

Airfare Price Elasticity over non-Business Passengers

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Abstract. In recent years, the air travel has become the most popular mean of transportation all around the world. As the safest mean of transportation, people go for air travel more each day to have the most suitable trip to their destination with less hassle of long hours of trips through other means. With such a rapid growth demand in recent years, there have been major impact on the supply and demand diagram for the tickets in different time where has left a necessity of a new look toward the ticket market. Here in this paper we want to have a short analysis over this market and want to go through the behavior of the customers and their response to this market. We analyze some important parts in deciding the ticket price from both business runners and the customers and try to find the equilibrium where the most profit goes for the both sides of this interaction. This analysis tries to define some important factors that can affect customer's attitudes to the price of the purchasing ticket and in turn how this behavior can affect price elasticity.

Keywords: Elasticity; Demand; Ticket Pricing

1. Introduction

In defining the price for the ticket specially the airfares, there are many factors that should be taken into consideration. As long as air travel is the most popular way of travelling for people, each of these factors can have a great impact on the demand for tickets. The problem with air travelling is that, the airfare is most of the time, beyond the expectations of non-business travelers. As long as the price diagram is not much sensitive for business and first-class travelers, here in this research we focus on the part of non business travelers as they are the biggest group in air traveling. While the air traveling is considered as the safest way of traveling, the convenience and the time saving are the major factors for passengers to choose it as the best possible choice; Thus, the demand for the air traveling is merely based on the price factor as long as solving this issue leaves no doubts for travelers to choose this way of traveling (Putting aside some rare factors like fear from flight, terrorist attacks and ...). But the price itself has so many important factors behind which decide for it. We can say, if we don't consider these factors in a synergic way, we won't have any cheap flight because of the nature of this way of travelling. You can imagine how costly it can be to take off a plane from one place and land it in a different place neglecting all these factors. That's why in recent years, there have been a crisis in many airlines as it has resulted in mergers and acquisitions in order to survive in such a competitive market, and yet the competition is based mostly on the price we take from the customer and the.

service we offer. Here, some of the factors that can be taken into consideration, some from both views of business and customers. It is not limited to these factors but these are those playing as a key role in deciding on airfares. These factors are as follow:

- 1) *Reliability*
- 2) *Transit Time*
- 3) *Personal space on aircraft*
- 4) *Catering*
- 5) *Airport Access*

Here we try to clarify each of these factors separately and then make a conclusion on the synergic affect of all these factors. We, again, emphasize that the view at analyzing these factors are limited to economic class passengers.

2. Reliability: What Makes You Confident on Air

It takes years but it makes billions to create what we call it “Reliability”. This is actually the brand awareness about the airline. Reliability consists of many different things like aircraft service quality, safety, luggage on time delivery and many other factors that depict an image from that airline in the minds of customers. This is what the customer is looking for most of the times “To pay for it deserves to be paid”. We pay for what we think it returns us a better outcome. As long as there are so many different factors that create such airline reliability, we can say that price is not a great concern for customers as long as the value attached to the price they pay is worthy. Figure 1 shows the impact of reliability on price.

While the reliability factor burdens a heavier investment for the airline on the long term, it both increases the fix costs and variable cost in time, which in turn, heavier demand on a long term makes the variable cost less and the growth in ticket price is mainly based on the higher fixed price and initial investment which is crumbled over the ticket prices. Thus, the growth in demand can grow faster than the growth in price as long as the better service keeps more customers on board while the step increases in price to cover superior service is not decreasing demand in a big way. That’s why making a more reliable airline with better brand image leaves

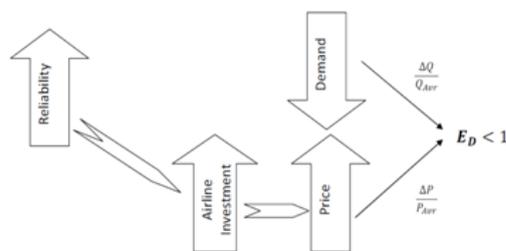


Figure 1: Reliably impact over price elasticity of demand

a better economical outcome over time as superiority over other airlines in services catches more customers in return as if the competitive advantage coax customers to pay a little more to get a reliable service.

3. Transit Time: What Makes You Feel Nervouse

You can be a reliable airline but how about the transit time that you need to switch the aircraft on a route? This factor is seen through the business side a major factor to cut the costs but as an uncomfortable factor for customers. Today, people look for non-stop flight rather than stop over different places even with the lower price. As long as the transit is a good opportunity for the airlines to fill up their seats on the located hubs, it’s only a waste of time for passengers. Maybe the only incentive to catches the attention of non-business passengers will be a great decrease in the airfare, otherwise, we a slight higher amount, they prefer to have non-stop flights. We can say that the transit time shows and exponential behavior to the demand. As the transit time becomes longer, the rate of decrease in demand for that route changes exponentially; thus, by creating a short transit time, both the airline can fill up their seats and the passenger can accept the switching

time between planes. Normally the best transit time is between 2 to 3 hours, giving enough time for the passenger to switch the flight on time while it's not too long to make passengers tired. The price elasticity of demand is very low on transit time and stops. Figure 2 shows the impact of Stops and transit time over demand elasticity.

By the right schedule, the airline can attract higher passengers with a higher reasonable price for the direct flight. Otherwise, adding stops will decrease the number of passengers greatly and it can only be compensated by a much lower price of the airfare.

The balance between the price increase or adding a stop should be decided by the airline as long as this factor can create a rapid change in the demand for that route with direct flight. Normally as the transit is not preferred by the passengers and the price elasticity of demand is low, any other substitute strategy is preferred to make the flight non-stop.

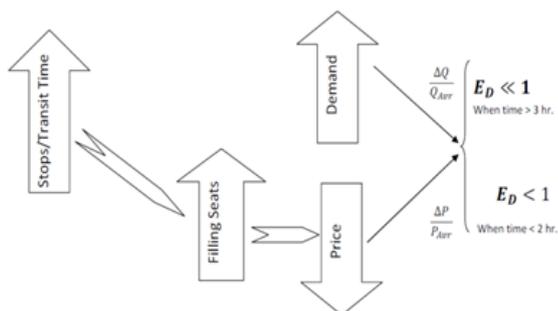


Figure 2: Stop/Transit Time impact over demand

4. Personal Space on Aircraft: What Makes You Feel Awkward

Like renting the house by square meter, actually we all pay the price of the space we occupy on the plane. Those in first and business class can have bigger space to lounge while economy class has enough space to sit. But it sometimes doesn't comply with the thresholds of human needs!!! This happens especially in low cost carriers where the arrangements of the seats are designed for the maximum use. The non-business passenger is not looking for a luxurious seat, but the comfortable space is the vital factor for the passengers specially those who are not in a good physical condition. The other factors which magnitudes this need is the duration of the flight where for flight longer than 3 hours, a more comfortable space is required both for sleeping and easier catering. Figure 3 shows the impact of personal space on demand elasticity.

Giving a large space to the non-business passenger is not changing the demand much as long as it is not required and is not asked by the non-business passengers but taking the space into an uncomfortable situation has a great impact on the demand as long as it has violated the basic needs of a passenger for a flight. So, the space should be arranged in accordance with the basic needs and also range of the flight. As long as long range flights needs more catering and sleeping time, normally a more comfortable seat can attract more passengers. As the figure 3 shows, this factor is affected by the duration of the flight. Normally in short-range flights, the given space does not have a great impact as long as the duration is short and it can be accepted by the passengers.

Moreover, the sleeping time and catering is not an important factor here. Giving a big space on short-range flight carried a higher price to the airline while this factor is not required much by the passenger and the price elasticity of demand is elastic to the given space (Unless it violates the comfortable space which rarely happens in reputed airlines) as long as by charging less we can have more passengers but passengers prefer to pay more and get a better space on long range flights so charging a higher price does not affect the demand for long range flights. This is what the low cost carriers use for the short and mid range

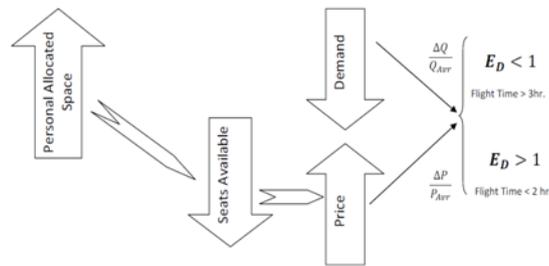


Figure 3: Space factor impact over demand

flights for the most possible seat arrangement where for the long range, the arrangement should be changed.

5. Catering: What it Tastes on Air

The food quality and diversity are the factors that can affect the demand for the flight.

There's not a specific standard for the quality of food as long as this goes back to the taste of the passenger. A food can have a very good quality but not well for the taste of passenger. This normally goes to different tastes in different places of the world. As long as the diversification of the food for different tastes is very costly, this gives a very high price on the airfare. Normally, in short range flights, no food or only a snack is enough. This way, the huge cost which is unnecessary can be cut from the ticket price.

On the other hand, even if the food is serviced, it can be less diversifies on short and mid range flights. Short flights mostly occur within a country so the basic taste of passenger are mostly the same while the mid range flights occur in the same region where the cuisine of that region have many common basic (e.g. Asian cuisine, middle east cuisine, Indian cuisine). This changes a great on long range flights as the whole culture and cuisine changes between two regions. On the other hand as the religious factors are also concerned with the food, it can affect the demand (e.g Muslim halal food, vegetarian foods, etc.) Figure 4 shows the impact of catering on different flight ranges.

As you see in figure 4, catering is not a great expectation on short range flights, so it can be cut or become optional (purchase on flight) for the passengers. This way, charging the passengers for the higher price for catering on short-range flights may result in a great decrease of demand while on a long-range flight, the food and it's diversity is important for the passenger which can they pay for it. Again, low cost carriers cut the price of their tickets by cutting the cost of catering to their passengers.

6. Airport Access: How to Catch Your Flight

One of the major factors of deciding for a flight is that how can we can reach the flight.

In the new modernized world, as the air traffic grows, many countries prefer to have airports outside cities. This makes the access for the airport a little bit harder for the

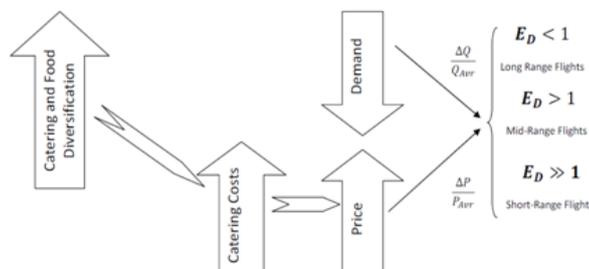


Figure 4: Catering factor impact over demand

passengers. But here, there are some facts that should be taken into consideration.

Again, the range of the flight is very important. For the Long-range flights, it's acceptable to go a little bit further to reach the flight as there should be a long distance journey where the access time to the airport is

not an important matter. But for the short range flights, as local flights, if the embarking is done in an airport outside the city, it doesn't look so rational for the passenger to waste a lot of time on the roads. For the short-range flight where driving takes only 6 hours it's not rational to have the boarding the airport for both origin and destination which takes about 2 hours from the main city.

This makes the passenger spend the same time to reach to the destination as by driving means. Thus, the airport location is a critical case for many airlines. On the other hand, if the airport is outside the city, fast access facilities like high speed trains should be used to make the time the shortest possible time (e.g. KLIA Express). While long-range flights are not very sensitive to this distance, short-range flights are very sensitive. Figure 5 describes how this can affect the demand on the market.

Sometimes by charging the customers of short and mid-range flights with a higher tax of airport but easier access to the destination, this problem can be solved as long as it will cost customers much more to fly to a casted-away airport and then pay much to go to their main destination. As you can see in figure 5, charging customers higher for short distance flights and give them a better airport access is rational as long as there's a great time saving for them. So, they're not much price sensitive to the tax surplus that is taken to give them a better access point of disembarking. For mid-range flights, the sensitivity goes higher as the main city vicinity disembarking becomes less important.

On long range flight, the price elasticity of demand can be seen as long as on an 8 hours flight, a distance of 1 hour to the airport is no very important. So, on this case, if we want to charge the customer a airport tax surplus, they prefer to look for the cheapest one.(Still these rules are considered for non-business passengers as long as for business passengers time is money and they pay for it). This is one strategy that national airlines sometimes can get more passengers to the country of their destination as long as they have airport tax exemption in their home country.

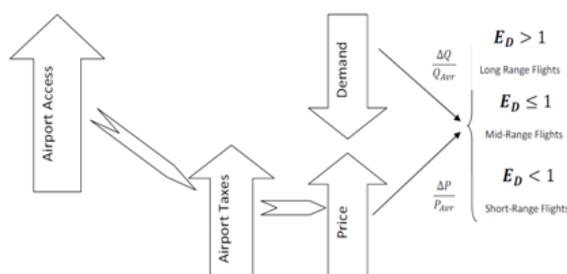


Figure 5: Airport Access (Tax) impact over demand

7. Conclusion

Different factors which are discussed about to now can affect the demand for the ticket.

There are many factors that can affect the airfare. The main part of the ticket price is the fuel price which can be hardly changed due to the specification of different planes. Thus, to maximize the profit, we have to work on the other parameters of the flights in order to make it more profitable. These factors mostly go around service factors before, in and after the flight. By choosing right services for the right customers on the right range, we can maximize the profit for the business and on the other side can make the customers more satisfied with our offered service. The Price Elasticity of demand analysis is very important here to know how we can maximize the profit while we have happy customers.

If we know what our customers want in each journey, then we can decide how the world behaves to the price that we charge them accordingly. If we charge them according to what they want, they may not show much sensitivity to the price increase that we have as long as we work in the range of their expected demands, so by pricing correctly according to our customers need, we can have some increases for their demanded services to maximize the profit. On the other side, if we find the range of their expectations, we can cut from many unwanted services that they are reluctant to pay for. These days, Low cost carriers use all these techniques to attract more customers. As long as all of them are running on short and mid range flights, they try to make air travelling as cheap as bus travelling or trying to be so call "Air-Bus". They've got to this

conclusion that non-business passengers are very sensitive to the price so, they could change the demand by cutting the unnecessary cost from ticket price which in turn attracted more passengers. In summary; they understood that for short and mid range flights, they have always a price elasticity of demand higher than one where they can attract many passengers by just slight changes in the price and their promotions.

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