A RESEARCH PROJECT REPORT IN AVIATION ON

"PRICING, ANCILLARY PRICING & PRICE FORECASTING OF INDIGO"

(BBAV3012)

FOR THE PARTIAL FULLFILMENT OF THE REQUIRMENT FOR THE AWARD OF

Bachelor's of Business Administration (2018-2021)

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JANUARY – APRIL 2021

Certificate of Approval

The following Research Project report titled (PRICING,ANCILLARY PRICING & PRICE FORECASTING OF INDIGO) is hereby approved as a certified study in management carried out and presented in a manner satisfactory to warrant its acceptance as a prerequisite for the award of Bachelor of Business Administration for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the Research Project Report only for the purpose it is submitted to the Research Project Report Examination Committee for evaluation of Research Project Report.

Name Signature

1. Faculty Mentor ______

Certificate from Faculty Guide

This is to certify that the project report (PRICING, ANCILLARY PRICING & PRICE FORECASTING OF INDIGO) has been prepared by NIMISHA TRIPATHI & NEETIKA VASHISHTH under my supervision and guidance. The project report is submitted towards the partial fulfillment of 3 year, full time Bachelor of Business Administration.

Name and Signature of Faculty

Prof. S.K SHARMA

Date: JAN-APRIL 2021

DECLARATION

I NIMISHA TRIPATHI & NEETIKA VASHISHTH having admission number 18SLAM1020097 & 18SLAM1020096 student of BBA of School of Business, Galgotias University, Greater Noida, hereby declare that the project report on(PRICING,ANCILLARY PRICING & PRICE FORECASTING OF INDIGO) is a original & authenticated work done by me.I further declare that it has not been submitted elsewhere by any other person in any of the institutes for the award of any degree or diploma.

> Name of the Student 's NIMISHA TRIPATHI & NEETIKA VASHISTH

Date: Jan-April 2021

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TABLE OF CONTENTS

S.NO	Particulars	Page No
1.	COVER PAGE	1-2
2.	CERTIFICATE OF APPROVAL	3
3.	CERTIFICATE FROM FACULTY GUIDE	4
4.	DECLARATION	5
5.	ACKNOWLEDGEMENTS	6
6.	TABLE OF CONTENTS	7
7.	EXECUTIVE SUMMARY	8
8.	INTRODUCTION	9-11
9.	OBJECTIVES	12-13
10.	LITERATURE REVIEW	14-16
11.	RESEARCH METHODOLOGY	17-25
12.	DATA ANALYZING	26-27
13.	FACTS & FIGURES	28-29
14.	FINDING	30-38
15.	RECOMMENDATIONS & CONCLUSION	39-40
16.	BIBLIOGRAPHY	41-42

Executive summary

This paper focuses on the pricing strategies of international airlines, being the key factor to match the supply with demand and accomplish market equilibrium. The aim of study is to find a pattern of how pricing takes place, if and how airlines implement market segmentation and take demand-related elasticities into account. We specialize on the IndiGO. In this Research Project, It is discussed regarding the Pricing, Ancillary pricing & Pricing Forecasting of the IndiGO airline. IndiGO Airlines is India's most efficient low forfeit carrier operating flights to 43 destinations which includes 6 international destinations. IndiGO Airlines is one of the merchant venture of InterGlobe Enterprises. It was started in August 2006 and in a decade it has grown to have a market share of 40.3% (as of December 2016). IndiGO Airlines is India's biggest commercial airlines (by market share). Indian aviation industry is very competitive and is struggling with competition from other modes of transport as well. Yet IndiGO Airlines is known for its low forfeit fares, punctuality and hassle self-ruling experience. Over the years it has wilt India's most preferred airline due to its low forfeit fares and upper quality. IndiGO Airlines has 14 new generation A320swhich forms a part of their 126 fleet. It carries virtually 4,035,677 passengers in a month.

Their flight prices were collected as primary data from the corresponding websites. We observed the following air travel services: Long-haul international, short-haul international and short-haul domestic; additionally, we differentiated price levels by the time of booking. Based on our findings we can say that the market segmentation model provides a good base for airlines. However, it has to be accompanied by additional strategies to react to arising problems (peak problem, currency fluctuation, etc).

INTRODUCTION

INDIGO represent a firm market-responsive approach to the problems in the airline industry. Airline Pricing Strategies Introduction and problem statement "Boarding completed – ready for take-off": Before a passengers hears these words on board, a long process has taken place. Not only technically, but also commercially, the airline business is a highly complex, yet fascinating market. It is a very challenging and continuously expanding industry. Successful marketing is just as important as engineering for an airline to survive. Part of the marketing mix is the pricing policies of a company. This is specifically important to position the product on the market and to generate the revenue desired. In the case of airlines, this field has hardly been researched until now. Although it is crucial for any airline to offer competitive fares, academic studies are rare. If there is airlinerelated literature available, it usually focuses on the whole marketing mix but not on pricing itself. Hence, it only treats the topic superficially and then refers to other sources. Nonetheless, it is a highly significant field of research since it gives insights to a company's strategy. Specifically, we will focus on the research of how different pricing strategies can be applied to international airlines. Furthermore, we would like to find out how airlines set their ticket prices to compete in a fastchanging and highly competitive market. These aspects shall help both researchers and professionals to get an insight to pricing strategies in the airline industry. It can give an idea of how to set the right fares for new airlines and even other industries that wish to understand and adapt the highly customer-orientated airline policies. Research questions Do airlines apply market segmentation when pricing? Do they apply further pricing strategies? If so, which ones? We would like to find pattern of how pricing takes place in the airline industry. We study if companies of this business sector implement the theoretically optimal model of market segmentation,

applying demand-related elasticities. If so, how do they realize this strategy? How does it affect daily offers. Moreover, we research if they apply further strategies in addition to or substituting market segmentation. Importance of research The airline industry is a fast-growing industry and main business sector for all European countries. Providing fast travel services along with other commodities, both airlines and airports are well-established and essential for our economies. Many organizations nowadays operate on an international basis and thus depend on frequent and reliable flight connections Airline Pricing Strategies 7 for their employees. Multinationals spend great parts of their budget on air fares for their staff, and the pricing policy of airlines directly impacts on other businesses. But also leisure travel becomes more and more significant. Not only holiday travel, but also for study reasons or to visit friends and relatives, is a growing market. Especially for leisure traveler, the price of a ticket is highly significant. The fares affect everyone of our society, and the requirement for fast travel opportunities rises continuously. Furthermore, the airline industry represents a major employer for many European regions. Both directly and indirectly, an airport enormously influences employment patterns and development of a region. According to the Fraport GmbH (commonly known as Frankfurt International Airport, which is the largest one in Europe), they employed 25.193 people during the first half-year of 2008. Arlanda Airport says it provides work for 15.000 persons. All of them depend on a well-operating airline industry, which can only prosper if the prices are correctly set. Being extremely competitive and customer orientated, airlines serve as examples for many other businesses. Not only can their attitude towards customer service, but also pricing policies be an aim for others to achieve. To be able to do so, the patterns which are applied by airlines must be clear. This paper is aiming at finding and explaining pricing patterns. Thus, it can be used as a base for other industries to transfer successful strategies and learn from air travel services.

Besides, due to its fast-changing nature, a constant research about the airline business is necessary. We want to correctly map the actual situation, and it is crucial to work with the latest data. Even if similar studies might already exist, they are quickly out of date. This paper is providing an up to date presentation of the situation. It can serve as a record to base current decisions on or as a current information source to monitor developments.

INDIGO'S ANCILLARY REVENUE						
Ancil	lary revenue (₹ crore)	Growth (in %)				
Q3 FY15	514.86	-				
Q4 FY 15	531.27	3.1				
Q1 FY16	580.57	9.2				
Q2 FY 16	558.41	- 3.8				

Source: Company

OBJECTIVES

- <u>Cutting financing -</u> IndiGO has joined the league of companies that are laying off its employees to tenancy the finances btween the coronavirus pandemic. In a recent move, Ronojoy Dutta, CEO, IndiGO spoken that the airline will lay off 10 per cent of its workforce. Ronojoy Dutta widow that the visitor had taken a number of measures such as pay cuts, leave without pay, and various other costs, but these forfeit savings were not unbearable to offset the ripen in revenues.
- <u>Save cost on Resource-</u> IndiGO Airlines saves huge cost on this very expensive resource. It provides optional services of meals which are prepaid. The consumers have to buy their meals in case they want to have anything on board. With these little knacks it controls its cost.
- <u>Higher fuel efficiency-</u> Air turbine fuel prices constitutes about 40% of the operating cost of an airline. IndiGO Airlines saves huge cost on this very expensive resource. It makes optimal use of technology to determine the petrol needed to travel from one place to another.
- <u>Low fares ,Quality services-</u> Price is what gives IndiGO its edge over other competitors, therefore it is an important component of it marketing mix. When consumers compare prices they find that IndiGO Airlines provides them with low fares and quality, on time services.
- Lower flight to market ratio IndiGO Airlines gives discount to senior citizens and students. It gives seasonal and time to time discounts on its mobile app and website. There is a fee charged on flight cancellations and rescheduling.

• <u>IndiGO Airlines Marketing Strategy</u>; The comprises of not only its Marketing Mix, but also segmentation, targeting, positioning, competition and analysis like SWOT.



LITERATURE REVIEW

IndiGO Airlines is one of the merchantry venture of InterGlobe Enterprises. It was started in August 2006 and in a decade it has grown to have a market share of 40.3% (as of December 2016). IndiGO Airlines is India's biggest commercial airlines (by market share). Indian aviation industry is very competitive and is struggling with competition from other modes of transport as well. Yet IndiGO Airlines is known for its low forfeit fares, punctuality and hassle self-ruling experience. Over the years it has wilt India's most preferred airline due to its low forfeit fares and upper quality. IndiGO Airlines has 14 new generation A320 neos which forms a part of their 126 fleet. It carries virtually 4,035,677 passengers in a month.

On the horizontal levels there are two different aspects to be considered – a classification concerning the expansion of the company's product range. The two dimensions are eitherindustry wide or a particular segment only. That is to say in the latter one the product only serves a special part of the industry. In the airline business this is for example only dealing with cargo transportation or the other way round only transporting passengers. On the other hand an industry wide product range includes all parts of the airline business, from passenger up to cargo. This distinction is important because the wider a company expands their portfolio the more complex management and administration becomes. That includes also more costs and a more diverse customer base needs to be addressed. On the other hand, a company which only operates in one segment of the market can draw a clear perimeter both concerning the marketing and portfolio. This is likely to result in a simplified cost structure as well as less administrative complexity. The vertical differentiation is between uniqueness perceived by the customer and low cost

position. The second one is easy to understand as it speaks for itself. The airlines operating in this dimension put their main effort in providing a product (range) for a minimum of costs. Therewith these airlines try to compete in the market by offering a price more than a product. The uniqueness which needs to be perceived by the customer is more difficult to describe. In this dimension the opinion of the customer is relevant. This is on the one hand difficult to find out and on the other hand hard to rate. But this part also is in favour for not reflecting the ac-Airline Pricing Strategies 10 performance of a product range but more the way the customer feels and sees it. That means it is not necessary to be unique as long as the customer perceives it as such. The main difference is that the low cost position basically deals with keeping the costs for production reduced to a minimum. It has to study customers' interests to find out which additional features are possible to be reduced to a minimum to be able to compete in such a highly competitive market. Companies in this market segment are not interested in satisfying all various customer groups but they specialize on the customers which are price-conscious. On the other hand the concept of customer perception is more customer-focused. For those companies it is a major concern to maintain an image which pretends to be a constant feature even if the reality is different. Out of these four axes in combination there result three segments which cluster a group of airlines with the same products and similar marketing. It should be mathematically four of them but the 'Focus' is not divided in the image which we have chosen. This could be done by differentiating between a cost advantage and a service advantage. But since the 'Focus' is operating on a narrow market the difference of cost positioning is not as necessary as in the broader market. The next segment we have a closer look at, is 'Differentiation'. This segment can be seen as a contrasting one to 'Focus'. A company which is assigned in 'Differentiation' operates with a product range including all possible products of the related market. So companies which relate to

this segment base their profit on before mentioned synergies which arise out of producing diversity. That means the companies operating in this segment aim to generate economies of scale as well as economies of scope. The latter is described later on and the economies of scale are developed by "increased efficiency in production" (Hollensen 2004,P.10) having a wider spread demand. The vast array of offered products needs to deal with a much more complex and therewith difficult way of managing. There is not only a problem of coordinating the operating sequences but also the need to satisfy a huge variety of different customer demands. There are a lot of different target groups to address. Connected to that there is a need for several separate pricing models to be able to compete with other companies. Those can be focused on overlapping markets.

RESEARCH METHODOLOGY

Airline Pricing Strategies 11 In respect to the customers view a company which is located in the 'Differentiation' segment has the advantage that it is possible to work together with this company on different markets. So once a customer is connected to a company he might want to keep consuming their services. Differentiation generates the possibility to purchase further products which are sold on new market scopes. Therewith the company derives benefits out of earlier relations, which means it generates economies of scope. Pricing Strategy In order to generate profits, a company needs to have a structure which is reliable. This is not only necessary on the production side but also in the distribution section. So the base for each company is not only the production of a good product itself but also a well thought through marketing strategy. As we specialized in airline companies the strategy of marketing is of even more importance because in this market there are sold intangible products. That means the goods have particular characteristics which compounds the selling. Unlike tangible products which are durable and touchable, the airline industry has to cope with selling products which cannot be advertised by showing pictures of them. It is always generated after it has been sold and therewith marketing strategies have to be mature. There are different types of products sold by airlines but the most important ones are passenger and cargo transportation. It is, for example, obvious that these products cannot be stored until the demand is there to sell it to the customers. Therefore each seat which is not sold at the time of departure cannot be sold later when there is more demand than the actual capacity of an airplane. This accentuates the importance of marketing in this area of business. In this context we also have to mention that another importance in regard to the intangibility is that products can

only be created with the actual presence of the customer. This 'Uno-ActoPrinzip' (Maleri, 1997) is a major disadvantage in the production of services in the airline industry. The company always has to rely on the cooperation of the customer, because otherwise the service cannot be implemented. In addition to that production in advance is also not possible. So there are peak-demands and times of off-peaks. That means the managing of personnel and machines becomes one of the major tasks. There are different ways of dealing with this extraordinary characteristics described in this paper. The price for products is one of the key factors, therewith it is dealt with this delicate topic in the following section. Depending on the price policy of an airline, the pricing strategy addresses certain groups of customers. Correct pricing is also crucial to cover the costs and Airline Pricing Strategies 12 market benefits. But what is the optimal price for an air transport service? What does it depend on and how to maximize the turnover? This section is going to analyse basic principles of pricing and costs of the airline industry. It will explain how to set the optimal prices for a flight and which factors influence the price building process.Equilibrium/marketclearing price Basic microeconomic principles show that in a free market the equilibrium price of a good or service is the point where the supply is equal to the demand (see Figure 1). At this point, the price "equates the quantity supplied to the quantity demanded" (Pindyck,) and marketclearing takes place. Due to market mechanisms, the price tends to change until the market is cleared.

Market Supply

In the case of airlines, the market supply is generated by all airlines operating on a certain route. This can be monopolised, such as the route Åre/Östersund (OSD) to Stockholm Arlanda (ARN), oroligopolised, for instance the route Frankfurt International, Germany (FRA) to New York, John F Kennedy, USA (JFK). Each company has three key performance variables unit cost, unit revenues/yields and load factor. The unit cost refers to the average cost for each unit of capacity, measured in per available ton kilometre. Unit revenues or yields indicate the profit an airline makes on each unit of output sold and are measured in per revenue ton kilometre. The load factor shows how much of the capacity offered has really been sold (%). These factors are closely linked, since one can compensate (but not replace) another. High load factors can balance out low yields. If costs are too high though, even a very high load factor does not guarantee profitability if yields are too low. Airline Pricing Strategies 13 The primary factor determining the supply of any company is costs. For an airline, the two major inputs are capital (airplanes) and labour (pilots, flight attendants, management, etc). It is important to note that the production function, which indicates the highest output (Q) that a firm can produce for every specified combination of inputs (Capital K, Labour L), is a fixed proportion production function (see Figure 2). This means that the output can only be increased if both input factors are augmented proportionally. For each plane, two pilots and a fixed number of flight attendants are required. Unlike other industries, increasing only the input of capital (number of planes) or only the input of labor force (amount of pilots), the output (flights offered) will not be rising.

The optimal price is set where the average total cost (ATC) is equal to the marginal cost (MC) of production (see Figure 4). At this point, the ATC reaches its minimum and the MC is increasing. The price gained for each unit equals the marginal revenue, thus the benefit is zero in the long run. If the market price would be higher, the airline would achieve profits and attract new competitors to the market. In that situation, the price falls each time more airlines offer their service. In the opposite case, at least one firm will not be able to remain in the marked since its costs are not covered in long-term. Exiting the market, the number of suppliers decreases, increasing the market price. For a short period, a company can offer its services for a lower price, as long as the variable costs are covered. If the price falls below that margin, the company cannot produce efficiently any more. One characteristic of the airline industry is that the marginal costs are extremely low. Whilst the fixed costs (the supply of a plane and the corresponding staff) are very high, the cost of carriage for an additional passenger is diminu-Airline Pricing Strategies. This allows the airlines to carry out massive market segmentation in order to maximize the load factor (will be discussed further on).

The challenge for any airline management is to match supply and demand in a way that these three factors are balanced. Therefore, it is vital to know and understand the demand structure of the market the company operates in.Market Demand The market demand is represented by all passengers wishing to travel on a specific route. According to Doganis, the passengers can be classified into two main clusters: Business travel and leisure travel. "Business travel involves a journey necessitated by one's employment and paid for by the employer.These customers usually require high seat availability on demand, high frequency of service, the availability to cancel/change reservation, as well as the possibility of a quick check-in and check-out. Leisure travelers in contrast can be subdivided into two

distinct categories: Holiday travel and passengers who visit friends and relatives (VFR). Their main characteristic is that leisure travelers are more flexible when it comes to flight times and dates and that they pay out of their own pockets. Therefore, their chief concern is to pay a low fare. Whilst they are prepared to fly on another day or time, and possibly travel to another airport nearby, the business traveler demands a certain time and location in order to match business with travel. Consequently, it is of great importance for an airline to know the mix of passengers to plan marketing. Furthermore, airlines have to face peak problems throughout the year. Whilst daily Output Price q* Marginal Cost Average Variable Costs Average Total Cost P* Price Airline Pricing Strategies 15 and weekly peeks result from common working hours and days in a culture, seasonal peaks are usually caused by school and public holidays. In general, one can say that the longer the flight is, the longer is the stay both for business and leisure travel. Doganis also points out important factors affecting passenger demand for all markets: The income level and elasticity, price elasticity (will be discussed later on), population and economic activity of a region, market supply, as well as the social environment. For particular routes, these additional factors come into account: tourist attraction of a region, exchange rates affecting the prices, travel restrictions, possible substitutes such as fast-track trains or ferry connections, historical and cultural links between two regions, which also lead to population movements and labour flows. Especially the last point enforces VFR-travel. He also found a "two-to-one relation between demand for air travel and world GDP" (p. 196). Elasticities of demand and consumer surplus As we have seen above, pricing is the key mechanism to match supply and demand. It can even out fluctuations in demand and be a guide to marketing planning and new investments. According to Doganis, there are two alternatives in pricing.

Cost of service/cost-related pricing. Market pricing/demand-related pricing. "The first is to relate each tariff to the costs incurred in providing the services used by those paying the tariff.". This implies an equal price for all passengers, independent of their purpose of travel and booking-time. During the 1980s, when most air travel services were governmentally regulated, the cost-related pricing was the foremost strategy. It was seen as rational, simple and enforceable, and each charge should "be at the lowest level which will cover the costs of efficient operators, including an adequate return on capital". Despite the different demand segments due to the specific passenger clusters outlined above, a fixed market price was set for all customers. The demand-related pricing on the other hand takes the varying price elasticity of the demand into account. Causing different willingness to pay among the customers, the price-related elasticity of the demand is the departing point when inducting market segmentation. It is crucial to understand and know the different elasticities in order to successfully conduct price politics. Even if it is an approach that is very much influenced by microeconomics, it explains us how to optimally structure the prices. Airline Pricing Strategies .This elasticity measures by how much the demand will change with the change in the price.

When observing flights to Arabian countries, one should take the shifted weekend and different peak days into account. Long term: Out long term fare is represented by a flight on Tuesday, February 17th, 2009. With that date, we believe to choose a relatively neutral date regarding time of the week and within the month. Data collection The figures were collected by entering the website of the corresponding airline every day at the same time (10am). This way, we wanted to ensure the consistency in data collection. On http://www.sas.se and http://www.INDIGO.de we searched for the related prices of SAS and INDIGO, respectively. On each website, a query form is provided to filter and find the flights needed. One difficulty we had to face was to understand and learn to use these query masks appropriately. As commonly known, each airline has a different system and we had to be very careful to select the right variables when searching for the prices. We even experienced some problems with the server, which sometimes gave out error messages due to overcharge. This is certainly one of the main difficulties when researching over the internet. For the short term bookings (next day and one week in advance) we referred to the day of observation. For example, on Monday 17th, we looked up the prices for Tuesday 18th and Monday 24th. This implies the daily change of the flight examined. Whilst the problem of peak days is influencing this data, it gave us the possibility to compare different short term offers of the two companies. The long term booking on the other hand was recorded by refer- 2 See also chapter "Pricing Strategies" Airline Pricing Strategies 25 ring to a constant flight, with the chance to observe possible price changes over time. We specifically monitored the following air travel services on February 17th, 2009: LH400 and SK1419/SK909 (long-haul international), LH6226 and SK1419/SK633 (short-haul international) as well as LH178 and SK072 (short-haul domestic). To find the air travel service which matches our categories best, we consulted the Schedule of Flights, which are available for download on each company's website. This represented a difficulty at first, since the schedules are coded differently by each airline. After finding the flights, we searched for the prices required. The data input was done by introducing the amount into a previously designed MS Excel worksheet (see Appendix 1). Depending on the flight category, some routes only offered two of the three ticket classes, marked with an X. Some flights were only offered on certain weekdays. Another difficulty was that the two airlines publish their prices in different currencies. To avoid problems when comparing the fare structures and be consistent, we converted all prices to Euros. This was done using

the currency converter offered by SAS online. We assumed that this converter always operates with the latest exchange rate. Furthermore, we recorded all prices as "gross" prices, that is, without any tax, service charge, etc. That way, we avoided discrepancies due to different service charges or the taxes an airport charges for landing and departure. This makes calculations more reliable and reveals the real price strategy of an airline and bypasses hidden costs. However, when booking a flight, a passenger should always take into account that the prices represented in this paper are not final fares. Depending on the airline and airport, the net price can rise considerably by adding the secondary costs mentioned above. According to a decision of the court of appeal of Cologne, Germany, an airline is not allowed to advertise by quoting flight fares without all related cost. If it does so, it would gain a considerable competitive advantage through false declarations and thus illegally. Nonetheless, from our own experience we can say that many airlines still use this type of advertising, especially in the low cost sector where penetration pricing is common. Within the data collection, we also included fundamental figures of the company. This draws mainly from the recent business report. We found this material to be most reliable, but have to take into account that it is secondary data. The purpose of publication was to serve as an in-3 Decision of OLG Köln, May 9th, 2007; 6 U 239/06; Press release OLG Köln; This decision was specifically aimed at INDIGO for offering flights for 99€, excluding extra charges Airline Pricing Strategies 26 formation source for investors. At least in the case of INDIGO, the organization is legally obliged to publish certain reports on a yearly base. Even though the business report is not aimed at students, we found some very relevant secondary data, such as the cabin factor used for data analysis later on. Another problem we experienced along the data collection was the relatively short time span for observations. Naturally, it would have been more significant to record figures over various months. Due to the limited time to write

the thesis it was impossible to carry out longer observations. Nonetheless, we believe that we have collected considerable data for our study purpose. The sources used for this study are mainly the information provided by the organizations SAS and INDIGO, as well as internet sources. This was due to the fact that we couldn't find much relevant and current prints. Because of the speed at which the airline business is changing, most case studies can only be referred to during a limited time span. Consequently, as a base for further research, one must be careful when referring to this or other studies. Even though the information is selected carefully and currently up-to-date, flight prices might change rapidly within a short time-span. Basic principles ought to remain the same, but it is always advisable to be cautious with out-of-date figure

Financial forecasting is the process of estimating or predicting how a business will perform in the future. The most common type of financial forecast is an income statement, however, in a complete financial model, all three financial statements are forecasted.

A financial forecast is an estimate of future financial outcomes for a company or project, usually applied in budgeting, capital budgeting and / or valuation; see Financial modelling Accounting. Depending on context the term may also refer to listed company (quarterly) earnings guidance.

DATA ANALYZING

- Despite being a market leader in the Indian air carrier industry, IndiGO reported a loss before tax of nearly 2.75 billion rupees at the end of the fiscal year 2020.
- The company had significant losses especially in the last quarter of the financial year 2020, due to national lockdown on account of COVID-19 pandemic.
- This was an exception compared to the performance in previous years, where profits continually and significantly grew from 13 billion rupees in the fiscal year 2016 to over 31.2 billion rupees in the financial year 2018.
- According to IndiGO's CEO, 2019 was a year of two halves the first involving declines resulting in losses due to high fuel prices and a weak rupee, in addition to fierce competition.
- Jet Airways' declaration of bankruptcy earlier that year also had an impact on the industry as other companies tried to fill in its gaps.
- IndiGO hired 285 pilots from the Jet Airways staff and was looking to increase those numbers further.
- As part of expanding its wings, IndiGO launched international flights in 2011, five years after being in operation. This, along with fleet development, made the private-owned budget carrier one of the fastest-growing in 2013, after Indonesian Lion Air .
- A couple of years later, Airbus received its largest single order from the Indian passenger carrier.

- Since its last quarter recovery in fiscal year 2019, the airline was reportedly studying the inclusion of business class for its long-haul flights.
- With Air India hanging by a thread, and players like SpiceJet and Vistara seizing growth opportunities, IndiGO depends on innovation and development to retain its market leading position.

INDIGO FINANCIAL FORECAST

IndiGO is India's largest passenger airline with a market share of 53.9% as of December, 2020. We primarily operate in India's domestic air travel market as a low-cost carrier with focus on our three pillars – offering low fares, being on-time and delivering a courteous and hassle-free experience. IndiGO has become synonymous with being on-time.

IndiGO has a total destination count of 87 with 63 domestic destinations and 24 International. This includes one destination: Leh, which is now open for sale. Fourteen codeshare destinations beyond Istanbul on Turkish Airlines are also open for sale. They include, Athens (ATH), Budapest (BUD), Brussels (BRU), Tel Aviv (TLV), Malta (MLA), Paris (CDG), Dublin (DUB), Copenhagen (CPH), Prague (PRG), Vienna (VIE), Zurich (ZRH), Amsterdam (AMS),London Gatwick (LGW) and London Heathrow (LHR).

FACTS & FIGURES

- consecutive years of Profitable operations
- Market share of 53.9% as of December, 2020.
- Flee10 t of 283 aircraft including 120 new generation A320 NEOs, 108 A320 CEOs, 25 ATRs and 30 A321 NEO.
- Recognized as 'Great Place to Work for in India' for 8 years in a row (2008-2015)
- Named as Aon's Best Employer for the year 2016 and 2017
- Despite being a market leader in the Indian air carrier industry, IndiGO reported a loss before tax of nearly 2.75 billion rupees at the end of the fiscal year 2020. The company had significant losses especially in the last quarter of the financial year 2020, due to national lockdown on account of COVID-19 pandemic.
- This was an exception compared to the performance in previous years, where profits continually and significantly grew from 13 billion rupees in the fiscal year 2016 to over 31.2 billion rupees in the financial year 2018.

NSE: INDIGO

1,057.50 INR +15.55 (1.49%) ↑ 13 Apr, 3:30 pm IST · Disclaimer

1 day	5 days	1 month	6 months	YTD	1 year	5 years	Max
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1,000	lumy	m	mm	why	ww		W
1,000	Wmy	2017	20		2019		2020
1,000 A	Wmy	2017	20	Div yield	2019	0.47%	2020
1,000 500 Open High	Wmy	2017 1,052.00 1,090.85	20	Div yield Prev close	2019	0.47% 1,041.95	2020
1,000 500 Open High Low	Wmy	2017 1,052.00 1,090.85 989.10	20	Div yield Prev close 52-wk high	2019	0.47% 1,041.95 1,898.85	2020

FINDING

IATA, a number of factors affect the price elasticity of an air service, including the availability of substitutes: the more possible substitutes, the greater the elasticity Degree of necessity or luxury: luxury products tend to have greater elasticity Proportion of the purchaser's budget consumed by the item: products that consume a large portion of the purchaser's budget tend to have greater elasticity Airline Pricing Strategies 18. Time period considered: elasticity tends to be greater over the long run because consumers have more time to adjust their behaviour With the knowledge of price elasticities, we can come back to the demand curve and market segmentation. Different customers are obviously willing to pay different prices for the same air travel service. By charging the same fare for everyone, as formerly done with the costrelated pricing, an airline would miss out on the consumer surplus shown in Figure 6. Figure 6: Consumer Surplus (Own elaboration based on Pindyck, Rubinfeld, 2005) To take advantage of different elasticities, airlines should offer a range of prices for the same flight. Depending on the days remaining until departure, the booked load factor, possible peak forecast and competitive pricing, the fare can vary greatly. This way, the market is broken down into segments and the airline receives higher overall revenue (Figure 7). Apart from that, carriers often accomplish different travel classes (first, business, economy, and subclasses) for pricing purposes. The downside of the demand-related pricing is the complexity of market segmentation. Whilst cost-related pricing is easy to implement, different fares for the same service are more difficult to manage. Apart from additional calculations, it might result in hard to justify price differences for the customers. One factor which is has to be considered when booking a flight is the time remaining until departure. That is, if one books well in advance or socalled last-minute. Price segmentation not only takes place between different

categories, but also within the categories. In our thesis, $P(\in) X$ (Units sold) Market-clearing price Consumer surplus: The benefit of customers by being able to purchase the ticket for a price lower than they would be willing to payAirline Pricing Strategies 19 we refer to three time frames: "extreme short term", "short term" and "long term". Extreme short term means to make a booking very close to the actual flight time. This can be for the next day or even the next available flight. Short term refers to a considerable short time span, such as a week or 10 days before the flight. In the empirical part, we set seven days as an example. Long term bookings are made well in advance. This is typical for leisure travel in to achieve low fares or for thoroughly planned business trips. It is important to distinguish between those subcategories, seeing that prices can vary within a booking class as the time span gets shorter. Along with the time remaining until departure, the booked load factor has to be considered when setting a price for an air travel service. These two factors are closely linked to each other, since the cabin factor tends to increase over time until it reaches its maximum. The term "cabin factor" describes the number of seats booked in relation to how many passengers can be accommodated by an aircraft. It is measured in percent. Since an airline has relatively high fixed costs accompanied by low marginal costs, the aim for any airline should be to achieve the highest cabin factor possible. Some even make use of overbooking. The higher the load factor is, the higher the revenue for the airline gets. At the time of departure, any unsold seats cannot generate benefits. Through market segmentation, an airline can capture the different willingness to pay and thus increase its cabin factor. It also represents an instrument to control the varying market demand. This will be further discussed in the empirical part.

Methodology We specialise our research on two airlines since the whole market in the airline industry is too wide to analyse. The geographical differences as well as differences in the type of market require a differentiated view on the whole industry to deliver a sufficient result. The understanding of Porters generic strategies gives us the possibility to synchronise this theoretic concept with airlines in the actual market. We want to have a closer look at two European Airlines - the German airline IndiGO and the Swedish Scandinavian Airline System (SAS). These two were once governmentally owned and now face competition in the open market. Hence, we apply the different segments of the model which were differentiation, overall cost leadership and focus to the presentation of the two airline companies. By setting them in such a cluster we can identify their covered scope they operate in. All organizations are different, yet we will try to find a strategy suitable for most internationally operating airlines. Since this is such a broad field, we will focus on the market of passenger travel. Demanding extreme customer-orientation, air travel services for passengers also represent a challenge for planning and implementing pricing strategies. Thus, we would like to find a concept suitable for the international airlines market. In the last part we have introduced the theoretical models we are going use for our analysis later on in this thesis. The models we have chosen are most suitable to give the answers to our research question. By using the Porter Model, with its different segments, we can position the airlines in the market. This will help us to identify which competition they have to deal with. As a result of that, the airline can chose the most suitable marketing strategy. The different pricing models will help us to compare the actual pricing system to the theory. Based on micro-economic knowledge, we would like to find out whether the theoretical model of market segmentation is also valid as a practical approach for the airline industry. By observing price policies and fares in case studies, we will examine if companies apply theoretically optimal models in real life and if they succeed. Delimitation We have to note that although pricing plays an important role in airline marketing it is important to mention IndiGO.

Findings As outlined above, we observed the prices in three categories. This implies that the willingness to pay varies greatly among different customers on that route. If it was not so, both airlines could charge a high price and limit their market segmentation to the point where the price elasticity of the demand is -1 for everyone. But since that point does not exist due to diverse elasticities, they offer a variety of fares. This can partly be explained by the factors that influence the elasticities, such as the availability of substitutes: On domestic and some shorthaul international routes, trains, buses, cars and boats can be an alternative to flying. The more substitutes there are, the greater the price-elasticity of demand. In our cases, the routes FRA-BER and ARN-OSD have serious competition. For the route FRA-ARN on the other hand, both INDIGO and SAS have a monopoly. They conduct code sharing on this route, enabling themselves of more price control and a higher profit margin. In some cases, we found that certain fare segments were not offered (any more). A palpably reason is that the corresponding seating category is booked out. Especially at SAS, we frequently observed gaps of this kind. Another explanation is the rising cabin factor over time. As the booking numbers increase, the airline augments the prices to exploit the customer surplus. Therefore, a low economy price might not be sold any more. Especially if there is a high demand expected from former experience (certain weekdays and times), they tend to increase the fares more quickly. This can also be an instrument to manage yields, which will be discussed further on in this paper. Another reasonable justification is that there is not always enough time to offer additional service. For example, on all short-haul INDIGO flights observed, there was no possibility to book First Class. Whereas Business and Economy has always been available on these routes, the most luxurious option was not offered. As it is a fairly short service (up to two hours), there is no sufficient possibility and demand for extra service.

Pricing structure in the course of time As we described in the three graphs before, both types of pricing structures have a positive effect on the usage rate of an airline because the peak seasons are depreciated. Another interesting result can be seen if we look at all graphs simultaneously. Since we observed different timeframes, that is to say the price for the same flight when booked in three month, one week or one day in advance, we can draw a conclusion concerning the pricing strategy by IndiGO, which shows the price when you book three months in advance, indicates that INDIGO tries to even out the uncertainty of late bookings. Therefore the company provides cheap prices in the Economy Class to be sure to have a safe load factor earlier. This then leads to a better planning of short term pricing. If this kind of pricing is not performed it is more likely that the peak number of booking will arise in a short phase prior to the flight. That leaves a long period of uncertainty regarding the achievement of a good load factor. We also expect that the price in the Economy Class is going to reach 283€ as we observed for bookings which are performed one week in advance since it is exactly the same route.

Fig1.1



the pricing structure turned out to be a different one. There INDIGO does not increase the price They are during t rate is l by attraction Analysis The aim of this study was to find a pattern of how pricing takes place in the airline industry. To achieve that, we collected data from both SAS and INDIGO for nine flights each. These are representative for most flights offered in this industry and thus provide a

good example for the majority of flights. Through empirical study of the two cases we found the following pricing strategies: Airlines apply the concept of market segmentation, which was explained in the theoretical part. They offer two or three seating categories which in some cases include sub-categories for booking. By doing so, the airlines exploit the consumer surplus. As different passengers vary among their price-elasticity of demand, the companies meet their requirements and thus maximise the revenue. Additionally to this general model, they usually apply supplementary strategies to cope with problems which arise in the international market. First, we observed the so-called peak problem. Depending on factors such as working days and hours, public holidays and school holidays, the demand for a certain air travel service varies. To even out these fluctuations, airlines should adapt their prices to different conditions. They set higher prices on peak days/hours and lower ones for times in which the expected demand is weaker. That way, they can even out the discrepancy between demand and supply. Second, all internationally operating airlines have to face currency fluctuations. As soon as they offer a ticket in a country with another currency, the fare and benefit margin suffers influence from changing conversion rates. These fluctuations are faced by adapting the fare to the current purchasing power. This implies a good planning and careful observation of currency developments to produce at the price optimum. Third, the airlines have to achieve the highest possible cabin factor. They manage their yields by increasing price over time. According to both booking status and time remain departure, the airline sets a continuously rising price. Forth, on short routes, substitutes such as the railway, buses, boats, and cars represent considerable competition. We observed that the flight fares are generally lower on such routes than on flights where they possess a monopoly. Airline Pricing Strategies 40 6 Discussion All these strategies complement the basic concept of market segmentation. Based on our findings we can say that the model presented in the

theory does provide a good base for airlines. However, it has to be accompanied by additional strategies to react to arising problems and fine-tuning the pricing strategy. The patterns we found implemented by SAS and INDIGO represent a firm market-responsive approach to the problems in the airline industry. We assume that not only the two observed companies, but also other international airlines of similar standards apply these strategies. Both for new organizations and for those who wish to change their pricing patterns, these structures are beneficial and practicable. We proved that companies do implement the theoretically optimal model of market segmentation and thus apply demand-related elasticities. As outlined above, they add further strategies necessary in the business. We have to note that air travel services are fast-changing and that the unwritten rules valid today might be completely changed. Nonetheless, this model proven to be well suitable at the moment and can be seen as an example to employ for other sectors as well. Due to its market-responsive approach, the market segmentation model is an excellent method in general. It very much takes the varying elasticities into account. Even if the market's environment changes as it constantly does, the customers will always have individual demands. This gives space for further research and updates. It also represents a trigger for professionals to constantly be aware of changes and stay alert of the current market situation. Airline Pricing Strategies. Opinion We also disregarded new and challenging forces like the increasing price for energy and more conscious treatment of the environment. These clearly are interesting to deal with since they are affecting not only the airline industry but all others as well in the near future and even in parts already nowadays. This future change is also directly connected to pricing. Since the increasing costs for production will have major effects on product prices. These prices for the consumer should not be fully determined by production but by demand. Still it is necessary that the final price covers at least the fixed costs for a

short term view and variable costs for long term view. We reduced the spreading of the topic so that we can present a meaningful and clearly defined delimited result of the complex structure. Otherwise the results would have been affected too much by influencing forces so that a statement could not be seen in a general perspective. Our results show that today's airline industry already is very customer orientated one. Since the companies in this market are mainly dealing with intangible products it is important to sell the right amount of products at the right time. So the customer needs to be the seen as the most important variable. Therewith pricing which affects the customer directly can be seen as a key instrument in marketing. We found out that demand peaks were reduced by offering a differentiated price. The resulting benefits for the customers are not only lower prices in the off-season but also a more efficient operating plane. This leads to wider diversity of routes. This customer orientated view is not yet understood by all other industries so the airline industry can be seen as model for the future market. A lot of companies or even industries create their prices only on a cost-related basis. This is due to the hard competition in the Airline industry not possible. Since competition increases in all industries partly as a result of globalization there is more need to focus on the customer and the connected demands. Ergo the results of our study, which contain solutions for regulating demand, can also be applied to companies in other industries.

RECOMMENDATION & CONCLUSION

All these strategies complement the basic concept of market segmentation. Based on our findings we can say that the model presented in the theory does provide a good base for airlines. However, it has to be accompanied by additional strategies to react to arising problems and fine-tuning the pricing strategy. The patterns we found implemented by SAS and INDIGO represent a firm market-responsive approach to the problems in the airline industry. We assume that not only the two observed companies, but also other international airlines of similar standards apply these strategies. Both for new organizations and for those who wish to change their pricing patterns, these structures are beneficial and practicable. We proved that companies do implement the theoretically optimal model of market segmentation and thus apply demand-related elasticities. As outlined above, they add further strategies necessary in the business. We have to note that air travel services are fast-changing and that the unwritten rules valid today might be completely changed. Nonetheless, this model proven to be well suitable at the moment and can be seen as an example to employ for other sectors as well. Due to its marketresponsive approach, the market segmentation model is an excellent method in general. It very much takes the varying elasticities into account. Even if the market's environment changes as it constantly does, the customers will always have individual demands. This gives space for further research and updates. It also represents a trigger for professionals to constantly be aware of changes and stay alert of the current market situation. Airline Pricing Strategies 41/7 Opinion We also disregarded new and challenging forces like the increasing price for energy and more conscious treatment of the environment.

These clearly are interesting to deal with since they are affecting not only the airline industry but all others as well in the near future and even in parts already nowadays. This future change is also directly connected to pricing. Since the increasing costs for production will have major effects on product prices. These prices for the consumer should not be fully determined by production but by demand. Still it is necessary that the final price covers at least the fixed costs for a short term view and variable costs for long term view. We reduced the spreading of the topic so that we can present a meaningful and clearly defined delimited result of the complex structure. Otherwise the results would have been affected too much by influencing forces so that a statement could not be seen in a general perspective. Our results show that today's airline industry already is very customer orientated one. Since the companies in this market are mainly dealing with intangible products it is important to sell the right amount of products at the right time. So the customer needs to be the seen as the most important variable. Therewith pricing which affects the customer directly can be seen as a key instrument in marketing. We found out that demand peaks were reduced by offering a differentiated price. The resulting benefits for the customers are not only lower prices in the off-season but also a more efficient operating plane. This leads to wider diversity of routes. This customer orientated view is not yet understood by all other industries so the airline industry can be seen as model for the future market. A lot of companies or even industries create their prices only on a cost-related basis. This is due to the hard competition in the Airline industry not possible. Since competition increases in all industries partly as a result of globalization there is more need to focus on the customer and the connected demands. Ergo the results of our study, which contain solutions for regulating demand, can also be applied to companies in other industries

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