Airlines Customer Segmentation in the Hyper-Competition Era

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As the airline industry reaches its maturity, so do the passengers who are looking for more sophistication in terms of the products and services they buy or expect. Offering a large array of services to customers with different expectations who await customization along their journey has become more challenging for airlines all over the world. Coping with changes in a volatile environment means that airlines need to redefine their customer segmentation, evolving from a social-demographic to a more complicated behavioral approach which encompasses the whole traveling experience and the way airlines deliver at every touching point.

Keywords: *airlines customer segmentation, multi-customer segmentation, socio-demographic segmentation, behavioral segmentation, airline competition, airline commercial strategy*

JEL Classification*: M30, M31*

1. Introduction

Traditionally, airlines used to segment customers based solely on demographics. As the markets evolve, so do the customers who have different expectations from the airlines. The customer segmentation based only on dividing the passengers by the purpose of the trip - in the airline industry business versus leisure, is no longer useful for airlines as they need to shift their attention to other ways for a better segmentation to increase ancillary revenue for every seat sold. As the demographic segmentation does not cover the passengers' needs and motivation for traveling, behavioral segmentation helps airlines to understand the willingness to pay as business and first-class passengers tend to book close to the departure date, underlying the price sensitivity for certain routes or periods. Usually, these passengers are not choosing an airline based only on the price, but rather based on their intensive experience in terms of traveling and loyalty. As loyal passengers tend to purchase flights on a higher frequency, they are an attractive segment for the airlines to whom attention needs to be shifted as they have a higher influence on other potential passengers.

As aviation is one of the most complex industries, the traditional viewpoint to segmentation which focused on gender, age or other customer attributes is no longer enough. The behavioral segmentation is more used in the aviation industry as it shows behavior patterns of the passengers who interact with the airline companies and allows them to divide the passengers into different groups. The ultimate objective for airlines is to identify those segments that help them understand how to address different needs of different groups,

uncover optimization ways for the passenger's journeys and to assess the potential it might have on increasing worth.

2. Theoretical Framework

As customers are very different in their consumption behavior, their ways of buying products and services, measuring the utility of a product or service according to their needs, companies have found it necessary to divide the customers into different segments and measure to which customer segment they should better concentrate the efforts. Over the years, segmentation has been in the attention of different authors as in practice segmentation is vital for the survival of any company given the intense competition and innovation. A specific segment often consists of a group of customers with similar sets of wants and needs, responding in a similar way to a set of marketing efforts (Kotler, 2009).

Looking for specific segments that companies can serve better is a trait of success, as marketing teams need to focus on segments that have the highest opportunities to satisfy (Kotler, 2016). As customers have unique needs, targeted marketing strategies need to be built around them. A market segment consists of large groups within a market with similar needs, buying attitudes, purchasing power, geographical location or different buying habits. According to Kotler (2002), a targeted marketing campaign consists of identifying and profiling distinct groups of customers who require separate products and services (market segmentation), followed by selecting one or more segments to focus on (market targeting) and finally communicating the products or services distinctive benefits.

In segmenting consumer markets, companies can apply geographic, demographic or psychographic variables as well as behavioral variables that are related to consumer responses (Kotler, 2002). In behavioral segmentation, customers are divided into different groups who share similar traits in terms of attitudes towards the use of products or services, or benefits, buyer-readiness, rate of usage, statuses or loyalty. Studies applied to aviation show that young travelers are less likely to book a flight based on the advantages of airline loyalty schemes but rather due to the services offered and the experience along their journey (Skift, 2017).
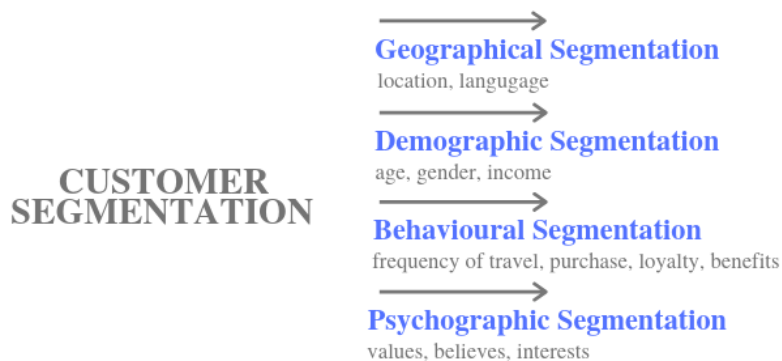

CUSTOMER SEGMENTATION

Geographical Segmentation
location, langugage

Demographic Segmentation
age, gender, income

Behavioural Segmentation
frequency of travel, purchase, loyalty, benefits

Psychographic Segmentation
values, believes, interests

Figure 1. Traditional Customer Segmentation
Source: Kotler and Keller (2002, 2009)

Evaluating segments to determine which one is the most attractive, companies need to look at their objectives and determine if a certain segment has the potential to become attractive. Kotler (2009) set five criteria that segments must rate positive to be attractive: measurable, substantial, accessible, differentiable and actionable. Therefore, a valid segment needs to be measurable - purchasing power, the size or the characteristics can be measured (applied on the airline industry, the airlines need to be able to predict the revenue and profit the segment can make) A segment needs to also be substantial which targets the profitability of the segment, differentiable meaning that each segment reacts differently to the marketing mix, actionable meaning that airlines need to provide value to the segment and accessible meaning that airlines need to be able to reach all segment whenever appropriate or needed.

Doganis (2019) believes that market segmentation is only relevant for airlines (both passenger and cargo) if they can identify the segments which they want to target, keeping the same objectives in mind – identifying the most profitable segment, define marketing strategies and pricing policies for each segment. This requires marketing research and different surveys to identify needs and therefore adjust products or services to different markets, offer better services than competitors and fulfill efficient branding.

Besides dividing the customers into different groups, customer segmentation is linking customers with the appropriate offers and enhancing the way companies communicate with customers (Magento, 2019). The

purpose should be to create relevant experiences, thus building brand loyalty by identifying the most profitable customers and tailoring the services and products to meet their needs. In the age of personalization, marketers need to give up on the "spray and pray" approach and adopt data-driven segmentation (Zoovu, 2019). By applying data-driven segmentation, companies can improve marketing effectiveness, expand the customer base, increase the competitive advantage which means more sales and also increase customer loyalty.

Weinstein (2014) believes that successful marketing can not be done without segmentation of the actual customers and most important of the potential customers. All companies need to have strong insights about their customers, their needs and desires regarding the products and services. Malcom and Dunbar (2012) believe that the purpose of customer segmentation is to divide the current customer base and potential customers into different groups with similar attributes as they have different perceptions of product and service value.

Furthermore, companies can segment by the five "W". First segmentation is WHO, which includes the basic demographic variables such as gender, age, income, education level occupation, etc. Next is WHERE, as companies need to know where their customers live, understanding the geographical diversity and area of concentration, business location, etc. Next is WHAT, analyzing the customers' history, present, and future – variables can include the most recent purchases, the total number of trips, experience, total generated revenue. Understanding the motivations and goals of the customers can help companies identify different gaps in product offerings and what can be improved. Next is WHEN – when are the customers most likely to buy, when are they using the products and services of the company Next is WHY which describes what the customers want or needs and what can the company offer. Companies should be able to answer who are the customer segments and how they can be defined, what customers segments deliver most revenue or profit, which products or services belong to which customer segment, how can the company communicate to each segment to deliver a proper message? Last, is HOW – how customers interact with companies? (Towards Data Science, 2019).

Understanding passengers' needs and concerns will provide airlines with better insights given the volatile market and passengers' expectations to receive value along the customer journey. Depending on each airline business model, companies target passengers different and understanding them is crucial for adopting appropriate measures and allocate resources into building a new strategy. The main problem for airlines nowadays is that they all try to deliver to the needs of a wide array of customers need, satisfying only a small proportion of passengers in each of their respective segments (Centre for Aviation, 2014).

According to Towards Data Science (2019), all customers are not equal. When airlines try to examine revenue by each segment, they usually discover that a minority of passengers are responsible for the majority of the profits – also called the Pareto 80/20 principle. By re-segmenting and identifying more profitable passenger segments, the airlines will be able to focus their efforts on keeping the passengers loyal by having their needs fulfilled. Also, a good segmentation strategy analysis should reveal underserved segments. By knowing the customers, airlines can predict which passengers are likely to purchase other services based on past purchases, thus helping with planning and marketing.

Camilleri (2018) found that demographic segmentation means dividing the markets into different groups which can be analyzed by physical and accurate data. This demographic variable can include age, gender, income, occupation, marital status, family size, nationality, etc. For example, there is a strong difference between the young and older passengers who are traveling for business purposes – Millenials flew 7.4 business trips in the past year 2017 (Skift, 2017) compared to 6.4 of the older generation.

According to Teichert, Sheh, and Wartburg (2008), the differentiation between business class passengers and economy class passengers is no longer enough to evaluate the selection criteria chosen by passengers or their preferences. Setting marketing objectives based solely on this differentiation of airline classes is not feasible as it does not provide a realistic segmentation of needs and preferences for passengers. The authors surveyed over 5800 frequent-flyer airline passengers who traveled on 11 routes by using consumption behavior and socio-demographic variables to obtain 5 market segments: the efficiency/punctuality segment, match all/flexibility, the efficiency/punctuality, comfort segment, and price segment. Each segment chose different variables such as punctuality, flexibility, schedule, catering, the price per segment, product.

Wittmer and Hinnen (2016) believe that the need for new segmentation is fueled by the diverse cultural background of the passengers, the power of digitalization, different lifestyles (the rise of bleisure – business and leisure mix of travel) or the environmental concern – all these shape new needs and expectations thus making airlines to provide with tailored offering, experiences and increase ancillaries. Due to ongoing changes in the industry and innovation in terms of new aircraft, new products, airlines need to draw passengers profiling for the future to avoid any mobility issues for the future.

3. Airline Passenger Segmentation – A Buzzword in the Airline Industry

Based on the behavioral segmentation, days before departure purchase can be a strong indicator of a passenger's price sensitivity. Price sensitivity can be a strong indicator of how airlines can segment their passengers. Once one side, the restricted fares target the needs of price-sensitive customers while the full fares are designed to the business class, corporate and first-class passengers. However, price sensitivity is not enough for airlines to segment customers, as they can miss a lot of opportunities regarding the ancillaries. According to Eye of Travel (2018), airlines need to be able to answer the following questions: Which customer segments want ancillaries, what kind of ancillaries and which ones they most value?; How can airlines point customers to the ancillaries they most value and which channels should airlines use? In this matter, airlines need more accurate price sensitivity estimates as well as more ancillary products – all for more precise customer segmentation.
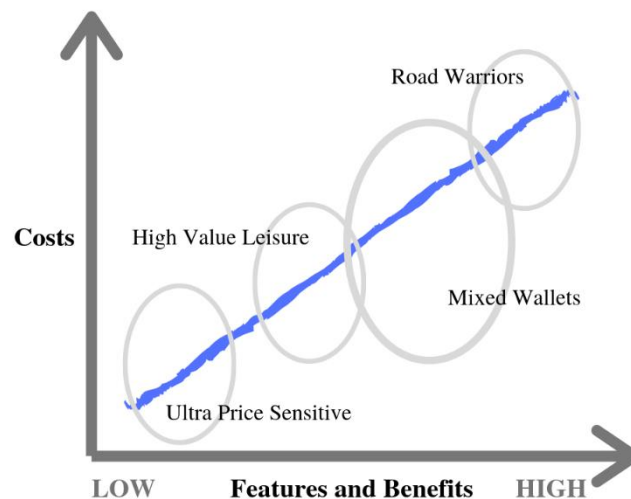

Figure 2. Example of customer segmentation, Jet Blue Segmentation
Source: Capa Aviation (2014)

As the low-cost airlines increase in size, full legacy airlines have been struggling of balancing the expectation of loyal passengers with finding new ways of competing with these airlines and increase ancillary rate – finding a way to strategically segment passengers while taking into account the aircraft cabins. For example, American Airlines introduced up to five different seating cabins and levels of service that would range from high-premium service to ultimately super basic and restrictive options dedicated to the ultra price-sensitive, hoping to compete with low-cost carriers at their major hubs. American Airlines planned the aircraft cabins to be divided as such:
- First Class and Business Class which would offer lie-flat beds, premium service, and full privacy
- Premium Economy – more legroom and amenities
- Economy – allowing the customers to choose seats, foods and extra luggage.
- Basic Economy – restricted dates, no refund, no extras.

American Airlines also specified that all the cabins will depend on the aircraft sizes as well as on which routes would the aircraft be deployed, given the different characteristics of the markets served by American Airlines. In other words, American Airlines as able to use all the data gained on the routes to match the aircraft configurations with the markets these aircraft serve, boosting the basic economy on low-yield routes with high demand or premium heavy configured aircraft on routes which are more dedicated to business passengers.

However, other airlines like Emirates in the attempt to add more revenue from ancillaries are slowly disrupting the market by unbundling fares, thus micro-segmenting the business segment. After reviewing the ongoing travel preferences of the business passengers, Emirates will add a new fare for their business class, expanding all fare options to give customers more flexibility on certain routes and a seasonal basis. To stimulate traffic during the slow season, Emirates is aiming at business price-sensitive passengers who can choose the lowest business fare without the chauffeur service, lounge access or possibility to upgrade to First Class. Besides Emirates, Lufthansa (2019) will start unbundling the business fares in the attempt to stimulate

traffic and increase ancillary revenues, revealing that their 777x widebody will have a seat configuration that will allow starting charging for their seats.

During Capital Market Days, Lufthansa (2019) stated that a proper customer segmentation enables offering tailored products and services. According to their presentation, 10% of their revenue comes from the touristic segment, 30% from the leisure segment, 10% from the premium leisure segment and 50% from the corporate premium segment. In Lufthansa's view, the traditional premium is equivalent to the travel class, however, the new premium means premium defined individually by every customer.

Figure 3. *Example of customer segmentation, Lufthansa Segmentation*
Source: Lufthansa (2019)

As seen in Figure 3, Lufthansa divided its passengers into 6 different segments, each with different attributes.
- 46% of their customers are Efficiency Seeker traveling on a business trip on short-haul flights, flying in economy class.
- 14% of their customers are Convenience Seekers traveling on a business trip on long haul flights, flying in economy and premium economy
- 10% of their customers are Individuality Seekers traveling on business trips, all routes, flying in first and business class
- 5% of their customers are Exclusivity Seekers traveling on leisure trips, all routes, flying solely in premium cabins
- 19% of their customers are Adventure Seekers, traveling on leisure trips, long haul flights, flying in economy class
- 6% of their customers are Care Seeking Families traveling on a leisure trip, all routes, flying in all classes.

According to Lufthansa, the tailored products should represent the Unique Selling Proposition for all airlines in a world full of standards. Among the tailored Offers and Services, airlines should include individual food offers, a new variety of seat options, innovative retail marketplace, and dynamic ancillary pricing.

3.1. Personalization based on Passenger Segmentation

Personalization is the key element for airlines all over the world to increase their revenues by personalizing the travel offers as airlines have more access to data, they need to know their customers more into depth (Accelya, 2018). However, a personalization strategy in the airline industry must determine if airlines can use enough personal information and respecting the privacy laws to offer a personalized offer or use the information they have to use it for the behavioral segmentation thus predicting future behavior using AI tools. Looking from a personalization point of view, airlines have already segmented their customers in what is known as bundles or easily said in the forms of different fares. The fare-based segmentation is purely a behavior segmentation and not a demographic one which should include the purpose of the trip or other elements. Accelya (2018) found out that there are many other segmentation methods used by airlines in targeting passengers for different purposes of travel – some segment based on frequent flyers or non-frequent flyers. As the airline industry is dynamic the actual segmentation strategies have only been useful to boost customer loyalty for frequent travelers and optimizing passenger relationships via different social media channels.

In practice, some airlines like Delta Airlines created the Economy Plus product which targets so-called "Affluent Couples" – which represent one of the five segments specific for Delta Airlines targeting a specific segment being a branded fare or a pack of ancillary features offered by Delta. In this case, personalization is knowing what the segment wants, what it is attractive to them and using its fares content, channel and price, it can merchandise it successfully. According to Accelya (2018), airlines need to start studying the ancillary behavior of passengers to create new ancillary strategies for different segments. Similarly to branded fares, ancillary-based segmentation is based on passenger purchase behavior as many customers would prefer a wide range of ancillaries, so new segments can appear. Put simply, the more ancillary options, the more granular the segmentation needs to be. For some airlines, though, personalization in regards to the segmentation can be solved by unbundling fares and let customers choose at any time the options they want.
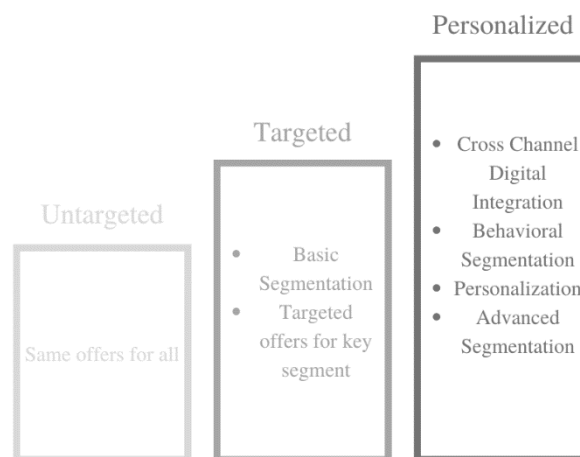

Figure 4. Airline Personalization Stages
Source: Diggin Travel (2018), author's concept

4. Conclusion

As airlines keep on targeting more sales, proper segmentation allows airlines to target each segment with tailored-made marketing. Besides this, airlines are keen on the personalization strategy which brings in more revenue and loyal passengers by creating an individual experience, unique to every passenger. As clearly the focus is to become customer-centric, airlines need to identify passengers as unique or as part of a certain segment, addressable, differentiated by needs, needs and behavior. Given that data is available more than in any other industry, marketers can start segment passengers based on touchpoints engagement, meaning that airlines can retain passengers by looking at how they interact with the airline after the purchase – the number of times they interact with the airlines via apps, websites, social media, pointing out the level of loyalty. Marketers, in this way, can start creating marketing campaigns based on the behaviors, derived from the study of touchpoints interactions. Touchpoints can help marketers understand the different behaviors and segment passengers as such as well as predict customers' needs as different points in the lifecycle. Also, marketers can segment based on the purchase patterns, gaining an overall understanding of when, how, what the passengers bought in the past and predict their behavior in the future and what motivated each group.

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