Part B: Methodological*, 43(10), 966–983. <https://doi.org/10.1016/j.trb.2009.03.002>
- Forsyth, P. (2006, September). Airport Policy in Australia and New Zealand : Privatization ,Light Handed Regulation and Performance. *Comparative Political Economy and Infrastructure Performance : Case of Airports*.
- Francis, G., Humphreys, I., Ison, S., & Aicken, M. (2006). Where next for low cost airlines? A spatial and temporal comparative study. *Journal of Transport Geography*, 14(2), 83–94. <https://doi.org/10.1016/j.jtrangeo.2005.05.005>
- Franke, M. (2004). Competition between network carriers and low-cost carriers—retreat battle or breakthrough to a new level of efficiency? *Journal of Air Transport Management*, 10(1), 15–21. <https://doi.org/10.1016/j.jairtraman.2003.10.008>

- Franke, M. (2007). Innovation: The winning formula to regain profitability in aviation? *Journal of Air Transport Management*, 13(1), 23–30. <https://doi.org/10.1016/j.jairtraman.2006.11.003>
- Franke, M., & John, F. (2011). What comes next after recession? – Airline industry scenarios and potential end games. *Journal of Air Transport Management*, 17(1), 19–26. <https://doi.org/10.1016/j.jairtraman.2010.10.005>
- G Francis, A. F. (2003). Airport–Airline Interaction: The impact of low-cost carriers on two European airports, *Journal of Air Transport Management*, 267-273.
- G Francis, A. F. (2003). Airport–airline interaction: the impact of low-cost carriers on two European airports, *Journal of Air Transport Management*, 26-273.
- Gillen, D. W., Stanbury, W. T., & Tretheway, M. W. (1988). Duopoly in Canada’s Airline Industry: Consequences and Policy Issues. *Canadian Public Policy / Analyse de Politiques*, 14(1), 15. <https://doi.org/10.2307/3550449>
- Gillen, D., & Lall, A. (2004). Competitive advantage of low-cost carriers: some implications for airports. *Journal of Air Transport Management*, 10(1), 41–50. <https://doi.org/10.1016/j.jairtraman.2003.10.009>
- Gillen, D., & Morrison, W. G. (2005). Regulation, competition and network evolution in aviation. *Journal of Air Transport Management*, 11(3), 161–174. <https://doi.org/10.1016/j.jairtraman.2005.03.002>
- Goetz, A. R. (2002). Deregulation, competition, and antitrust implications in the US airline industry. *Journal of Transport Geography*, 10(1), 1–19. [https://doi.org/10.1016/s0966-6923\(01\)00034-5](https://doi.org/10.1016/s0966-6923(01)00034-5)
- Goetz, A. R., & Vowles, T. M. (2009). The good, the bad, and the ugly: 30 years of US airline deregulation. *Journal of Transport Geography*, 17(4), 251–263. <https://doi.org/10.1016/j.jtrangeo.2009.02.012>
- Gosling, G. D. (2014). Use of Air Passenger Survey Data in Forecasting Air Travel Demand. *Transportation Research Record: Journal of the Transportation Research Board*, 2449(1), 79–87. <https://doi.org/10.3141/2449-09>
- Graf, L. (2005). Incompatibilities of the low-cost and network carrier business models within the same airline grouping. *Journal of Air Transport*

- Graham, A. (2013). Understanding the low cost carrier and airport relationship: A critical Analysis of the salient issues. *Tourism Management*, 66-76.
- Graham, A., & Dennis, N. (2010). The impact of low cost airline operations to Malta. *Journal of Air Transport Management*, 16(3), 127–136.
<https://doi.org/10.1016/j.jairtraman.2009.07.006>
- Graham, B. (1995). *Geography and Air Transport* (1st ed.). UK: Wiley.
- Graham, Brian, & Shaw, J. (2008a). Low-cost airlines in Europe: Reconciling liberalization and sustainability. *Geoforum*, 39(3), 1439–1451.
<https://doi.org/10.1016/j.geoforum.2007.12.006>
- Graham, Brian, & Shaw, J. (2008b). Low-cost airlines in Europe: Reconciling liberalization and sustainability. *Geoforum*, 39(3), 1439–1451.
<https://doi.org/10.1016/j.geoforum.2007.12.006>
- Grubestic, T. H., & Murray, A. T. (2006). Vital Nodes, Interconnected Infrastructures, and the Geographies of Network Survivability. *Annals of the Association of American Geographers*, 96(1), 64–83.
<https://doi.org/10.1111/j.1467-8306.2006.00499.x>
- Hannon, D. (2009). Despite lower jet fuel prices fewer airlines hedging. *Purchasing*, 138(5), 22.
- Hansson, T. J. R. (2002, December 6). Flight for Survival: A New Operating Model for Airlines. Retrieved December 23, 2019, from <https://www.strategy-business.com/article/22462?gko=6c44a>
- Hansson, T., Ringbeck, J., & Franke, M. (2002). *Airlines: a new operating model*. McLean, VA: Booz Allen Hamilton.
- Harvey, G., & Turnbull, P. (2006). Employment Relations, Management Style and Flight Crew Attitudes at Low Cost Airline Subsidiaries: *European Management Journal*, 24(5), 330–337.
<https://doi.org/10.1016/j.emj.2006.07.002>
- Hofer, C., Windle, R. J., & Dresner, M. E. (2008). Price premiums and low cost carrier competition. *Transportation Research Part E: Logistics and Transportation Review*, 44(5), 864–882.
<https://doi.org/10.1016/j.tre.2007.03.004>

- Holloway, S. (2002). *Airlines: Managing to Make Money* (Rev. ed.). UK: Ashgate.
- Homsombat, W., Lei, Z., & Fu, X. (2014). Competitive effects of the airlines-within-airlines strategy – Pricing and route entry patterns. *Transportation Research Part E: Logistics and Transportation Review*, 63, 1–16. <https://doi.org/10.1016/j.tre.2013.12.008>
- Hooper, P. (2005). The environment for Southeast Asia’s new and evolving airlines. *Journal of Air Transport Management*, 11(5), 335–347. <https://doi.org/10.1016/j.jairtraman.2005.07.004>
- Hossan, Chowdhury. (2012). Sustainability and Growth of Low Cost Airlines: An Industry Analysis in Global Perspective. *American Journal of Business and Management*. 1. 162-171.
- Hossan, Chowdhury. (2012). Sustainability and Growth of Low Cost Airlines: An Industry Analysis in Global Perspective. *American Journal of Business and Management*. 1. 162-171.
- Humphreys, S. I. (2006). A Review of the Airport -Low Cost Airline Relationship. *Review of Network Economics*, 413-420.
- Humphreys, I., Ison, S., & Francis, G. (2006). A Review of the Airport-Low Cost Airline Relationship. *Review of Network Economics*, 5(4). <https://doi.org/10.2202/1446-9022.1105>
- Hunter, L. (2006). Low Cost Airlines: *European Management Journal*, 24(5), 315–321. <https://doi.org/10.1016/j.emj.2006.08.001>
- Hüschelrath, K., Schnell, M., (2004). Existing and new evidence on the effects of airline hubs. *International Journal of Transport Economics* 31 (2), 99–121.
- Hussain, S. A., & Bahçeci, S. (2008). Network Structure and Design in the Deregulated U.S. Airline Industry: An Argument for Re-Regulation? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1280913>
- ICAO. (2006). *Airport Economic Manual* . Montreal : International Civil Aviation Organization.
- ICAO. (2009). *Policies on Charges for Airports and Air Navigation Services*. Montreal: ICAO.
- ITA, E. (2000). Cost of Air Transport Delays. *EuroControl*.

- James, G. A., Cliff, A. D., Haggett, P., & Ord, J. K. (1970). Some Discrete Distributions for Graphs with Applications to Regional Transport Networks. *Geografiska Annaler. Series B, Human Geography*, 52(1), 14. <https://doi.org/10.2307/490437>
- Janelle, D. G., & Beuthe, M. (1997). Globalization and research issues in transportation. *Journal of Transport Geography*, 5(3), 199–206. [https://doi.org/10.1016/s0966-6923\(97\)00017-3](https://doi.org/10.1016/s0966-6923(97)00017-3)
- Janelle, D.G., (2004). Impact of information technologies. In: Hanson, Susan, Giuliano, Genevieve (Eds.), *The Geography of Urban Transportation*, third ed. The Guilford Press, New York, pp. 86–112.
- Jeyapalan, J. K. (2000). Future Outlook for Trenchless Pipeline Rehabilitation Technologies. *Environmental and Pipeline Engineering 2000*. [https://doi.org/10.1061/40507\(282\)25](https://doi.org/10.1061/40507(282)25)
- Kenneth Kraemer, Jason Dedrick, L. (2000). Refining and Extending the Business Model With Information Technology: Dell Computer Corporation. *The Information Society*, 16(1), 5–21. <https://doi.org/10.1080/019722400128293>
- Klophaus, R., Conrady, R., & Fichert, F. (2012). Low cost carriers going hybrid: Evidence from Europe. *Journal of Air Transport Management*, 23, 54–58. <https://doi.org/10.1016/j.jairtraman.2012.01.015>
- Knibb, D. (2008a). Low-cost carriers expand reach through cross-border deals. *Airline Business*, April 24.
- Knibb, D. (2008b). Bridge building: airlines bridge the divide between southeast Asia and Australia. *Airline Business*, 21 August.
- Kraemer, K. L., J. Dedrick, S. Yamashiro. (2000). Dell Computer: Refining and extending the business model with IT. *Inform. Soc.* 16(1) 5–21.
- Lawton T, S. S. (2015). When being the lower cost is not enough : Building a successful low fare business model in Asia . *Journal of Air Transport Management* , 355-362.
- Lee, D. (2007). *The Economics of Airline Institutions, Operations and Marketing, Volume 2 (Advances in Airline Economics) (Advances in Airline Economics)*. United States: Emerald Publishing Ltd.
- Lei, A. P. (2010). Measuring the effect of low-cost carriers on regional airports' commercial revenue. *Research in Transportation Economics*, 37-43.

- Lian, J. I., & Rønnevik, J. (2011). Airport competition – Regional airports losing ground to main airports. *Journal of Transport Geography*, 19(1), 85–92. <https://doi.org/10.1016/j.jtrangeo.2009.12.004>
- Linder, J. C., & Cantrell, S. (2001). Five business-model myths that hold companies back. *Strategy & Leadership*, 29(6), 13–18. <https://doi.org/10.1108/10878570110411330>
- Linder, J.C., Cantrell S. (2000). Changing business models. Chicago: Institute for Strategic Change, Accenture.
- Linder, J.C., Cantrell, S. (2002). BPO big bang: turning theory into practice”, *Competitive Financial Operations: The CFO Project*, Vol. 1, pp. 1-5.
- Low, J. M. W., & Lee, B. K. (2014). Effects of internal resources on airline competitiveness. *Journal of Air Transport Management*, 36, 23–32. <https://doi.org/10.1016/j.jairtraman.2013.12.001>
- Lu, C. (2009). The implications of environmental costs on air passenger demand for different airline business models. *Journal of Air Transport Management*, 15(4), 158–165. <https://doi.org/10.1016/j.jairtraman.2008.09.019>
- Mahadevan, B. (2000). Business Models for Internet-Based E-Commerce: An Anatomy. *California Management Review*, 42(4), 55–69. <https://doi.org/10.2307/41166053>
- Malighetti, P., Paleari, S., & Redondi, R. (2009). Pricing strategies of low-cost airlines: The Ryanair case study. *Journal of Air Transport Management*, 15(4), 195–203. <https://doi.org/10.1016/j.jairtraman.2008.09.017>
- Malighetti, P., Redondi, R., & Salanti, A. (2014). Competitive vs. monopolistic routes: Are fares so different? *Research in Transportation Economics*, 45, 3–8. <https://doi.org/10.1016/j.retrec.2014.07.001>
- Mansfield, G. M., & Fourie, L. C. H. (2004). Strategy and business models - strange bedfellows? A case for convergence and its evolution into strategic architecture. *South African Journal of Business Management*, 35(1), 35–44. <https://doi.org/10.4102/sajbm.v35i1.650>
- Mantin, B., & Koo, B. (2009). Dynamic price dispersion in airline markets. *Transportation Research Part E: Logistics and Transportation Review*, 45(6), 1020–1029. <https://doi.org/10.1016/j.tre.2009.04.013>

- Mark Hansen, B. Z. (2013). *Airport Operational Performance and Its Impact on Airline Cost*. Wiley.
- Markides, C. (1999). *All the Right Moves: A Guide to Crafting Breakthrough Strategy*. United States: Harvard Business Review Press.
- Mason, K. J. (2000). The propensity of business travellers to use low cost airlines. *Journal of Transport Geography*, 8(2), 107–119. [https://doi.org/10.1016/s0966-6923\(99\)00032-0](https://doi.org/10.1016/s0966-6923(99)00032-0)
- Mason, K. J., & Morrison, W. G. (2008). Towards a means of consistently comparing airline business models with an application to the 'low cost' airline sector. *Research in Transportation Economics*, 24(1), 75–84. <https://doi.org/10.1016/j.retrec.2009.01.006>
- Mason, Keith & Morrison, W. & Stockman, I.. (2013). Liberalization of air transport in Europe and the evolution of 'low-cost' airlines. *Liberalization in Aviation: Competition, Cooperation and Public Policy*. 141-156.
- Md Atiqur Rahman Sarker, C. G. (2012). Sustainability and Growth of Low-Cost Airlines: An Industry Analysis in Global. *American Journal of Business and Management*. 1(3), 162-171
- Mitchell, D., & Coles, C. (2003). The ultimate competitive advantage of continuing business model innovation. *Journal of Business Strategy*, 24: 15-21
- MoCA. (2010). *Regulatory Objectives and Philosophy in Economic Regulation of Airports and Air Navigation Services*. Ministry of Civil Aviation India.
- Morandi, V., Malighetti, P., Paleari, S., & Redondi, R. (2015). Codesharing agreements by low-cost carriers: An explorative analysis. *Journal of Air Transport Management*, 42, 184–191. <https://doi.org/10.1016/j.jairtraman.2014.10.004>
- Morrell, P. (2005). Airlines within airlines: An analysis of US network airline responses to Low Cost Carriers. *Journal of Air Transport Management*, 11(5), 303–312. <https://doi.org/10.1016/j.jairtraman.2005.07.002>
- Morris, M., Schindehutte, M., & Allen, J. (2005). The entrepreneur's business model: toward a unified perspective. *Journal of Business Research*, 58(6), 726–735. <https://doi.org/10.1016/j.jbusres.2003.11.001>

- Niemeier, H. M. (2014). Regulation of Airports : The case of Hamburg Airport . *Journal of Air Transport Management* , 37-48.
- Oliveira, A. V. M. (2008). An empirical model of low-cost carrier entry. *Transportation Research Part A: Policy and Practice*, 42(4), 673–695. <https://doi.org/10.1016/j.tra.2008.01.025>
- Pasari, N. (2006). Low cost airlines in a developing Economy. The University of Nottingham
- Pels, E. (2009). Network competition in the open aviation area. *Journal of Air Transport Management*, 15(2), 83–89. <https://doi.org/10.1016/j.jairtraman.2008.09.001>
- Poon, T. S.-C. (2010). Low-Cost Carrier & Low fare. *International Journal of Human Resource Management*.
- Reichmuth, J. (2008), Analyses of the European air transport market: Airline business models, Air Transport and Airport Research, DLR, Germany
- Research in Transportation Economics 24, 75- 84.
- Reynolds-Feighan, A. (2001). Traffic distribution in low-cost and full-service carrier networks in the US air transportation market. *Journal of Air Transport Management*, 7(5), 265–275. [https://doi.org/10.1016/s0969-6997\(01\)00021-7](https://doi.org/10.1016/s0969-6997(01)00021-7)
- Schlumberger, C. E. and Weisskopf, N. (2014). Two Case Studies: Mexico and South Africa. In Schlumberger, C. E. and Weisskopf, N. (eds), Ready for Takeoff.
- Schnell, M.C.A. & Hüschelrath, K.. (2004). Existing and new evidence on the effects of airline hubs. *International Journal of Transport Economics*. 31. 99-121.
- Schweizer, L. (2005a). Concept and Evolution of Business Models. *Journal of General Management*, 31(2), 37–56. <https://doi.org/10.1177/030630700503100203>
- Schweizer, L. (2005b). Organizational Integration of Acquired Biotechnology Companies into Pharmaceutical Companies: The Need for a Hybrid Approach. *Academy of Management Journal*, 48(6), 1051–1074. <https://doi.org/10.5465/amj.2005.19573109>
- Skarzynski, P. (2008). Viability across business model. Harvard Business Press.

- Skarzynski, P., & Gibson, R. (2008). *Innovation to the Core: A Blueprint for Transforming the Way Your Company Innovates* (Rev. ed.). UK: Harvard Business Review Press.
- SpiceJet. (2018-19). Annual Report. Gurgaon: SpiceJet. (n.d.).
- Starkie, D. (2006). Reforming UK Airport Regulations . *Journal of Transport Economy and Policy* , 119-135.
- Starkie, D. (2014). Reforming UK Airport Regulation. *Journal of Transport Economics and Policy* , 35-54.
- Sterzenbach, R., Conrady, R., & Fichert, F. (2009). *Luftverkehr: betriebswirtschaftliches Lehr- und Handbuch*. Deutsch: Oldenbourg.
- Taneja, N. K. (2010). *Looking Beyond the Runway: Airlines Innovating with Best Practices while Facing Realities* (1st ed.). India: Routledge.
- Uittenbogaard, A.C. (2009), “A Study on the Effects of Low-Cost Airlines in Planning Issues: Case studies of Glasgow, Stockholm and Düsseldorf”, Stockholm: KTH Department of Urban Planning and Environment.
- Walters, D. (2004a). A business model for the new economy. *International Journal of Physical Distribution & Logistics Management*, 43(3), 346–357.
- Walters, D. (2004b). Worker representation and health and safety in small enterprises in Europe. *Industrial Relations Journal*, 35(2), 169–186. <https://doi.org/10.1111/j.1468-2338.2004.00307.x>
- Warnock-Smith, D., & Potter, A. (2005). An exploratory study into airport choice factors for European low-cost airlines. *Journal of Air Transport Management*, 11(6), 388–392. <https://doi.org/10.1016/j.jairtraman.2005.05.003>
- Whyte, R., & Lohmann, G. (2015). The carrier-within-a-carrier strategy: An analysis of Jetstar. *Journal of Air Transport Management*, 42, 141–148. <https://doi.org/10.1016/j.jairtraman.2014.09.008>
- Wu, C., & Hayashi, Y. (2014). The effect of LCCs operations and scheduled services deregulation on air charter business in Japan. *Journal of Transport Geography*, 41, 37–44. <https://doi.org/10.1016/j.jtrangeo.2014.08.007>
- Yetiskul, E., & Kanafani, A. (2010). How the presence of low-cost carrier competition scheduling differentiation. *Journal of Air Transport*

Management, 16(1), 7–11.
<https://doi.org/10.1016/j.jairtraman.2009.06.003>

Yetiskul, E., Matsushima, K., & Kobayashi, K. (2005). Airline Network Structure with Thick Market Externality. *Research in Transportation Economics*, 13, 143–163. [https://doi.org/10.1016/s0739-8859\(05\)13007-8](https://doi.org/10.1016/s0739-8859(05)13007-8)

Zhang, Q., Yang, H., Wang, Q., & Zhang, A. (2014). Market power and its determinants in the Chinese airline industry. *Transportation Research Part A: Policy and Practice*, 64, 1–13. <https://doi.org/10.1016/j.tra.2014.03.003>

Zott, C., & Amit, R. (2007a). Business Model Design and the Performance of Entrepreneurial Firms. *Organization Science*, 18(2), 181–199. <https://doi.org/10.1287/orsc.1060.0232>

Zott, C., & Amit, R. (2007b). The fit between product market strategy and business model: implications for firm performance. *Strategic Management Journal*, 29(1), 1–26. <https://doi.org/10.1002/smj.642>

APPENDIX A

CAREER SUMMARY OF RESERACHER

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Career Summary

Mr. Manish Yadav is associated with esteemed Modern College of Business and Sciences (Muscat – Sultanate of Oman) as core domain faculty and Program Head (B.Sc. Aviation and Airport Management) under Faculty of Business and Economics. He has diversified work experience of more than 13 plus years as aviation educationist and aviation industry professional with premier organizations i.e. University of Petroleum and Energy Studies, Dehradun (India); Banasthali University, Rajasthan (India) ; Air India and GMR Delhi International Airport Limited . Along with IATA certified instructor in travel and tourism, he is doctoral scholar (Aviation) under Indian Ministry of Civil Aviation (MoCA) EU project. He is very active in aviation research and has presented and published research papers in various domestic and international conferences across globe. Recently, he has contributed as coauthor in book chapter which is benchmarked as very first academic work aligned with UN agency International Civil Aviation Organization (ICAO) initiative Next Generation Aviation Professional Program (NGAP) .He has been invited speaker in high profiled aviation events i.e. Gulf Aviation Training Event (GATE) under Dubai Air Show 2018; Aviation Show MENASA -2017 (Dubai UAE) and Aviation Festival Asia 2018/2019 (Singapore) and also member of International Air Transport Association (IATA) and University Aviation Association (UAA). He has earned

graduation in science (B.Sc. Electronics) from Maharishi Dayanand University (Rohtak – Haryana) and master's in aviation management from University of Petroleum and Energy Studies (UPES).

Publications and Conferences

- Syed, R.T., Yadav, M. and Magd, H. (planned 2020), Entrepreneurial Mindset Development: Cog in the Wheel of Talent Management in Aviation Sector, Engaging the Next Generation of Aviation Professionals, Routledge Publishers, Taylor and Francis Group (In publishing stage)
- Yadav M; T Dhingra” Hybridization of Low-Cost Airlines Business Model”; Asian Management Research and Case Conference; March 24-26, 2019; UAE University Al Ain (UAE).
- Yadav M, Dhingra T. 2019 ‘Interfusion of Airline Business Models: Case of South East Airlines. International Journal of Advanced and Innovative Research, Vol 06, pp.113-121.
- Yadav M, Dhingra T. 2018 ‘Recent developments in Low Cost Carrier Research: A Review. International Journal of Business Excellence, Vol 16, pp.427-453.
- Yadav M; T Dhingra” Critical Success Factors of LCC Airlines in India” ; International Conference on Management of Infrastructure (ICMI); Feb 6-8, 2017; University of Petroleum and Energy Studies, Dehradun.
- Yadav M; T Dhingra “Recent developments in “Low Cost Carrier” Research: A review of top Air Transport Journals”; Strategic Management Forum 18th Convention - 2015" December 17-19th, 2015; Indian Institute of Foreign Trade (IIFT), New Delhi.
- Yadav M, Prakash Chandra “Airport Benchmarking – Case of Indian Airports”; International Conference on Research and Business Sustainability - 2015" December 4-6th, 2015; Department of Management Studies; Indian Institute of Technology Roorkee and Sheffield Business School, Sheffield University UK.

- Khan A, Yadav M;” Cargo Growth and Prospective: A case of GMR DIAL”; International Conference on Management of Infrastructure (ICMI); Feb 14-15, 2015; University of Petroleum and Energy Studies, Dehradun.
- Yadav M, Mohapatra J; “Paradox of Merger Motives: A Case of Indian Aviation Industry” "International Conference on Research and Sustainable Business" March 8-9, 2014; Department of Management Studies; IIT Roorkee.
- Yadav M,” Cargo Growth and Prospective: A case of GMR DIAL”; International Conference on Management of Infrastructure (ICMI); Feb 14-15, 2014; University of Petroleum and Energy Studies, Dehradun.
- Yadav, M, Mohapatra J; “Merger Consequences: A Case of Indian Civil Aviation”; Proceedings of GLOGIFT 13; December 13-15, 2013; Department of Management Studies, IIT Delhi.
- Mohapatra, J, and Yadav, M, “Joint Venture in Indian Aviation” UGC National Conference on Management: Challenging Perspectives, Paradigms and Challenges; 7-8 Feb 2014. Department of Business Administration, Jai Narain Vyas University Jodhpur.
- Kumar R, Yadav M; “Route development as critical success factor for the survival of LCC in India; A case of Air Asia India; International Conference on Management of Infrastructure (ICMI); Feb 14-15, 2014; Awarded as the Best Paper in the Conference. University of Petroleum and Energy Studies, Dehradun.
- Yadav, M, Mohapatra, J, “Use of social media by Indian airports”; National Conference on “Rejuvenating Management Strategies for emerging markets”, SJ CET School of Management; St. Joseph’s College of Engineering and Technology; January 23 rd and 24th, 2014.

APPENDIX B

INTERVIEW SAMPLE TRANSCRIPT

RESEARCHER: Sir how the airline policy and objectives impact the airline strategy?

EXPERT: I think on that I would say its a vice versa it's a circular relationship in a sense because ideally the flow should be that strategy of a company should actually define the policy but then obviously it is not a perfect world and of course in real life or real scenario yes policy do effect the way a particular strategic function works and essentially there is a bi directional flow in various department and strategy. Strategy function, by large, by RESEARCHER own experience. all-encompassing across the functions, it's an extension of CEO office in sense and it is not limited to a particular function and the KRA KPI are very different. OK it is not like that you have to deliver so much revenue or you need to deliver so much PNL, so KRAs' is a resource for strategy professionals. so in that sense lot of policy decisions are taken by the strategy team and hence they affect the policy but vice versa is also possible which is the question, that certain decisions are taken based on, for example, nothing to do with strategy, it could be regulatory decision, some regulation has changed the policy has to be changed and how does that affect so that can happen and it does happen but Ideally as I said the flow is the reverse.

RESEARCHER: Mission and vision how does it impact strategy of an airline? Any comments on it, Sir.

EXPERT: So see any airline for that matter ,the key strategic objective is obviously is profitability .That's the net sum of that really happens, having said that along with that strategy as a combination by leading up to a profitability, it may defined as the combination of, let's say environment is responsible ,various goals it may have, SpiceJet strategy has been varying kind of, because it has many ownership changes over a period of time but the key element you mean is the profitability and chasing that and one of the key things that changes in 2011 is when the inducted the turboprop, the dual fleet that was the

major change in the strategy and the new milestone has been talked about is wide bodies that will be the other change.

RESEARCHER: Do SpiceJet has specific plan for future with regard to profitability and sustainability

EXPERT: That would I was referring to you earlier, right ,for example domestic market is getting crowded so the earlier company decided to go for dual fleet, fleet from narrow body only which is smaller plane, now what is happened, as domestic market is growing significantly but the infrastructure is really not able to take it ,so what is the next frontier opportunity is international so now SpiceJet is already international airline but with very limited presence so to grow beyond a certain level ,it needs to grow to a newer market so it cannot do it with the current fleet so that's it's been talked about the wider body planes. Yes, there is a certain planning behind seeking that profitability.

RESEARCHER: Sir do you think that organizational structure has something to do with strategy

EXPERT: That is extremely important strategic planning, see all the strategic objectives that strategic teams supposed to deliver but then after the strategy is defined, strategic objectives are defines, execution is the key, now when it comes to the execution, there is nothing more important as organizational structure, along with the people .so there is three things people processes and structure. so these three are critical once the strategy is defined and how it is being delivered the result, absolutely the key component is the organizational structure if you don't get it right you will never ever able to deliver the strategic objectives for example various airline has commercial department structured into a particular fashion sometime let's see sales may be a part of revenue commercial or not depending on the Airline customer care should be /*the part of commercial

Outside the commercial there is a bit of conflict of interest if it is under commercial department is the one who is selling ticket and it is also receiving the feedback from the customer so there is a bit conflict of interest they will

not necessarily always be able to share the honest feedback but if you segregate the two customer care out of commercial and put it directly to the CEO then it might address when it works very differently because then there is an filtered feedback on the customer that comes directly to the CU so that is an example how the structure works question do SpiceJet has and strategic objective or policies so as I said I am not sure as it is cold policy or it's a strategy because some time there is a very thin line between policy and strategy so it's a strategy that they will go after white bodies right two possible to pursue the international destination offline against NZ / policy of pursuing ancillary revenues very aggressively then they have done very well again this strategy or policy going beyond the core like starting the logistic with their own drugs and everything they started retail like spicestyle.com so so these are policies / strategies which has a clear that behind that question according to you sir what factors impacting the strategic planning answer ok the key factors are let me think as I speak biggest factor is the competition in the environment what is your competition doing what is their product and services what is your product and service how much is the market share of your company

How much is the market share of your competition are you able to command pricing in the market or not if you are very small player then you will not able to do that two commander pricing on the other hand if you are over all small player but a big player on a particular route you can command pricing on that so you can be a market leader in certain roots but overall you can be small so I think that the biggest factor which impact the strategic planning is competition second would be regulatory environment you know regulation is ki and aviation happens to be a very highly regulated market environment so in RESEARCHER mind these are the top 2 third obviously is the profitability that always right the policy question sir define this what according to you strength weakness opportunity and set answer 4 SpiceJet I think the one of the weakness that is there is frequent change of ownership in the past 10 years but it is stabilized in last 3 years also but otherwise this has been a big issue unlike other competitors like Indigo not just the ownership but also the management has been stable but SpiceJet had many changes in ownership as a result in

management as well and that creates uncertainty and it reset the strategy every time every time there is a new management and the reset button is hit of this strategy so that creates a lot of confusion and a lot of time is wasted so I think that's one of the key issue but I think they are very well doing on ancillary part ancillary revenues and associated business verticals so that's a big strength that they have and they are doing very well on it any comments on Indigo part Indigo as I said they are very stable and you know they are very focused the planning is robust their growth pipeline in terms of aircraft with huge orders so there planning is there stamp so planning is very strong which others has not able to replicate

And they have grown a little too large looks like this somewhere might have lost sight of the ground realities and that' visible in some of the recent event happened in the last year customer related events you know which has become big in the media and so so that's the weakness side, they have lost the sight in this use growth and now I think they are getting back on the horse and now you see you see the whole set management changes the game so now there seems to realize that what's going on ,4 Spice and Indigo ,for both opportunities is the same used International Frontier, ok that is the next growth Frontier that's the huge opportunity and that's why both of the airline are talking about wide body aircraft why because domestic still has lot of potential but there is no significant Indian carrier present in international market in India most of the foreign travelers/ foreign traffic is being carried by international airlines foreign carriers so that I think is a fuse used opportunity, which has been captured in to domestic so far. On the Threats, I think SpiceJet certainly have legacy issue with previous owner, you know some court case is going on ,dues, there certain money that is odd, so those are on the financial side The Legacy issue, Indigo let me think I think customer service they are being seen by large nowadays too mechanical and too process oriented ,so which is good for them internally but for a customer point of view you see the scene has more human as a company more human and that probably the kind of weakness they have threat for them if they will not fix that and that is

repeatedly coming into various incident that have been there and I think they are fixing it.

RESEARCHER: Sir in selecting the strategy what is the role of airline management is it crucial

EXPERT: answer yes absolutely there is a shareholders stakeholders and there is management and management starting with CEO and the HOD .obviously the shareholder will you know, drive not strategy necessarily but the broad outcome, broad objectives, right but then it's up to the management , HOD to do this thing now that certainly is consultative process with HOD with HOD but largely it remains CEO office function to look at a bigger picture , bigger factors like competition , regulation extra and the possible opportunities, look at those bigger pictures and then develop framework and view and then talk to the various HoDs and consult with everybody and get Everybody On the board on the same page and then define A final strategy and go for inclusion.

RESEARCHER: Sir in term of strategy formulation what is the management role is it a different for different verticals or it's a one strategy fits all

EXPERT: Well it depends, I am not sure ,if you say management , if it is the HOD, each HOD more specialized in that function whether it is cargo whether it is ground opts, distribution ,they obviously has their personalized approach to handling that function ,right, which is even called business unit but if you say management like CEO then obviously so as to manage everything through the HOD so it will map to that and that will basically kind of determine how the particular management is handling particular functions but generally, I think organizations airlines are kind of moving towards lean structure ,lean for better delivery I have seen many Airlines now much leaner organizational structure and very few layer of structure hierarchy.

RESEARCHER: sir when it comes to corporate business or day to day functional activities what's your viewpoint on it

EXPERT: strategy is totally different, day to day, today it's very different and you know the better mature and professional HOD, less involvement required from the top management CEO on day to day function. CEO in general should

not be involved into the day today. General he or she should be out the meeting with the external stakeholders, regularly managing the regulatory environment, that is the CEO job in RESEARCHER opinion you know as a strategic role not really managing ok day to day functions or p and l, obviously he would have oversight and that's why he is CEO and there are people under him who are managing the show basically.

RESEARCHER: Sir, in terms of strategic planning and management what's the role of airline budget

EXPERT: I am not sure, really both can be separated I think they are so closely in tuned, I don't think you can really separate the strategy and budgeting. Because strategy will define what you want to achieve. For example, last year your

Most expensive I don't think so both can be separated I think they are so closely intertwined Because strategy will define what to achieve. Let's say last year you have a turnover of 1 billion your strategy let's say is growth strategy which seeks more growth, this year which means more probably a regular growth of 10% which means 1.1 billion dollars, you want to take it to 1.4 billion dollars and that will mean a different allocation in budgeting for each function .so I think they are so closely intertwined and highly correlated. you cannot really, apart them.

RESEARCHER: Sir any specific procedures for planning budget with regard to strategic implementation

EXPERT: Well every airline has its own process ,that's a very standard procedure, first you define the strategic goals and you define the bottom line and then that drives the whole thing .so there is a set process in general, in every airline ,all the inputs are taken from each Hod's so it's a bottom up approach basically, where it's not ,you are defining the outcome ,so it is not just like that you are defining a desired outcome ultimately the approach is bottom up, revenue guys may come and say commercial guys that it is not possible. ultimately, it's a consultative process and it's a bidirectional process.

RESEARCHER: How the airline manages to implement the strategy

EXPERT: of course, the execution is done by the day to day Management which is HoD by enlarge, strategy as I said it is a consultative process once you agreed as an organizations with the CEO and the HOD and the shareholders of course.

RESEARCHER: What are the challenges and problems in strategy practices whenever it comes to practicing this strategy what kind of major challenges that an airline face.

EXPERT:I think challenges are basically, you know environment related, it could be regulation suddenly something changes and your whole strategy and plants might be at stake ,suddenly which you have not foreseen, so that is one challenge- the other is ,disruption, by competitors or competition in general, some new competition may coming which did not anticipate or an existing competition made something that you never anticipated ,so high new service, new product which you are not ready for ,either Technology or strategically both even if anyone introduced something are you equipped to retaliate or response or of similar services probably not if not then definitely it's a challenge ,so these are the some of the challenges in Silo you can define plants and strategy but in real life there may be destruction so that's the issues

RESEARCHER: When it comes to the execution of the strategies of an airline so how do you monitor right EXPERT: So I think again everything has to be quantifiable, as long as you are strategic goals are defined clearly, then you can always track them clearly as I said ultimately the goal is profitability ,I mean one of the key goals is key profitability right apart from you may define your goal in other ways as well but in term of numbers if the profitability ,so there is a business plan And there is actual performance you always track it or, month on month or quarter to quarter and it's not a rocket science ,so that's the way to track it basically .at the beginning of the Year these are defined then the periodical report regular reports you monitor the number .you mean to say it has to be quantified this, strategic goals has to be quantified in numbers

RESEARCHER: How you will justify the role of employee empowerment.

EXPERT: yes it is it is always good see ,there is a process and there is a empowerment ,so in empowerment means what are we defining empowerment going beyond the process if it is so it can go to a very questionable scenario either you go by process or you do not but if you want to define environment empowerment as a powerful tool for example the employees if there is a problem with the customer I am empowering him or her to do whatever it takes to satisfied this customer for example buying ticket of an airline even the cost is 20000 so that empowerment is questionable Unless you define a clear policy about it ,empowerment can be defined with clear policy, for example you say ok the agent can buy upto 5000 rupees ticket to satisfy the customer if it is our mistake, with proper policies always empowerment is a good idea

RESEARCHER: In terms of training certifications skill enhancement

EXPERT: I mean that's one of the thing ,aviation in India, definitely so training and development is a big requirement and some other sector like aviation sector is not is not very high on it but there is a regulatory component of it ;like - recruiting cabin crew engineers And cockpit crew ,so their training and development is regulated you cannot do anything about it that's good but the corporate sector needs a lot to happen and that is why you see statement like Indian promoter open a line that India don't have the right talent for aviation and that's why you see that most of the CEO in India are foreigners or Indian expats, to come back to your main question I think there is lot more need to be done on the aviation training and the development by the organization, by the government there is NSDC National Skill Development Corporation they have developed the job descriptions and sector skill Council they already have tied up with the certain universities colleges for the programmes, first they will develop the job descriptions then the skill sets and now they are going to the next step in execution with the certain universities so a lot more needs to be done and yeah absolutely it is required

RESEARCHER: When it comes to the various level of strategies of airline strategy be it the corporate strategy or business level strategy or functional strategy -any difference amongst these

EXPERT: This is pretty much how it is that corporate business and functional corporate level is the CEO level and the shareholders and can be the strategy goal which will further we break down either business level which is SBUs and then within the sbu or single sbu then the functional strategies but everything has to be linked with the top level corporate strategy basically it has to be linked with the corporate strategy otherwise it will be fall apart

RESEARCHER: In term of implementation part sir what are the challenges that you are facing for an airline.

EXPERT:I think that the challenges would be probably internally , externally we have talked about already internally I think the challenges is the related with org structure and communication processes and communication processes oh this is you can call it coherence -organizational Coherence - sometime all that functions and people are not aligned while you communicated as the top management to the functions and everybody at the beginning of it but over a period of time ,the disjoint things happen people get it is aligned or alignment goes away and the common coherence around the strategies go away for some reason so that's in term of one communication you need to keep right rating your strategic goals ,Then is the structure if you don't have a right structure to deliver that strategy goal it will not happen so you can have a very confused structure and kill the whole idea so structure is very key so you need to fix it off from the beginning

RESEARCHER: Sir with regard to the strategic implementation do you think leadership plays an important role

EXPERT: absolutely because as I said basically there are challenges you can define very Rosy ,glamorous strategies but how do you execute them ,how do you implement them so the challenges will be mentioned .External which could be regulated regulatory competition internal communication structure etcetera and processes maybe - unless there is a strong guy strong person as a leader- behind driving this -largely aligning- the people carrying them along with the people carrying the heart unless that happened the execution will not happen so it is really leads to challenge challenges has to be continuously fixed by the leader or he has to ensure that it doesn't get to that level so that's

the thing very important quotes for the leadership absolutely I mean - I completely agree you see the examples around the world Michael O'Leary Ryanair supposed to be to be very aggressive blunt personality and that trickle-down how they perceive customer, they treat their customer they were very blood with the customer for ages, so their attitude was we provide lowest airfare we don't care about the customer so don't expect services from us but now that has changed from the last few years because they realize they have taken a soft approach with this blood, . is now their strategy is getting better with regard to customer their strategy is title is that so now they are treating the customer very differently but again it's a very personality driven top leader kind of thing. Virgin Atlantic Kingfisher it does matter the implementation, challenges, and the way you handle them very related with the personality

RESEARCHER: during this entire strategic function how you communicate with superior areas our colleagues and the top management

EXPERT: That's very important question, I think as I said at the higher level, at the top level which is which is the CEO strategy team and the board, so first of all board has to approve all the strategy, so CEO and strategy team will together agree strategy and then it will be presented to the board and board will debate and discuss and at the end of it there would be an agreement on a particular strategy. it could be variation that was being suggested it could be totally different it could be just a slightly change with minor changes save strategy whatever it may be but that's the flow. They both has to be you know has to be have visibility at every stage of strategy formulation and then you need to improve it so that's the communication from the top level and then down the line it has to be it has to be circulated communicated to every single function every single HOD et cetera and then it has to be actually trickle-down and the communication is the key important things as I see I said coherence organizational coherence which is related to communication so you need to make it sure that enough channels of communication at in a frequency people are talking regularly, leaders are doing that regularly

So as was saying communication if you see something called workplace for Facebook it is a Facebook for companies if you see companies like Air Asia

and others they have adopted that too and the top leaders go live, it is only for the company of course they do regular Live Session with the employees old 20000 people can listen to the top guy live, ask question live, so there are lot of things going on with regard to communication and the leaders realize that it is extremely important to reach it out

RESEARCHER: So when it comes to execution of strategy again the implementation of strategy is monitored by quantitative methods same is happened with the execution of strategy how you will monitor...

EXPERT: well I know they are why is closely related I would say I don't see a lot of difference execution and implementation things are similar ultimately what you are doing you need to achieve the result which you define in strategy so I think they are same so you track it review it once in a while so it's a monitoring process

RESEARCHER: When it comes to a modification of any strategy so how we take up to the entire process

EXPERT: there could be a course correction required ,at the beginning of the year of a particular strategy ,sometime because of challenges has to be discussed ,external or internal largely external in this case ,could force you to rethink , real life there is no nothing perfect or there is no nothing perfect so you have to be flexible be nimble not stick to one thing that this is that and I will not change ,this is according to RESEARCHER direction that will not work so you have to be flexible sometime if you think that you know, oil prices are shooting up and for the next year now let's this a new view is that oil prices will be going to remain super high, are you still going to pursue as per the growth which you planned as per the strategy or maybe not or maybe you will moderate that growth and rethink about your strategies. because you don't want to lose any money then what you thought, are you don't want to reduce up your profits so you may be you will temper down your growth level temporarily for the next year and do a course correction short of thing and then later when the timing is right you continue to that strategy, so I think that the course correction is important being flexible and nimble is very important

RESEARCHER: When it comes to the supplier and when does is an external stakeholder so how's the strategy part influence the stakeholder answer the relationship with external stakeholder

EXPERT: I think yes they are very closely linked tightly linked ,the external stakeholder could be shareholder ,they could be vendors, that would be supplier ,they are the passengers of course, and there could be the regulatory stakeholder so dependent on the strategy so strategy is to get the lowest cost possible in terms of let's see airport cost then the suppliers that is airport when they are going to negotiate like that with them so you will not going to accept their current charges similarly with others suppliers for example similarly with the regulatory if you want a certain concession from the government on certain policies which you have defined on your strategy then I will go up at transit connecting traffic for which they should not be charging the transit taxes airport taxes on transit then you will go and negotiate with the regulatory I think your strategic goals will define your relationship with your suppliers ,vendors ,external stakeholders they are very closely linked

RESEARCHER: So when it comes to the when it comes to the market competition do you think that it impacts the strategic implementation.

EXPERT: I think that this is the most important in the market if you are a monopoly there is a very little strategy to be done daily because you are the only player and it doesn't matter what you really do so competition is the key consideration in defining strategy strategic goals and the strategic path and plan so that plays the visual important role obviously whatever competition does when you define a particular policy and strategy it is defined at that particular point of time with the available information at that particular point of time tomorrow competition may do totally different which is going to be happening in the market right now , Indigo announced its interest for Air India International operations then they said well so we will not go for it but still we will go for wide bodies and now SpiceJet is talking about that too SpiceJet is not talking necessary only based on its own analysis but also kind of inspired or feeling threatened so whatever competition does it affect your strategy ,on the business ideas everything competition does that matters of course

RESEARCHER: Sir what's the role of IT into strategic aspect

EXPERT: it is far is the airline are concerned IT is the new thing how the CEO the airlines are giving it there are new position called chief digital officers, those are the people you see in the airline like Air Asia the focus on digital is so big ,right from the owner himself that that they are calling air Asia to point so they are calling internally the strategy of Air Asia 2.2 enlarge part of the strategy is driven by IT, this is digital and e-commerce in fact they have segregated sum of their functions like E-Commerce and Ancillary into separate company because they see this is a huge potential there driven by IT. So whether it is the frequent flyer program for CRM Customer Relationship Management whether it is revenue management everything has used IT footprints and the technology new technologies are driving transformation and airline are very keen on it has been the backbone of LCC specially now it's getting to a different level .earlier it was in a support but they are not driving the system now it's all gone totally to a different level revenue management models, customer service orientation now airlines has seen that they have they have a dedicated customer pool and they want to leverage it with the help of IT that's the idea

RESEARCHER: so when it comes to renew the strategy and management practices or the process so any comments on it answer

EXPERT: RESEARCHER brief view on this will be like this, I think I think as far as the same team remain same generally the big strategy renewal doesn't change overhauling doesn't happen unless there is a change in ownership or in management or anything that radical, so strategy does not happen. again but yes when the management changes or totally ownership changes then completely new strategy generally comes into the place so that's why we can't of course there are enough example of Companies who have been a stable management and ownership and still they are being redefining the strategy every few years to come back to that largely the overhauling of the strategic management practices will happen either when there is a change in management overall ownership all with stable ownership management will be not probably before few years you will not change it every now and then

RESEARCHER: Sir can you please explain the various level and type of strategies

EXPERT: can give you a certain example ,So overall strategy can be like that profitability revenue maximization ,cost minimization - at functional level in metrical down we want to reduce our distribution cost as an airline as a part of overall cost reduction so how would you do that ,so let's see your distributor into website you are also distributing through GDS and through travel agencies .so as a strategy you will say that well this year will go through direct channel which is website and mobile app and call centre and basically Adopt certain policies which will discourage people coming through travel agencies and rather encourage them to come to RESEARCHER website so strategy at functional level so which is trying to achieve the overall goal .so every function every Sub function in a day to day operation you know such strategic position in place so this is where the strategy is converted into policies .it's so there is a broad strategy then its converted into you can call it functional strategy you can call them functional politics in RESEARCHER mind they are same strategy is a corporate level will be different but in a day to day level it's more like converted into functional processes and policies I think

RESEARCHER: In key areas like revenue management network planning and scheduling so can you please connected to the strategy part how these are playing a very crucial role

EXPERT: absolutely these functions are the backbone of the of the airline business not from the cost side but from the revenue side, network planning as the term includes planning itself strategy and planning of an airline generally a lot of big airline usually network planning is a part of the strategic planning itself. because that's the core of the business what is an airline - airline is its network. So that is the product what is the schedule and where do you fly as 17 and then the price of course so network planning and revenue Management are the hearts of the business and airline when you say how it is related with strategy I think you can not the segregate in terms of there is a Core- to answer your question they are the core element you cannot take them

segregate you cannot take them away they are the heart of the strategic implementation

RESEARCHER: sir in term of long-term medium- and short-term strategic planning we already have been defined so when it comes to the bright eyes day to day strategy formulation of strategic function so how you prioritize it.

EXPERT: ok that's important at the point of us business some goal could be regulatory related I need to get this permission from the regulator extra but ultimately why you need to be get the permission again related to revenue or business, everything related to business so this is the bottom line ,now the priorities will be define in order of revenue importance largely pndl importance -for example ancillary revenue even though it is a small part but it is directly bottom line ancillary revenue pretty low cost to it or negligible cost to it ,selling seat ,seat selection there is no cost to it so whatever the revenue what is your property of it pure profit obviously as a business anything that is of revenue importance or pnl profit and importance as a first priority , anything which has the highest revenue impact will be the very first priority ,Lower revenue impact lower priority as simple as that

RESEARCHER: So what is the leverage in it for that strategic function in an airline

EXPERT: that we were discussing earlier that it is playing it has a two partners easily infrastructure and the digital part and I think the digital is key nowadays most of the airline today have a chief digital officer or equivalent apart from CIO, update now you see that Indigo has higher head of digital recently, in RESEARCHER current airline we have hired CDO officer recently every airline every business not just the airline every sector people are focusing a big time on digital and innovation.

RESEARCHER: Any comments on regulatory framework in India for LCC sustainability

EXPERT: I think lots of leads to be desired from a regulatory framework, While Things happened in a few years but I think lot still need to be done especially for 5:20 rules but in reality now the abolish but it is still there, only

you can't grow so many aircraft at a point of time, no it was not abolished it was it was changed to 0 20. 5/20 was meant for 5 year 20 aircrafts 5 year ,now it has been changed to 0 years and 20 year graph in reality what happens to grow 20 aircrafts you can't do it overnight you can't do it in one year or two years, show in reality you can do it less than three or four years so it is more over same only ,if you see the current operator it was done with certain intent but outcome is not that lucrative ,similarly there is a lot of other areas weather airport charges secondary airports, are not being available ,HAL Airport has been shut down from the commercial location when there is no capacity in Bangalore airport ,similarly Delhi so lot of secondary Air ports are being shut down and this is the policy issue so lot of things need to be done from regular device .

RESEARCHER: Any comments on Civil Aviation policy

EXPERT:I think it has many elements obviously from the infrastructure point of view again the airport site airport economic regulatory authority is the body while the airport part of the policy mention hybrid till ,but in reality, it is not been implemented .so there is a gap between the policy and reality. I think need to be fixed so policy has all the good intention for ground handling for example extended to more players .so single deal will be more appropriate for the airline show in reality it's not happening it's burdening the Airlines in terms of charges which ultimately they need to pass it to the customer so while the policy intentions are good a lot more needs to be done specially on the training and development ,part on the infrastructure site

RESEARCHER: you talked about the airport role so how do you think that Airport is playing an important role in to low cost carrier sustainability

EXPERT: Airport as I was referring earlier has image your major role I think roughly depending on the airline the geography anywhere 10 to 20% of the cost can be airport costs and now that's a huge chunk of cost. anything to do with airport improvements so Airport has two ways they can deal help the airline one is on the cost side and second side is on the processing or customer friendliness. so now Technology plays a very key role there for example facial recognition, paperless checking so who will enable that airport will do that

airport operator along with the airline but the prime facility will be provided by airport has to be partner along with the airline. if the airport don't have the functionalities are the facilities airline can't do anything so in term of customer facilitation whether it is Queue at the immigration so cute check in infrastructure or not customer experience all that plays a major role for the Airlines for an airline strategic point of you then obviously cost side of it you see the example in India Bangalore Airport is working closely with the airline ,they have an innovation lab ,they are closely working with the certain Airlines according to their need on particular projects Jet Airways was the very first one to do checking at Hyderabad airport Bangalore Airport has project that lead the airline so now you see the Changi Singapore new terminal which is pretty much human less and that's amazing. so Airport has a very big role in the ecosystem. I think the partnership between a line and airports on a financial aspect already happened if you see London Heathrow IAG is pretty much like that you see , Saudi even in India AAI and Air India but these are governments. so government has been like that everywhere what if your question is on private side that is also there IAG British Airways and London Heathrow so therefore there are examples like that But I think airports are Complicated business, they are very capital intensive on infrastructure side, airline is a very different kind of a business generally I think it will take time , examples which will be probably exception largely the norms will not be together in this two spaces

RESEARCHER: sir in terms of critical success factors in totality was your day

EXPERT:I think couple of things ,brand, last customer service and that is key how people perceive you , you may have the lowest prices but people may pursue either cheap or unsafe or undesirable I remember that Air Deccan has reached at some point of time at that particular stage is where people would fly with Air Deccan where the price is less but when the land at the airport at the arrival they will tear the bag tag because that don't want it to be seen so we want to not be seen as a person who have travelled by AIRDECCAN so it had that kind of a bad image .so brand image is very important ,that is the one of the key factors then the network, network / reach how many place is you can

fly to what is your schedule what is the depth you have how much how many options you will get to the customer if you have a one flight in a day in a particular sector weather your competition has a 10 flights in a day ,obviously the customer will go to the 10th Rights Day kind of airline because if he misses one flight we can book the alternate one I think that pricing is always important but I'll come back to the main point pricing is not the main thing from a success point of view what matters is how you manage your brand, marketing is important and your network is important I think these two are the key things then you can manage.



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