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**Beyond customer perception of price
discrimination: A consumer behavior analysis
and its implications on aviation revenue
management**

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Declaration of Authenticity

I, Katharina Kusch, hereby declare that the Master's Thesis "Beyond customer perception of price discrimination: A consumer behavior analysis and its implications on aviation revenue management" presented herein is my own work, or fully and specifically acknowledged wherever adapted from other sources.

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Prague, December 14th, 2016

Katharina Kusch

Title of the master's thesis:

Beyond customer perception of price discrimination: A consumer behavior analysis and its implications on aviation revenue management

Abstract:

Though price is undoubtedly an important factor in a consumers' decision-making process, price might not be the only selling point anymore. Consumers are getting more strategic in their buying behavior and consider more than just the price when making a purchase. It is theorized that the problem airlines are facing is the lack of the consumers' knowledge. Their use of online travel agencies does not only potentially lead them to a strategic behavior. There is the potential of a steering away from the awareness of unique qualifiers for airlines, which can in turn increase switching behavior. Therefore, the effect of the Internet through OTAs and media, political events and consumers' knowledge on consumer decision-making and behavior in the airline industry are analyzed. An empirical study conducted with 154 participants from 31 different countries worldwide. The research was conducted upon six different research questions, which aim to identify consumers' strategic behavior and influence on price discrimination also considering the OTAs role in that. Furthermore, it was the general intention to understand the political influence on consumer decision-making and price sensitivity in the light of media and OTA influences. The survey found significant proof for all six research questions. Therefore, further research should be conducted to generalize the findings

Key words:

Airline revenue management, price discrimination, airline industry, consumer behavior, strategic consumer

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Table of Contents

Introduction	01
1. An Aviation Industry Overview	05
1.1 The Business vs. the Leisure Market	06
2. Implications of Price Discrimination in the Airline Industry	08
2.1 Price Discrimination Explained through Monopolies	08
2.2 The Three Degrees of Price Discrimination	12
2.3 Price Discrimination in the Competitive Market	16
2.4 Price Discrimination in the Airline Industry	19
2.5 Consumer Perception of Price Discrimination	24
3. Beyond Price Discrimination	27
3.1 Consumer Behavior	27
3.2 Revenue Management	31
3.2.1 Myopic Consumer Behavior	34
3.2.2 Strategic Consumer Behavior and their Effect on the Industry	35
3.3 The Innovation Internet	37
3.3.1 The Internet and its Effect on Today's Society	39
3.3.2 The Internet and the Airlines	41
4. Empirical Study: Strategic Consumers and the Lack of Knowledge	52
4.1 Research Questions and Sampling	53
4.2 Data Collection Method	53
4.3 Questionnaire Design	54
4.4 Data Analysis	54
4.5 Limitation of the Study and Suggestions for Improvement	62
Conclusion	63
References	67
List of Figures	77
Appendix A Birthdays and telephone numbers survey	78
Appendix B Price Discrimination	92
Appendix C Beyond Price Discrimination	93
Appendix D Airline Industry Consumer Experience	94

Introduction

“The old joke in the airline business is travelers choose their flight based on three factors — price, price and price. But maybe that’s not as true as some people thought.” (Sumers, 2016 p.1).

The last time you were on a plane, did you clap when the plane touched down the runway? Did the people around you clap?

Different factors influence this supposedly very easy to answer question. Ultimately, leading to the resulting answer of ‘it depends’. According to Flight Attendant Karen Muler (Van Buren, 2016), clapping might depend on where people are traveling to, a big city or a tropical island. Mulder observes that flying into big city airports like JFK in New York City, USA people do not tend to clap because they are on a business trip or on their way home. Contrary when going to Las Vegas or Hawaii, leisure is mostly the reason for travel and here people tend to clap more often (Van Buren, 2016). Cultural differences might also play a role. Scandinavians, more reserved in their nature tend not to clap as often as people from Puerto Rico who are more openly expressive.

Psychologist Tatyana Volkova states that, as pilots are unable to hear the clapping in the cabin, mostly people tend to clap for themselves (Pemberton, 2015). Mulder confirms this theory and says that she experiences people also clapping when the weather was bad and the landing was not smooth (Van Buren, 2016). The behavior of clapping by passengers is seen as a sign of relieve and excitement. Volkova states that it occurs mostly on charter flights, which are primarily used by scare flyers (Pemberton). Those who fly on a regular basis lose the excitement for it. For them, flying is just normal, like riding a bus or driving by car clapping for that is seen as ridiculous (Van Buren). Referring back to the comparison between Scandinavians and Puerto Ricans, it could further more be said that the quality of life (GDP, vacation days etc) is among the highest world wide in Scandinavia (Numbeo, 2016). This leads to the conclusion that Scandinavians do possess more means to travel and could therefore be more accustomed to flying than people from Puerto Rico on average.

More interesting than just thinking about whether or not one is clapping right now is if the behavior has changed over time.

Just taking this very simple example of ‘applauding on a plane’ provides a glimpse of the change consumer behavior observable in the aviation industry. The aviation industry once glamorized and seen as exclusive to the most privileged, is now viewed, by an increasing number of consumers, as normal, as a commodity. The increasing competition among carriers and the increasing consumers’ willingness to fly led to a price driven and capital-intensive market dynamic. With low profit margins,

high fixed cost and a low switching cost for customers, the airline industry became a fierce competitive field not only about who can retain customers but who can drive down operating cost as low as possible.

With the entrance of Low Cost Carriers (LCC) into the market, the market seemed to solely compete on price. Which carrier is able to offer the lowest price is receiving the most customers, at least in the leisure segment. While driving down costs and maintaining it at a low level seems to be a major goal for every airline, price discrimination of airline tickets for customer is treated like the key to success. The solution sounds intuitive, offering the lowest price among competition but management to ask for the highest price the customer is willing to pay. However, as social concerns and political unrest are also increasing in the Western world, this previously over-consuming low-cost driven society might not be only persuaded by price anymore.

Through the global interconnectedness, especially online, consumers do now have the chance to be more informed about and influenced by global issues. Understanding the effect of low cost production in the textile industry may make customers more aware about what they are buying then simple consuming at the lowest cost. A stretch is observable between wanting to buy the lowest price and gaining an increasing consciousness in what is bought. Trends such as being vocal about buying local, being vegan, wearing faux fur or driving a Prius is determining today's social behavior. CEO of Routehappy phrases it saying that the airline "industry has a false belief that the only thing that matters is price [...]. If that were true, we would all be flying Spirit" (Sumers, 2016 p.1).

Though price is undoubtedly an important factor in a consumers' decision-making process, price might not be the only selling point anymore. Consumers are getting more strategic in their buying behavior and consider more than just the price when making a purchase. It is theorized that the problem airlines are facing is the lack of the consumers' knowledge. Their use of online travel agencies does not only potentially lead them to a strategic behavior. There is the potential of a steering away from the awareness of unique qualifiers for airlines, which can in turn increase switching behavior. Therefore, the effect of the Internet through OTAs and media, political events and consumers' knowledge on consumer decision-making and behavior in the airline industry are analyzed

Hence the aim of this thesis is to assess consumer behavior in the airline industry from a perspective beyond the effects of price discrimination. First the consequences of dynamic pricing will be assessed before looking at the role of the Internet. Here, OTAs, social media and offline social influences as well as consumer satisfaction and airline equilibrium networks and their effects on consumer loyalty are analyzed. Final implications on aviation revenue management will be drawn

In the following, the implementation of the problem statement to the six different investigated research questions is described. For each research question, the associated null and alternative hypotheses is stated. This builds the overall concept of the research, that is conducted first through secondary literature research and then through the specific questions of the primary research questionnaire. These questionnaire questions build the basis for the statistical analysis outlined below, which is developed to understand consumer decision making in regards to airline ticket purchases.

The research questions presented below are connected to the tested hypotheses as well as to the associated tests. Additionally, the reason behind the chosen research questions is explained.

1. Research Question: *Are consumers in the airline industry behaving strategically?*

This research question aims to understand the differences between consumer decision-making and research behavior. To understand this difference in behavior will allow understanding further steps customer take.

2. Research Question: *What is the relationship between consumer perception on price discrimination and consumers' strategic behavior?*

As this topic is gaining increasing attention, though has not been analyzed by many scholars a connection will be analyzed between strategic behavior and price perception.

3. Research Question: *What is the relationship between countries' political stability and consumers' purchasing behavior?*

The political changes in the world in the last two years have affected many people. As the airline industry is an industry sensitive to safety, recent political event did not give people around the world a sense of safety. Therefore, it is interesting to assess how this affects the airline industry through consumers' purchasing behavior.

4. Research Question: *What is the relationship between media press and consumer behavior?*

Connecting to research question no. 2, the effect that the media has on political events is beyond the scope of this thesis. However, the effect that media outlets have on consumer behavior is of interest. Comparing the outcome to marketing effort by airline can give inside on their effectiveness.

5. Research Question: *What is the relationship between online travel agencies (OTAs) and consumer purchasing behavior?*

This research question is of particular interest. Many scholars have previously assessed the influence of the Internet on consumer behavior. Considering consumers' price perception effect on the airline industry, this perception could possibly be influence by OTAs.

6. Research Question: *Are consumers aware of product differences between airlines?*

Connecting all the research questions leads to the question of how aware consumer are on product variations offered by different airlines. Though price is always an important factor when considering a purchase, the airlines might not set each other far enough apart to prevent frequent consumer switching behavior.

1. An Aviation Industry Overview

In a world in which change seems to be the only constant, what is the key to success? It seems that the key to success is to embrace the changing environment and use it as an opportunity. William Pollard (2011, p.1) once said: "Without change there is no innovation, creativity, or incentive for improvement. Those who initiate change will have a better opportunity to manage the change that is inevitable."

The ability to imagine something better seems to be the driving force through time. Around 4000 BCE the wheel was invented (Potts, 2012). It laid the basis for many innovations to come. 1000 years later, in 3000 BCE, the Egyptians invented the ship (Ward, 2001). From the very beginning of mankind, to always strive for something more, something faster, higher, further seems to be the force behind the motivation to innovate. When Karl Friedrich Benz invented the car in 1885, this was revolutionary (Stein, 1967). Nevertheless, already in ancient Greece did people dream of flying. The famous Greek mythology of Daedalus and Icarus who used wax and bird feathers to create wings may as well be the first proper attempt to fly by mankind (Ovid, 1991). Only in 1903 (Smithsonian National and Air Museum, 2016) were the Wright brothers able to successfully invent the first airplane. Over the last 113 years, the effect the airplane has on modern society is astounding as it literally overcomes barriers and brings the world closer.

This introduction sounds very inspiring and though it is true, it does not paint the whole picture. During the World War II, airplane technology was majorly improved leading to the first commercial route shortly after the war ended (Investopedia, 2016b). Since then, the industry has come a long way. Today's world is not imaginable without airline traffic. It facilitates the connection between families who live further apart and allows for international business. Over time, the aviation industry has become intensely competitive (Sumers, 2016). To understand the different stages, the airline industry has gone through Bieger and Agosti (2005) developed a four-stage model. In the first stage, called the technical stage, which came to an end at the beginning of WWII, traveling was for adventurers. The focus of business was on supply leading to next to no profit for airlines (Bieger & Agosti). The establishment of standards and international agreements marked the second stage, called the political stage (Bieger & Agosti). With the advancement of jet planes and other technical advancements, airlines gained growths, marking the third stage (Bieger & Agosti). With more focus on costs and quantity, price schemes were developed and customer entered the market (Bieger & Agosti). The final stage started in the 1990s. It marks the era of alliances and network (Bieger & Agosti) but also the rise of low-cost airline (LLC) competition and revaluation of safety standards. Here, the most remembered tragedy was 9/11. What followed was a complete of airport security. Furthermore, already established airlines started forming alliances in order to widen their network reach. The three alliances are Star Alliance, Oneworld and SkyTeam (Stellin, 2011). This completely altered the airline market. Furthermore,

through the open sky agreement in the 70s, LCCs like Ryanair or Spirit managed to establish them in the market. Their entrance led to financial distress for several established airlines like Austrian Airlines.

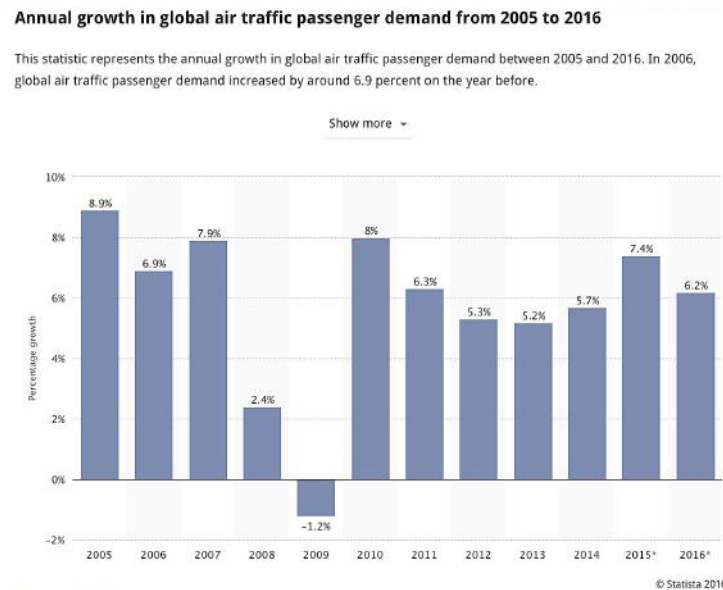


Figure 1: “Global Annual Growth in air traffic passengers” (Source: Statistica, 2016a)

With an outlier in 2008 and 2009, which can be explained by the financial crisis of 2008/09, the number in air traffic passengers is continually increasing by more than 5% compared to the previous year (Statistica, 2016a). This continuous increase in passengers is also visible in the network the airlines have established, several new destinations are added constantly as the figure below show.

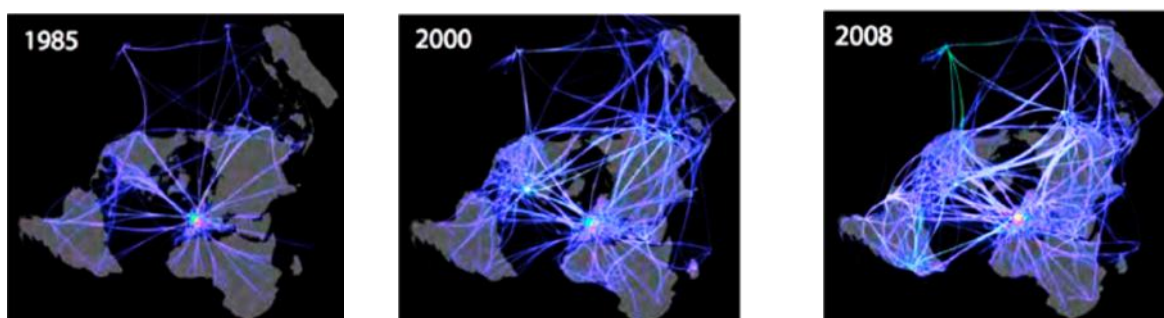


Figure 2: “Network Expansion” (Source: West, 2011)

1.1 The Business vs. the Leisure Market

The industry can be divided into four major parts, namely international traffic, national traffic, regional traffic and cargo. Whereas the first three focus on passenger transportation, cargo is the process of shipping goods. The passenger segment is commonly divided between passengers travelling for leisure vs. those that travel for business purposes. To be able to understand a consumer’s behavior it is often helpful

to know the purpose of the trip, therefore the distinction is made. However, one has to start by defining who the customer is. As Shaw (2016) points out, not every customer an airline has is also its consumer. If an individual books a flight directly from an airline's website and then uses that ticket to fly, the customer is also the consumer. However, as soon as the individual uses a 3rd party to make the booking, that 3rd party agent becomes an airline's customer whereas the individual who purchased the ticket is the consumer.

A leisure passenger is usually more flexible with booking dates than business consumers are (Shaw, 2016). They might not be the most frequent travellers and families with children (Shaw). As those might not travel alone, the price factor is most of the time the most important decision factor (Shaw). There is also the possibility that leisure consumers are facing a tradeoff between an expensive or an expensive hotel (Shaw). This tradeoff is often in the favor of the hotels, supporting the fact that airlines do not gain most of their revenue from leisure travelers (Shaw). Airlines can be more flexible with their schedule for leisure consumers as they often do not show price sensitivity though expect punctuality (Shaw).

Business customers are more complex. They can be divided into four different types (Shaw, 2016). The different types are related to who is the decision maker. The first option the author mentions is the traveller himself, followed by the option of the secretary who can be classified as an intermediary. The third type is again the travel agency and the final type is a person internal to the booking firm, whose job it is to coordinate the other employees' travel itineraries (Shaw). The first type will consider a variety of product attributes according to his or her personal preferences (Shaw). As the author points out, the other three types are influenced by the contracts the airline has with the respective company and the outline of their incentives. These incentives can be of company nature or directly targeting to them. Knowing that they are under time pressure and have the experience and ability to switch between airlines, some airlines have launched secretary clubs. It is an exchange of entertainment offerings and travel advantages for their loyalty (Shaw). Providing an intuitive, simple and fast booking process while offering constant customer service has to be the norm to not lose business travellers (Shaw). The balance between rewarding and incentivizing is a challenge in the business market (Shaw). The biggest challenge lies in distinguishing between consumer and customer and then reaching the customer. Paying incentives is also an enormous cost factor, since it can potentially involve paying the company, travel agent and the person who is booking the flight e.g. secretary (Shaw).

The airline industry as an industry with high competition and low margins is constantly struggling bankruptcy. Those that survive and stay in the market have successful revenue management. The need to maximize revenue has led the industry to develop certain strategies.

2. Implications of Price Discrimination in the Airline Industry

The following chapter focuses on the microeconomic implication on marketing theory in regards to the aviation industry. Starting with the theoretical concepts of price discrimination and followed by its application to the airline industry, the importance of price on the industry is explained. This chapter closes with an analysis of consumer perception on price discrimination.

Price discrimination is defined as “charging different prices to different consumers, where the price difference cannot be fully explained by differences in cost” (Stavins, 1996, p. 3). Price discrimination has always been a sign of the seller’s market power as a monopoly. Many scholars and textbooks show that the lack of competition results in monopolies. These are then able to set prices to their maximum benefit. Increasing competition is often seen as the “solution” to the monopoly “problem”. However, the question arises, why is price discrimination possible in the aviation industry? The industry is known to be extremely price driven and does not show a shortage of competition. Therefore, the following section explains price discrimination in the airline industry. Firstly, price discrimination will be explained using the example of monopolies, before going into detail of the three degrees of price discrimination. Finally, its implication on the aviation industry is discussed.

2.1. Price Discrimination explained through monopolies

Before going into detail regarding the meaning and consequences of price discrimination, the three conditions for it to occur need to be assessed. As outlined by Varian (1989), the firm must possess “some market power” (p.599). The second condition is for it to possess the “ability to sort customers” (Varian, 1989, p.599). And finally, the third condition says, it has to be able to “prevent resale” (Varian, 1989, p.599.).

Price Discrimination can be defined as “selling [identical units of] output at different prices to different buyers” (Nicholson et al, 2010, p.389). The mere difference in cost does not fully justify that change in price. In order to fully understand the significance of price discrimination as well as its conditions, price-setting differences between perfectly competitive markets and monopolies have to be explained.

In a perfectly competitive industry, price P^* would be charged given the output of Q^* . The area of EFP^* shows the correlating consumer surplus. Consumer surplus is defined as the “extra value individuals receive from consuming a good over what they pay for it.” (Nicholson et al., 2010, p.111). Consumer surplus can be understood as the amount the customer is willing to pay minus the actual price paid. The consumer surplus under a perfectly competitive market situation is maximized. The reason consumer surplus is maximized is the absence of the deadweight loss, meaning that

every value is maximized and accounted for given the marginal costs and revenue as well as the demand. This however is not the case in a monopolistic market.

Given the behavior of a monopolist, a shift from output level Q^* to Q^{**} takes place. This shift indicated, that the price charged is higher than the marginal cost. As shown in the graph below, this shift results in customer willingness to pay price P^{**} . At P^{**} , not all consumers are served. These unserved customers, though having a demand for the good, are not willing to buy it at price P^{**} .

Due to this inefficiency, total received value by the customer is reduced, as shown by the area BEQ^*Q^{**} . However, not the entire value is lost. Part of it can be reallocated to the production of other goods, which might in turn provide value to the customers again. This is shown by the area AEQ^*Q^{**} in the graph above. The area AEQ^*Q^{**} is not the only area reallocation. Prior to the increase in price from P^* to P^{**} , consumer surplus was shown by the area FEP^* . Now, consumer surplus is reduced to the area FBP^{**} . The remaining part, namely BAP^*P^{**} is now transferred from the customer welfare to the company's profit, showing part of the additional profit a monopolist is able to make.

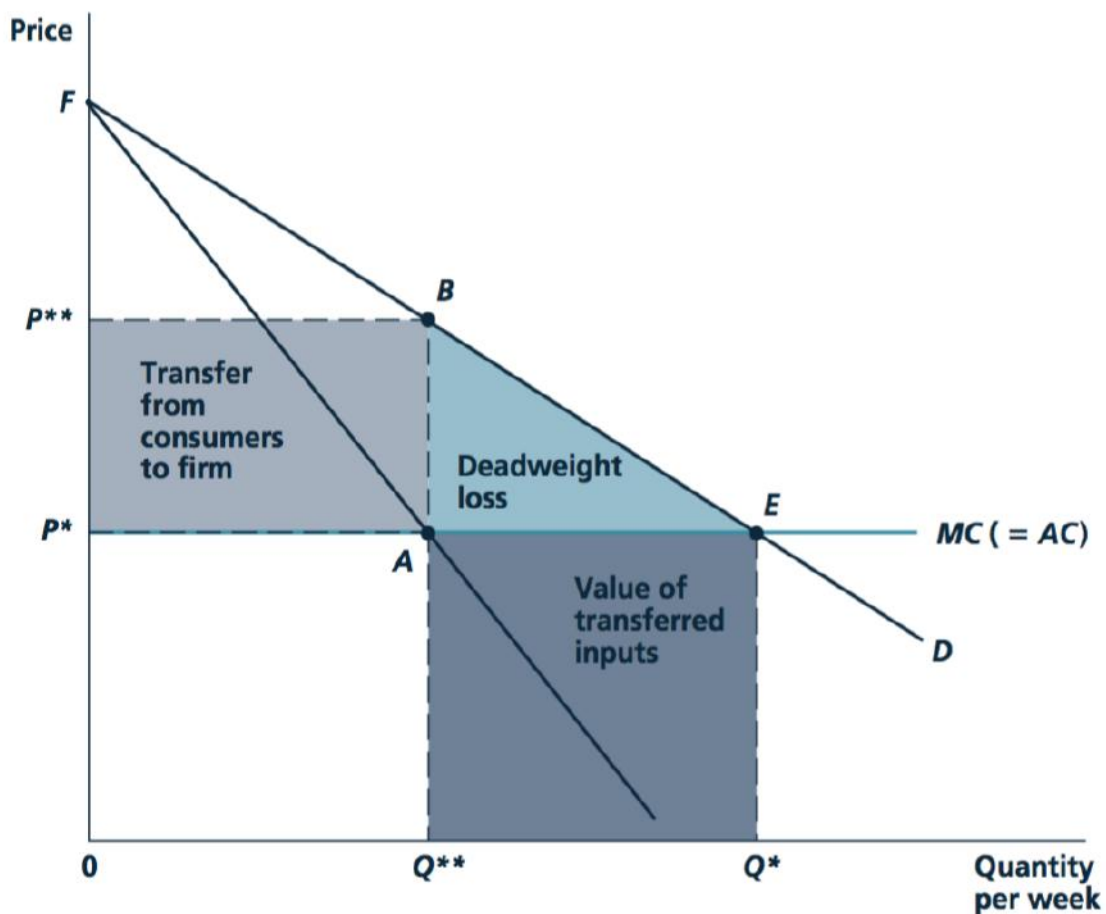


Figure 3: "Allocational and Distributional Effects of Monopoly" (Nicholson et al, 2010, p.383)

However, the last part, namely the value of the triangle BEA is not reallocated. It is neither transferred to the consumer nor to the producer, making it the deadweight loss. The deadweight loss therefore signals best the “allocation harm caused by a monopoly” (Nicholson et al., 2010, p.384) as the welfare of the customer is decreased through the price setting of a monopoly.

As outlined above, there are two main areas, which lead to the conclusion that a monopolist does not always maximize its own profits by not serving all customers within their scope. The deadweight loss (area BEA in the graph below) is the first area, which shows the inefficiency and the remaining consumer surplus, area FBP** shows the second one. The deadweight loss represents the area where consumers are willing to buy the product, however on a lower price than originally set by the monopolist. The consumer surplus, on the other hand, marks the area where consumers are actually willing to pay a higher price.

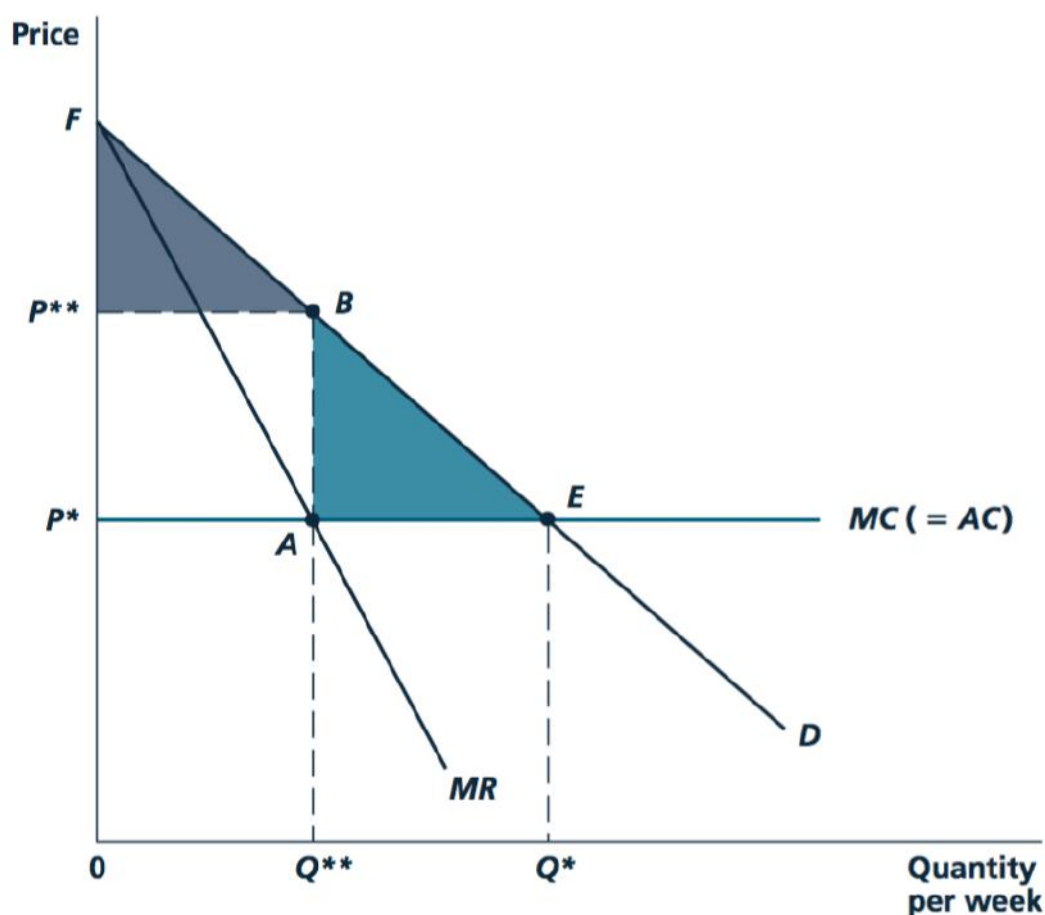


Figure 4: Monopoly Price Discrimination (Nicholson et al, 2010, p.389)

This inefficiency occurs due to the assumption that monopolists are trying to sell all their outputs at one single price at one time only. That suggests that by allowing for a price variation for different customers at a different point in time, the monopolist will no longer forgo the mutually beneficial transactions (BEA) and furthermore increase

profits by further reducing the consumer surplus (FBP^{**}). This brings back to the assumptions mentioned in the beginning.

The incentive to discriminate in price arises, when a price is charged, which exceeds the marginal costs of production (Varian, 1989). This is naturally observable in monopolies or oligopolies due to their market power (first condition). A monopolist's main intention is to secure its monopolistic power and maximize profits. Even though there are still customers who want this output, they are not willing to buy it at price P^{**}. Lowering the price to all customers is not only inefficient but may also be unprofitable. However, if the price is lowered or in fact increased only for the marginal consumer, the returns may be profitable (Varian, 1989). This leads to the second condition, namely the ability to sort the consumers.

By being able to observe the potential of the consumer surplus and the deadweight loss is the first step. Next, a way has to be found to categorize the consumers in groups to be able to adjust the price according to each groups demand and maximum willingness to pay (Varian, 1989). This is the greatest challenge and can mostly be done in two ways, namely by building exogenous categories or endogenous ones (Varian, 1989). As Varian (1989) explains, sorting customers by exogenous characteristics e.g. age or gender is easier accomplished than doing so by endogenous ones. An endogenous classification is more complex as a more sophisticated analysis has to be done, in order to sort by e.g. "time of purchase" (Varian, 1989, p.599). Contrary to the exogenous category, endogenous groups have to be created so that the consumer is able to "self-select in the appropriate category" (Varian, 1989, p.599).

Finally, as mentioned earlier, the impossibility to resell has to be ensured (Nicholson et al, 2010). If this condition were not met, the possibility to sell at different prices to different customers would not be possible. Ultimately, the reselling condition ensures that arbitrage in price discrimination is prevented. Otherwise, the customers would have the chance to buy at a discounted price and resell at a higher one to those who would potentially paid even more (Varian, 1989). As Carlton and Perloff (1981) discuss, there are several ways to prevent reselling. The best-case scenario is, when the product itself is already by nature not resalable or difficult to resell e.g. services or electric power.

Furthermore, the variation of external factors might also allow for price discrimination. In the presence of taxes or tariffs might create an "external" barrier to resell and thereby being able to price discriminate though charging different prices in different countries. This might also be achieved, as Varian (1989) mentions, by transportation costs. The author gives the example of the price difference of books in different countries. Here, Varian (1989) says, the book publishers "rely on transportation costs or tariffs " to delimitate resell (p.599). Moreover, there is the possibility for the legal system to restrict reselling arbitrage. Companies like e.g. Apple offer discounts for certain categories e.g. education or business (Apple, 2016). The members of these

groups do not only have to provide personal information in order to become eligible, they are also contractual regulations, which hinder the reselling. At the same time, as e.g. in the case of Apple products, this is only a first step towards preventing reselling. Customers might still be able to find ways to resell regardless of those contracts. Though it is less likely and possible to do so on a bigger scale. On the same note, Carlton and Perloff (1981) point out that product modification can also be a useful tool to prevent reselling. For example, offering students a less advanced version of a software program might make it not suiting for the use in the business world. Therefore, the reselling from e.g. discounted educational programs would be prevented.

Considering the three price discrimination conditions explained above, the next step for the producer is to analyze the market and competition as well as the potential customers. This analysis is crucial in order to be able to decide on the appropriate type, also known as degree of price discrimination. Each degree has several advantages and disadvantages. These become more or less prominent given the different market and customer they are applied to. Furthermore, not every degree is suitable for every market or customer group. The applicability of the three degrees as well as their pros and cons are assessed in the following.

2.2 The Three Degrees of Price Discrimination

Price discrimination is categorized in first-, second- and third degree price discrimination. *First-degree price discrimination* is defined, as being able to charge the maximum price per output unit, the individual customer is willing to pay (Odlyzko, 2003). This means that the price of each individual output unit varies and is personalized to the maximum amount a customer is willing to pay. According to a diversity of scholars including Odlyzko (2003), first-degree price discrimination is the type of price discrimination referred to as the “unattainable ideal” (p.4).

On the one hand, as Weyl (2011) points out, the benefit of first-degree price discrimination is that no quantity discount needs to be granted. On the other hand, as first-degree price discrimination perfectly adjusts the price to the individual customer at the maximum amount the buyer is willing to pay for the unit of output (Nicholson et al, 2010), it thereby absolutely maximizes the producer’s payoff. This means consumer surplus is completely transferred to the producer’s revenue, as illustrated below. Producers receive the entire producer surplus and additionally also the entire consumer surplus, whereas the consumers do not obtain any surplus at all. It seems therefore to be more beneficial for the producers than the consumers.

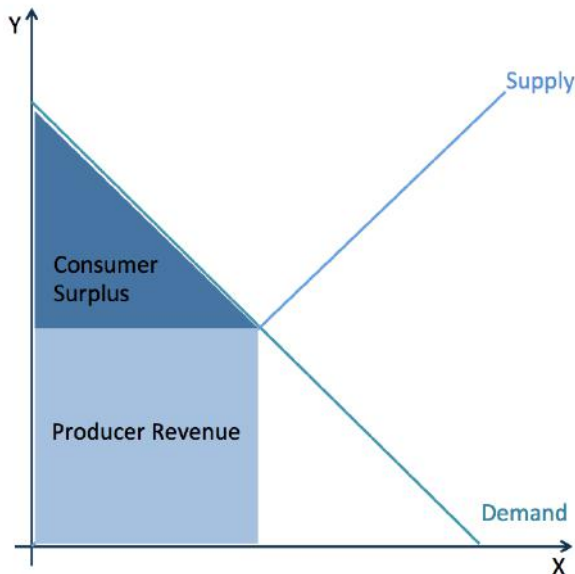


Figure 5: Producer revenue in the perfectly competitive market (Author, 2016c)

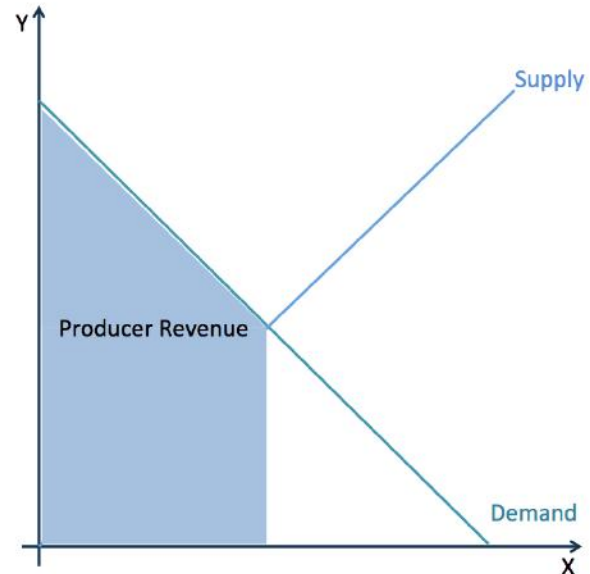


Figure 6: Producer revenue under perfect price discrimination (Author, 2016d)

First-degree price discrimination is therefore often referred to as perfect price discrimination. As shown by Nicholson et al (2010), in order for a firm to price discriminate, it must have the market power to raise prices above marginal cost. An example for first-degree price discrimination would be the selling of a car.

In the case of *second-degree price discrimination*, the price differs not per individual consumer but regarding the amount of units bought (Varian, 1989). Different amounts of units bought therefore vary in price, also called nonlinear pricing (Nicholson et al, 2010). Nonlinear pricing therefore takes place when the monopolist is unable to separate the market of the individual customers. This pricing technique is very popular and seen for various types of products, for example in restaurants or also the airline industry. Considering the example of prices of the Samsonite Neopulse luggage. The volume price in liters is lower for the bigger size luggage than for the equivalent cabin size one. Whereas the price per liter of the cabin size luggage is $\frac{169\text{€}}{38\text{l}} = 4,45 \text{ €}/\text{l}$ (Samsonite, 2016a) whereas the price per liter for the largest piece of luggage from this collection is $\frac{215\text{€}}{121\text{l}} = 1,78 \text{ €}/\text{l}$ (Samsonite, 2016b). Here, the travellers of shorter or travellers, which require less baggage, are discriminated. In this specific case and in light of the air traveling, it furthermore more increases the risk of over packing and possibly encountering a fee for excess baggage.

The most common forms of nonlinear pricing or second-degree discrimination are two-part tariffs and quantity discounts (Nicholson et al., 2010). Under quantity discount discrimination and as seen in the luggage example states above, the consumer's marginal price decreases, leading to a higher consumption on the consumer's side thereby a decrease in the deadweight loss and hence an increase in

the consumer surplus (Nicholson et al.). Ideally, the firm then takes the entire consumer surplus by setting an admission or entrance fee equal to the consumer surplus. Samsonite does not need to charge an admission fee as it offers suitcases at different sizes where the biggest one is set at a lower per volume cost. If the market were composed of identical consumers, Samsonite would only need to offer one single suitcase size with the ideal price and quantity ratio. However, nonlinear pricing tends to be most successfully implemented in markets in which consumers face a demand for more than just one unit of goods (Nicholson et al.). Here, the monopolist is able to maximize profits by understanding a consumer's valuation of increasing units of goods. Increasing the size of the luggage might bring some consumers more value than others. Loyalty programs offered by airlines are another common example of quantity discounts. A threshold of times required to fly within a certain time frame is set by the airline. As soon as a frequent flyer has exceeded this threshold, certain rewards are offered e.g. in the form of free travel (Nicholson et al.).

Two-part tariffs or two-part pricing are commonly defined as keeping the price per unit constant while demanding an entrance fee (Nicholson et al.). The most popular example as outlined by Nicholson et al is the taking of rides at e.g Disneyland. The single individual's demand (labeled *d*) and marginal revenue (labeled *mr*) are shown in the figure below. For the simplicity of explaining the model, it is assumed that this individual consumer is representative of the overall market.

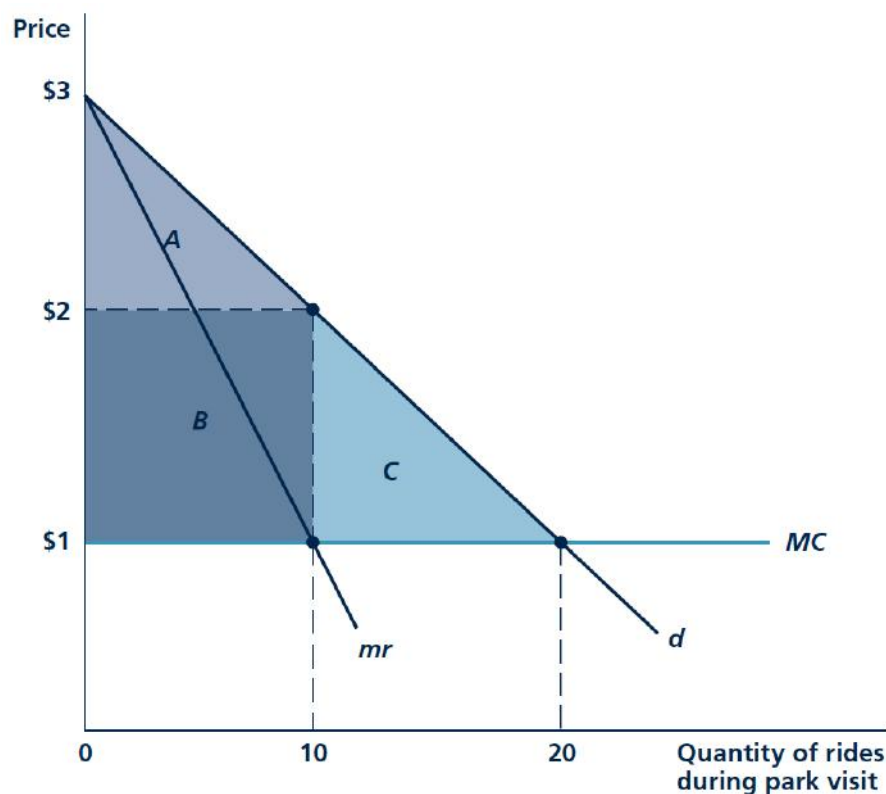


Figure 7: "Two-Part Tariffs at Disneyland" (Nicholson et al, 2010, p.394)

The consumer's demand for additional rides is downward sloping. This means that an additional ride will bring less value if already the consumer has already been on several rides. Given a marginal cost of \$1, the best price Disneyland can charge is \$2 per ride leading the customer to participate in 10 rides and providing Disneyland with a profit of \$20 (10 rides x \$2 per ride). In the figure, Disneyland's profit for this single consumer is shown by the dark blue quadrant labeled "B", leading to the overall profit of "B" times the number of visitors Disneyland had. This is the example of a linear pricing strategy without the use of an entrance fee. Looking for profit maximization under two-part tariff, a price of \$1 per ride would be chosen. This leads to the consumer choosing to take 20 rides. In this case, the consumer surplus is \$40 [$0,5 \cdot (\$3 - \$1) \cdot 20$ rides] as represented by the areas ABC in the figure above. To obtain the entire consumer surplus, the entrance fee has to be set equal to the consumer's surplus. By maximizing the consumer surplus and then setting the admission fee equal to the surplus, Disneyland is able to maximize its overall profit. Though this example technically provides the same outcome perfect price discrimination would produce as well, it explains the idea behind two-part pricing. In reality not all consumers are the same in their behavior requiring the firm to manage the entrance price more carefully. A focus would have to be set on not excluding those customers with a lower demand while setting the per-unit price between marginal cost and the potential price charged without an entrance fee.

Third-degree price discrimination is defined as demanding different prices from different groups of customers with the particularity of always keeping the asked price per unit for each group constant (Varian, 1989). The significant difference between second and third degree discrimination lies in the inability or ability to classify customers into groups and keeping the groups separated. Market-separating strategies are therefore identified as third-degree price discrimination tactics (Nicholson et al., 2010). Besides being able to group customers, the second prerequisite of third-degree price discrimination is that consumers are unable to respond to price changes by switching markets (Nicholson et al.). As Nicholson point out, to keep groups separated and thereby successfully discriminate the price, the time of sale or geographic differences should be exploited. Otherwise, strategic consumer might be able purchase the good in a market with a lower price before selling it at a higher in a different market at a later time. Following the rule of $MC=MR$ and keeping marginal cost constant over the entire output level, profit maximization requires different quantities in the two markets. As Weyl (2011) and the figure below show, this leads to the market with the more elastic demand (market 2) being charged with a lower price compared to the market with a less elastic demand (market 1). The more elastic the demand, the more price sensitive consumers are.

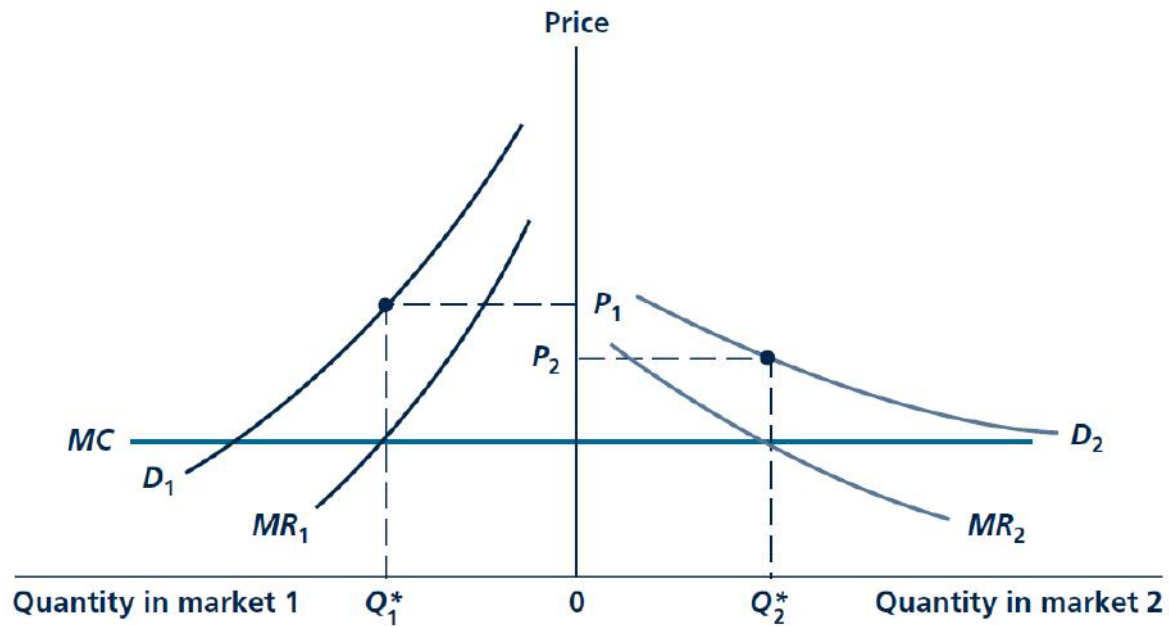


Figure 8: “3rd Degree Price Discrimination through market separation” (Nicholson et al, 2010, p.392)

Varian (1989) further mentions that this degree is the “most common form” (p. 617) and can often be seen in offering educational discounts or if prices are adapted on a daily basis.

After having established a basic understanding of price discrimination several questions arise. As explained above, price discrimination aims at fully obtaining consumers welfare. How does an airline price discriminate, even though it is not a monopoly? Is price discrimination doing more harm than it does well for the consumer? Finally, how do consumers perceive price discrimination and can their behavior influence it?

2.3. Price Discrimination in the competitive market

“In a competitive market, price equal marginal cost. Wherever there is price discrimination, price deviates from marginal cost. Therefore, if there is price discrimination, the market must not be competitive and there must be market power.” (Levine, 2002, p. 3). Considering the statement above the logical conclusion is that as an industry moves towards a more concentrated market compared to a more competitive one, price discrimination should increase. So how can price discrimination even occur in a competitive market like the airline industry?

Numerous scholars have studied the relationship between price discrimination, competition and monopoly power. Their findings contradict this intuition. Authors like Borenstein (1985) and Gale (1993) show that an increase in price discrimination can occur, as the market gets more competitive. Concrete, Gale (1993) shows that a monopoly has less price discrimination than a duopoly studied in his theoretical

model. The question arises as to how it is possible to price discriminate without market power?

Supporting the study by Eden (1990), which showed that firms in a competitive market charged prices, which were discriminatory but differed in the combination of prices among the individual firm, Carleton (1991) discusses the influence of transaction cost. He rationalizes that given transaction costs and a market experiencing stochastic deviations in consumer's demand, providing only one sole price may lead to an inferior solution. The challenge lies in finding a single unique price, which allows offsetting total cost which occur over a period of time. Carleton argues that distinguishing between demand characteristics of existing and targeting consumers with a demand suiting to recover total cost while preventing new consumers with a different demand to enter is more efficient. Dana (1998) utilized the results to apply them to the airline industry. He found out that price dispersion increased as the airline industry increased in its competitive nature. Focusing on uncertain demand, Dana continues the study of price discrimination regarding of airline capacity management (1998) to yield management (1999) under uncertain demand. His studies aimed at proofing that market power and anticompetitive behavior cannot always be the result of price discriminatory behavior. In his model, he found several efficient outcome scenarios where using yield management for seat allocation for different customers at varying prices and times. Dana indicates that price discrimination can actually be beneficial rather than harmful in a complete market.

Levine (2002) shows that price discrimination can occur without possessing market power. Though previous scholars often used specific real- world characteristics such as demand uncertainty to explain the existence of price discrimination without market power, Levine (2002) points out that the more universal solution lies in the need to recover common costs. He sees price discrimination as a tool to distribute "the burden of common costs among customers in the least output-restricting way" (p. 8). As common costs occur for all participants in a competitive market, covering those is crucial in order to stay competitive and in the market. The author defines common costs e.g. advertising costs, facility rent or operational costs as costs which arise in the production of creating "more than one unit of output, whether of the same product or not" (p.8). This way, he sees the existence of common costs so prevalent that price discrimination cannot be seen as convincing evidence of monopolistic power in the market. Though marginal cost pricing is seen as an efficient pricing strategy in the competitive market, it does not allow full recovery of total cost in a cost-declining industry as.

The issue pointed out by Levine (2002) is that in almost all competitive markets in the real world with efficient production, cost of one unit are at least partially inseparable from those of another unit, sometimes even beyond one product. Assigning common costs to single units of a single product is complex. The production of one unit is depended on the input of other units. However, marginal common costs will not

decrease when terminating the production of one common unit. That is because selling additional units decreases average total cost of a product, however that does not decrease the average total cost of the firm's total output. Moreover, as each additional unit sold drives down the average total costs it cannot be the case for incremental common costs, as those cannot be allocated to a specific product.

To efficiently allocate shared common costs, competitive producers use price discrimination (Levine, 2002). They ask customers, who demand different products or product units, for different prices based on the demand slope of the respective consumer segment. The concept reminds of Ramsey pricing for natural monopolies but the difference is that here the market and not external regulators (e.g. government) imposes constraints. Though each unit within a group receives different prices, the overall group of units is always produced so that incremental revenue and incremental cost are equal. "Consumers in the same demand segment are charged the same price by competing producers" (Levine, 2002, p.13). Levine further continues that supply of additional units will continue until no extra unit can be produced without incurring a loss or reducing total output.. The price is compiled of all separable costs as well as a partial of common costs (Levine, 2002). The price of the common costs is then again defined by the unit customer's demand elasticity (Levine). Each unit's price is sensitive to demand and cost changes as well as to technological advancement. As changes occur, new market prices are adjusted for to ensure exhaustion of common inputs and thereby create efficient production. Those who do not adjust are inefficient or eventually exit the market. This indicates that firms are actually price takers. Their need to adjust to the market leads to an equilibrium in the market with sustainable prices is reached in a competitive market without monopoly power (Levine).

After a detailed explanation of the microeconomics behind price discrimination in a competitive industry, it still means that different consumers are charged different prices for the same product or service. So does price discrimination do more good than it does harm?

As mentioned above price discrimination does not lead to market power by itself. Levine (2002) explains that there are several different common cost recovery strategies all of which show that price discrimination are necessary to recover costs. Market power only occurs when very few firms manage to prevent market entry by competitors. Those firms are then able to decrease the output in the overall market, change the combination of products and services available and thereby decrease consumer welfare. As prices rise above the competitive price along with demand due to potential scarcity, new equilibrium is reached (Levine). At this equilibrium the output produced does maximize profit but does not satisfy all of the demand a competitive market would have satisfied. In this case, as welfare is decreased price discrimination does lead to an optimal outcome. However, this possible outcome is not solely referable back to price discrimination. As Levine points out, different structural analysis need to be done in order to detect this monopolistic behavior.

At the same time, as mentioned above, prices can be influenced by consumers demand. Culture, wealth, gender, technology might not only influence the price itself but also how a product or service is provided in different locations (Levine, 2002). It is not only the cost factor that determines the price but also the demand. As slight adjustments are made according to demand and then reflecting in the price, one could state the hypothesis that discrimination is not really the case, as different products or services are provided (Levine). The issue occurs in defining what are the same or different products or services, meaning when they are or are not perfect substitutes (Levine). Though economists define a product as the same when they are perfect substitutes, it lies with the individual consumer to assess if a product passes as a substitute. As mentioned above factors like culture, purpose of the product, or language can be a few of those influencing factors for a consumer. As long as these differences occur, no absolute definition of “product” can be given and price discrimination can take place (Levine). In order to successfully and efficiently price discriminate market segmentation has to be maintained.

In the airline industry, creating a language segment for example does this. Tickets are sold at a deeply discounted fare to price conscious consumers who are speaking a different language than their dominant or home market without disturbing their prices (Levine, 2002). The following section focuses on how price discrimination is applied to the airline industry.

2.4 Price Discrimination in the Airline Industry

The airline industry is often seen as an extreme case of price discrimination due to its nature of the business. The media and consumers have criticized the ethically questionable fact of consumers being charged different prices for the same product, namely a seat on an airplane for a certain flight (Economist, 2007). The fact that ticket fares fluctuate can be caused by either changes in cost or changes in demand. Airlines use price discrimination in two different ways (Stavins, 1996). First, they use second-degree price discrimination by offering tickets in form of packages. Each ticket is grouped in booking classes, which not only each have a different variety of fares sometimes even within one booking class, but also certain conditions attached to them (Stavins, 1996). As Stavins shows, by purchasing a ticket, the consumer also chooses a certain booking class based on their preferences (price, time, convenience). Secondly, a capacity restriction is set on the availability of the quantity of tickets in booking classes (mostly the cheaper ones). As an economy class ticket at business class fare does not feel different to an economy class ticket at a discounted economy fare, tickets have to be paired with restrictions to differentiate the ticket. A cheaper fares face more restrictions, which ensures a separation between price sensitive and price indifferent consumers. By doing so, they control that not all of the tickets for a given flight are sold immediately at the lowest fare

(Stavins). The following paragraphs aim at explaining the reasoning behind price discrimination in the airline industry.

The costs per seat on a given flight are virtually identical, disregarding the costs of the different service provided (Levine, 2002). Furthermore, the costs associated with establishing and running an efficient airline network such as flight control, stations and maintenance are indivisible on a per passenger per flight basis (Levine, 2002). Finally, as each customer requires an individual itinerary, the cost of providing them with a trip is combined and shared among all passengers, also those with a different trip. That allows them to bundle passengers of different destinations and offer frequent service at competitive costs (Levine, 2002). This is best explained in a theoretical example.

Assuming airline X is offering service to a variety of destinations frequently but with an almost inefficient seat load factor. The seat load factor shows capacity on a given flight, which gives indication on how profitable the flight could become (Investopedia, 2016b). Given a low seat load factor, the task at hand is to try to increase bookings on that flight. Creating hubs and grouping passengers with different itineraries on one flight can reach this (Levine, 2002). By creating a hub (central point) more efficient service can be offered as this larger groups is able to cover the costs of operating the aircraft. Thereby a wider network is provided as customers from different starting points as well as different destinations are managed in an efficient way. Given the situation in which many airlines generate enough customers but are unable to fill aircrafts efficiently can provide service to consumers by working together with the competition (Levine, 2002). This is the case of code sharing. Airlines are able to widen their network by collaborating with competitors. Though each airline does get a separate code for that flight, the flight is operated by one airline (operating carrier), which allowed the other one's passengers to come on board (focus, 2016). Assuming that a customer named Sally wants to fly from New York City JFK, USA to Cape Town CPT, South Africa. Due to the duration of the flight and a lower demand for that specific route, this customer does not receive a direct flight connection. The customer has to catch a connecting flight at the hub in e.g. London LHR, Great Britain. As customers are pooled on that flight, some might just travel from JFK to LHR. Others on that flight are starting at a different city and reach their destination in LHR and have JFK as their connecting point. The last option is that this flight transports passengers like Sally that are flying from JFK to LHR to get a connection like CPT. The difficulty at hand is to calculate the marginal cost of transporting Sally from JFK to CPT. Though the cost of operating the entire network per a certain point in time are know, the marginal cost of going from JFK to CPT is or any other two point in the network is unknown. This is due to the fact that only a percentage of travellers are going from e.g. JFK to LHR to CPT. Some travellers might not depart at JFK to arrive at LHR and continue the journey to CPT, leading to the inability to determine marginal costs (other than separable ones like meals or fuel) (Levine, 2002).

Additionally, not all passengers on the flight even those following the same itinerary have the same price sensitivity. One can roughly distinguish between two main groups of travellers, namely those for leisure and those for business. Where as business travellers can be defined as customers who focus on minimizing connections and if inevitable have fast ones. They need to fly to the nearest airport and avoid detours to more remote ones. That leads to the conclusion that a big influence on business travellers decision making for is time saving compared to cost minimization to a certain extent. Leisure travellers tend to be a lot more price sensitive (Levine, 2002). Typically, leisure travellers would rather loose time (longer connection, remote airport) than pay more for a ticket (Levine, 2002). For them, flying to London Stansted STN instead of Heathrow, which is not as close to the downtown area, would be a considered alternative if the price were lower. It might even be an option for them to change airports (JFK to STN and LHR to CPT) to meet a connecting flight for a discounted fare. Therefore, creating a network of the requested scale and scope at competitive prices mean combining consumers demand (Levine, 2002). Additionally, as Dana (1998) showed, uncertain demand is also a factor that needs to be considered. Price discrimination allows an airline to supply such a network with an efficient frequency and capacity (Levine, 2002). As Levine points out, by combining those passengers with a different demand all of them do profit to a certain extent. The less price sensitive consumers are offered higher frequency of flights to more locations while the more price sensitive consumers profit by the available capacity due to the overall increase of flights. All airlines in the market have to obtain such a strategy in order to stay in the market. Moreover, common costs can be “shared in more than one combination of output and prices” (Levine, 2002, p.23).

Following this explanation the obvious question is how to keep customers in their segment. Though business travellers are less price sensitive they would surely exploit the option of flying for a cheaper fare if everything else stays the same (airports, travel time etc.). A passenger’s main goal will always be to maximize their expected utility when choosing between the different packages of “high price-no conditions” and “low price-high conditions” (Stavins, 1996). Their selection depends on their elasticity of demand. As mentioned above, one of the conditions for successful price discrimination is to keep consumer segments separate. This of course is only of need if the segments actually show a significant difference in demand elasticity. The figure below indicates a situation where the two are far enough apart.

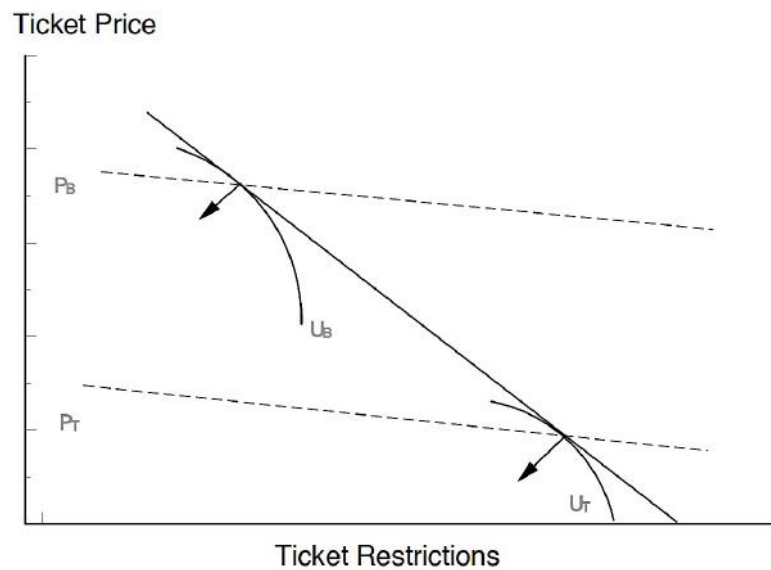


Figure 9: Market Segmentation by Air Carriers (Stavins, 1996)

In the figure above, U_B shows the indifference curve of a business traveller where as U_T the one of a leisure passenger. The dotted lines show the indifference curves of the carriers studied. The arrows point in the direction in which utility increases. The solid line connecting the two consumer indifference curves intersecting with the carrier ones shows the ticket price packages available to the consumers. As the indifference curves are far enough apart, different ticket price packages can be offered to each customer segment (Stavins, 1996). Here, as indicated by the intersection between P_B and U_B and P_T and U_T respectively, leisure passengers are willing to pay P_T where as business travellers choose P_B . As previously shown, price discrimination is most successful for an airline when the target customer base is large and dispersed between leisure and business travellers.

As consumers cannot be ask for their purpose of the trip without incurring strategic behavior, conditions on the fares enable an airline to segment successfully (Levine, 2002). Furthermore, each class (first, business, premium economy and economy) contains several pricing and condition options to keep revenue flexibility. These price and condition options are grouped and labeled booking classes (Kerr, 2015). The potential switching between classes is only harmful for the airline when customers switch from a higher (corporate or business) fare to a lower (leisure) fare. Otherwise they would upsell and gain revenue. Lower fares are e.g. not available for last minute purchase, are not transferrable to a different customer, specific to a departure and arrival point or presuppose a round trip (Levine). A business trip might face last minute changes in regards to the person travelling, the duration or the entire itinerary. Therefore, purchasing a discounted leisure fare in advance is in most cases not an option for business travellers. Though switching cost between segments can be prevented this way, how can an airline ensure that customers do not switch to

another airline, which offers the same route for a lower price to those high paying customer?

The answer to this question is that they cannot. The entrance of new competitors can lead to both higher or lower price discrimination. There is the potential of airlines having to charge all passengers at a price of their marginal cost due to the increase in competition. However, it is also possible that an airline is able to still gain higher revenue through the higher prices the business passengers are charged (Stavins, 1996). Airlines can gain market power by differentiating themselves through their network and flight schedule slots as well as their loyalty programs (Stavins). By focusing on and dominating those, the market turns into a more monopolistically competitive one as consumers start to favor certain airlines (Stavins). Thereby airlines might get market power in certain segments of the markets while not in others.

If an airline does not price discriminate it is unlikely to be able to offer a complex network while minimizing their costs. Price discrimination allows maximizing revenue by only opening higher booking classes on more popular routes and thereby dictates which size of planes to use while shaping the airline network. Though they are able to occasionally offer a discounted fare to hurt the competition, over a longer period of time this is not sustainable (Levine, 2002). By undercutting the competition, the airline can create market share however also faces the threat of earning too little revenue in the process (Levine). Though it is argued that the price dispersion seen in the industry is not solely explainable by fluctuations in cost (Borenstein & Rose, 1994), offering prices below costs, also known as predatory pricing is, under anti-trust law, illegal (Investopedia, 2016b). However, in a price war it cannot always be easily distinguished when predatory pricing occurs especially since total costs are not always fully disclosed and verified (Investopedia, 2016b). Nevertheless, this is not a sustainable strategy over a longer period of time, since revenue needs to be earned in order to stay in business. Therefore, while needing to minimize costs the airline also has to focus on maximizing revenue. According to many scholars, at this point in time, the only way to successfully and sustainably do so is to segment customers and price discriminate according to the elasticity of demand.

The need for network airlines to price discriminate is thereby answered, however also point-to-point airlines are dependent on an effective revenue management, meaning price discrimination (Levine, 2002). Point-to-point airlines do not observe the indivisibility of common cost like network airlines do. However, the demand for frequent flight service and unstable demand in the light of constant cabin size indivisibility leads to a need of price discrimination (Levine). Though compared to a network airline, their price spread between the highest and lowest possible fare offered by a point-to-point airline is lower. This is due to the fact that point-to-point airlines focus on more price-sensitive consumers who demand less convenience and thereby is willing to pay less.

To summarize, price discrimination is typically seen as mean to take consumer surplus and turn it into producer surplus given consumer's utility and income functions. It involves the morally question of charging two people different prices for the same product. However, it also shows that this depends on how "the same product" is defined. For an airline, fluctuation in price discrimination means changes in discounts provided not for the less but for the more price-elastic passengers (Stavins, 1996). As competition increases price discrimination increases as well leading to lower prices for passengers with higher price-elasticity of demand. Therefore, successful and sustainable price discrimination means effective revenue management fore and airline.

2.5 Consumer Perception of Price Discrimination

From an economics point of view, price discrimination in the airline industry makes perfect sense and seems to do more good than harm. It suggests that overall, consumers benefit from price discrimination more than it does harm them in the airline industry. To understand consumer perception on this topic, one has to distinguish between different ways on how this topic.

Some consumers might view the airline ticket just as an entry to a plane, which brings them from A to B. They do not distinguish between the additional service options, which can justify a price difference and thereby might see price differences for a given flight as less fair compared to products, which are less comparable (Xia et al., 2004). Empirical research done by Dai (2010) focuses on exactly those comparable products like an airline ticket. His findings show negative perception towards the price differences of those products. Furthermore, the magnitude of price differences as well as the short time span between those differences leads to a negative perception. This suggests that even after the purchase (accepting a certain price) consumer's perception can be negatively influenced by major price variations (Dai). Therefore, airlines should avoid those variations in general but especially over a short period of time in order to minimize the risk of negative perception.

In this line of thought it is important to assess whether there is a perception difference between loyal customers and non-loyal ones. Previous research suggested that those loyal to a firm are less price sensitive, however Dai suggests that a distinction needs to be made. Dai found that loyal customers feel like they are entitled for a discount because of their loyalty. However, loyal customers perceived a smaller price difference not as negative as non-loyal customers. Loyal customers value their long-term relationship. If major price differences are observable those loyal customers feel betrayed and undervalued by the firm (Dai, 2010). Therefore, given a minor price difference, loyal customers do not perceive price discrimination as unfair however; as the magnitude of the difference in price increases they perceive price discrimination as unfair. If airlines want to prevent this, they should

avoid charging loyal consumers significantly high prices as well as avoid price fluctuations over a short time span. As stated above, minor changes over a longer period of time are more accepted by loyal customers so that would be a way to still price discriminate.

Dai also analyzed the relationship between price discrimination perception, repurchases and satisfaction. The author found that consumers' perception only indirectly influences the possibility of a repurchase. He found that satisfaction is the direct influence however is influenced by the consumers' perception of a fair treatment. Just like it can prevent repurchases it can also lead to several other behavioral actions. There is the possibility that consumers try to backlash because of the perception of unfair treatment (Xia et al., 2004) potentially even at their own cost. Dai found that perception of fairness can lead to a variety of consumer behavior. His research showed a negative relationship between price fairness and "customers' self-protection and revenge intentions" (p, 86). This basically means that the more consumers perceive price unfairness they are inclined to participate in actions to potentially harm a seller's reputation and revenue. Therefore, it is crucial for an airline to not underestimate the results price discrimination can cause. On the one hand it might increase revenue but it also has the potential to harm it. In order to minimize harm through e.g. switching to a competitor, airlines can improve their customer services (Dai). That can allow a customer to explain their dissatisfaction while the airline has a chance to react to it.

Another aspect that can influence the perception of price discrimination is consumers' knowledge on price discrimination or the lack thereof. Customers might not see the value price differences can give or take. They might see airline networks as a given. Furthermore they might simply not understand why a price difference actually exists. Some can understand a price difference in a mere profit increase for an airline but fail to see the additional cost the seller has (Bolten et al. 2003). Therefore, it is up to the airlines to improve communication to avoid negative perception on price differences. The importance of understanding consumers' concern on price differences is not to take lightly. Consumer's word of mouth and the low switching costs to a competitor are threats. Loyalty programs and an excellent service can improve consumer's experience and thereby improve their satisfaction (Dai, 2010). That in turn, as showed above positively effects a repurchase.

Though an elaborate discussion on ethics in the business world is beyond the scope of this thesis, price discrimination can be looked at either with a consequentialists view point or a deontologists one. This will give an indication on how different consumer's can view and react to this topic. Consequentialists see on the act of price discrimination itself but asses if the consequence of that act is immoral or not (Edwards, 2014). Contrary, Deontologists focus on the moral of the act itself (Edwards). It comes down to the question between efficiency and fairness. Those consumers who follow a more consequentialist line of thought might look at price discrimination like an economist does. They question price discrimination in the light

of social or personal efficiency gain or harm (Edwards). Here it is plausible that if communicated correctly, those consumers see price discrimination as an efficiency gain, as it allows for more frequency service and a more elaborate airline network. Contrary, a consumer with a more deontological mind set might question the fairness of price discrimination (Edwards). This perception of fairness questions the ethics of pursuing price discrimination. This group of customers does not stop thinking about price discrimination in an ethical way as soon as they where that a negative perception might not bring value to shareholders (Edwards, 2014).

Several scholars claim that consumer perception on price discrimination is heavily influenced by the perception on norm violation (Edwards, 2014). Price discrimination always involves consumer segmentation. This can be done by different characteristics. Discrimination based on willingness to pay seems to be due to social norms more accepted than discrimination based on race (Edwards). Furthermore, Edwards (2014) states that segmentation that the consumer is already accustomed to e.g. a discount for students, the elderly or minors is also seen as acceptable. Additionally, some consumers might focus on the aspect that each ticket stands for a slightly differentiated product. By being aware of that and then having the free will to choose if the additional price is worth the benefits is not give the perception of equality (Edwards). Online ticket prices offered through OTAs (online travel agencies) like Expedia, Orbitz or Travelocity questions the consumers' trust even on lower prices. Research done by the Boston's Northeastern University in 2014 showed that discounts were given depending on the device used. Here they found that consumers searching with Apple Mac or Android devices where charged higher prices than those using a Windows PC or IOS device (Russon, 2014). Furthermore, it was found that Orbitz and Cheaptickets are giving membership discounts to those that kept being logged in on their website (Russon, 2014). The lack of information regarding the price changes leads to a lack of trust.

The Internet though it aids airlines to price discriminate also allows the consumer to see that different prices arise (Dai, 2010). Consumers will expect to be offered a higher price and see buying an airline ticket as a gamble for the possibility of a lower price in the future. Thereby, consumers are getting more strategic in their purchasing behavior as they are trying to find the best price. This already indicates the strong effect the Internet has on consumer purchasing behavior, which will be followed up in a later chapter.

To conclude, objectively speaking, price discrimination can by definition not be fair. Some passengers pay more or less for a ticket due to the restrictions on the ticket. Nevertheless, how price discrimination can be assessed objective is not actually relevant. What is relevant is how consumers interpret this unfair strategy and how they behave. This behavior and perception depends on their awareness, knowledge, and loyalty. Furthermore, it is heavily influenced by social norms that each customer is have been raised by or exposed to as well as what society sees as acceptable. When on a plane, the economy seat purchased with a higher booking class ticket

does not feel any different than the one obtained through a lower booking class. If the product purchased is the same or different and thereby justifies a price difference or not depends on consumers perception. As today's society is characterized as post-truth, emotions seem to way in more than facts do. As it increases social welfare and thereby seems to benefit mutually the society and the companies, price discrimination is legally and to a wide extent socially accepted. However, that acceptance is influenced. Klock (2002) summarizes that point perfectly by saying:

If a big corporation selling washing machines or a street vendor selling ice cream charged one price for white customers and a higher price to other customers solely based on their color, society would be outraged. Suppose different prices are charged, not because of differences in color, but because of differences in some other attribute, such as the willingness to pay. Why should society not object to this? Sometimes the people discriminated against are poorer and less educated, are affluent or educated, or are corporate entities. Does it make a difference? If so, is that not analogous to suggesting that it is acceptable to steal from insurance companies, but not from individuals? (Klock, 2002, p. 351)

The extent on how consumer perception and behavior is influenced is analyzed in the next chapter. Furthermore, an emphasis is put on how this behavior is then in turn influencing the airline industry.

3. Beyond price discrimination

Routehappy CEO Robert Albert said that if in a competitive industry, like the airline industry, consumers "perceive the product as only as being about price, that's a problem." (Sumers, 2016, p.1). As airlines are trying to differentiate themselves, consumer behavior on factors other than price is gaining more and more importance.

In this chapter, consumer behavior will be defined and the influence on the airline industry is assessed with a focus on revenue management. It cannot be denied that price is always one of the most important factors on consumer decision making in this industry. However, an emphasis will be placed on those factors that have gained are continue to gain on importance over the last years.

3.1 Consumer Behavior

Before being able to analyze customer behavior in the aviation industry, outlining the influencing factors and relating that to the price setting measurements taken by the airline, the concept of consumer behavior has to be defined. Consumer behavior is officially defined as "The study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services,

experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society" (Kuester, 2016, p.110).

A difference in consumer behavior is only possible to observe due to the presents of choices (Taylor, 1974). The outcomes of the options a customer has are uncertain up until they occur in the future. This is a very important aspect for the basic understanding of consumer behavior. Uncertainty turns every decision problem into a gamble, as the outcome is not guaranteed. Due to the presents of choices, consumers are faced with risk. Risk is an important factor when considering consumer behavior as it is seen as resulting in a potential loss (Taylor, 1974). There is on the one hand the uncertainty of the outcome of the decision-making; on the other side there is the uncertainty of the resulting consequences. Though uncertainty can be mitigate, in reality it can never be completely removed According to Taylor, the more information consumers have about the certain gamble and its options, they can reduce the uncertainty of outcome. Passing on a gamble or an option can mitigate uncertainty of the consequence if too much is at stack. However, this requires the ability to rationally assess the situation and having the information to assess the riskiness of the gamble.

Given the same outcome, a rational consumer would always opt for the less risky option (Nicholson et al., 2010). However, it is not always visible to the consumer which option is more risky and what the respective outcome is. Not every person assigns the same level of risk to a given option. Additionally, where as in theory, no one would want to pay a higher price for a lower quantity of the same good, in practice however, in many cases (Samsonite, 2016) it is visible that consumers pay a size premium.

As stated by the definition by Krueger (2016), consumer behavior reaches its complexity due to the difference in each consumer's habits. The habits are in turn again influenced and possibly changed by social factors e.g. group-belonging, cultural factors e.g. social class, personal e.g. age and psychological ones e.g. perception. As customers are individuals and by definition this means that no two customers are ever exactly the same, it is impossible to apply one single marketing strategy and be successful with that. However, through market segmentation, a firm is able, with the help of consumer behavior, to analyze and group those customers who share a similar behavior. Thereby, an appealing marketing strategy can be created for this specific segment. Now the question is, how does a firm know about its clients' behavior?

In most cases, past behavior does indicate how customers will act in the future. If historic information about the behavior is not given, customer behavior in a similar market might act as a reference point. To be able to understand the customers' decision making process is one of the most important aspect in order to be successful (Hollensen, 2013).

The figure below shows the general decision-making process consumers go through before and after making a purchase (Sirakaya & Woodside, 2004). Sirakaya and Woodside state that especially in the tourism industry, consumers weigh alternatives against each other in a “funnel-like procedure” (p. 815) before deriving at the best option given the existing alternatives. After actually making the decision and acting upon it, the outcome of the selected option is evaluated for future references.

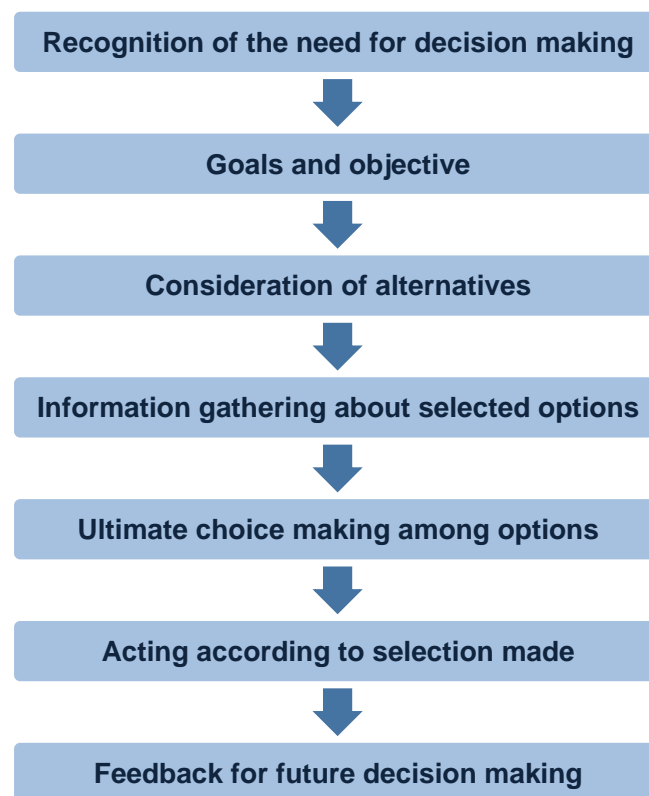


Figure 10: Consumer decision-making process (Author, 2016)

Just like past decision making outcomes are an influence on future ones, the overall decision-making process is influenced by several more variables. These variables can be grouped by internal or external nature. Internal variables include intentions, belief, attitude and motivation while examples for external ones are marketing or time (Sirakaya & Woodside, 2004). The interrelation between these variables is of importance, as these variables do not separately affect a consumer. The consumer is influenced by a combination of them with some having more or less influence than other variables.

Whereas the influence of internal variables is harder to distinguish and assess due to their sometimes-subconscious nature, the intent and effect of external ones is easier to cluster. Marketing enables a firm to influence a consumer's buying process and thereby possibly alternating consumers purchase behavior, as shown by countless marketing researches (e.g. Vinson, Scott & Lamont, 1977). Understanding consumer

behavior is therefore an important tool when implementing a marketing strategy (Perner, 2016). It provides the necessary information in order to target the potential customer base at e.g. the right time of the day. Though most customers follow the steps outlined above, the manner on how these are followed varies widely (Solomon et al., 2014).

Up until now, consumer behavior might sound like a 'secret tool' companies use to spy on their consumers in order to make the most money off of them. Consumer behavior analysis however is more than that. By researching and understanding the choices consumers take, firms are able to further innovate their products. By understanding e.g. how a consumer uses a certain product, the packaging of this product can be optimized in order to reduce waste (Perner, 2016). Furthermore, there is an application of consumer behavior in the field of social marketing. Social marketing focuses on providing information rather than selling goods or services (Perner). This is often used in areas of health and wellbeing. Here marketing does not have the power to change consumer behavior, but the consumer might still be helped. Though the rudimentary problem might not always be solved e.g. in the case of drug addiction, social marketing can prevent fatale side effects by explaining e.g. the risk of sharing needles. In regards of the aviation industry, understanding consumer behavior is great importance because it allows for product optimization as well as improvement of the overall service the customer receives. Social Media and the overall ability to obtain information online have not only aided the airlines to observe their customer's behavior faster and in more detail, but also directly and indirectly influence it in a whole new dimension.

3.2 Consumer behavior in the Airline Industry

It almost seems common knowledge that the most important factor, influencing consumer-purchasing decisions is price. This is not only studied by numerous scholars but also seems to be common sense to most consumers. It even goes so far that advertising by online travel agency websites, make it sound that price is almost the only relevant factor influencing a consumer. Though the strong influence of price is undeniable, it is not the only factor to consider. As the industry has low switching cost, the establishment of loyal long-term relationship with customers is strategically important for airlines (Johan, Noor, Bahar, Yan, & Ping, 2014). The authors claim that this is essential for gaining a competitive advantage, which is sustainable. Therefore they focused on factors, which have an effect on consumer loyalty in the airline industry. Perceived quality has the strongest positive influence on loyalty (Johan, Noor, Bahar, Yan, & Ping). The other factors studies, perceived value, the airline's image and a consumer's satisfaction only have a moderate effect (Johan, Noor, Bahar, Yan, & Ping). This leads to the conclusion that loyalty and thereby a competitive advantage can be achieved when an airline manages to minimize the difference between a customer's perception and their previous expectations (Johan, Noor, Bahar, Yan, & Ping). That however, is not as simple to achieve. Airlines also

use other means to prevent consumers from switching, e.g. frequent flyer programs or company contracts which offer incentives and thereby might reduce the need switch.

Hamidi, Niareki & Madrekian (2013) performed a study to rank (though the Wilcoxon signed- rank test) influencing factors for a consumers' airline choice. All factor studied are of significant where as consumer focus is first on flight safety followed by flight schedule and management (Hamidi, Niareki & Madrekian). Following these two factors are on-board service as well as the image the airline has (Hamidi, Niareki & Madrekian). The authors also assessed the sub-components of the individual factors and found that delays, comfort and the possibility to cancel a flight were more influential than the social activities the airline encounters or a long haul's inflight entertainment offerings (Hamidi, Niareki & Madrekian).

Other research has been conducted to understand the effect of consumer's consciousness of sustainability in the airline industry or the lack thereof. Though being vegan, organic products etc. are a major trend in today's society; Bindu (2013) showed that the concern about the impact on the future is great among consumers however, very little consume sustainably. The author's sample gave indication for a difference in knowledge about this topic among Europeans and Asians or Arab nationals. The existence of knowledge did then go hand in hand with more sustainable consumption. Furthermore, this lack of knowledge can be connected to the findings that Asian or Arab passengers are not willing to increase their spending on environmentally friendly purchases (Bindu). The conclusion of the study shows that consumers are not placing an importance on sustainability in the airline industry due to a lack of knowledge about the topic, the increasing cost factor and a lack of trust (Bindu). This lack of trust is mainly created through marketing tricks e.g. green washing. It becomes apparent that with increase air traffic and a growing earth population, sustainable and environmentally friendly airplanes have to be important. However, it is also clear that marketing plays an important role, as it needs to be careful to create acceptance for a higher price in this area. Analyzing the factor advertising as well as several others in the light of an external factor was conducted by Simarmata, RS, Keke & Panjaitan (2016).

The external factor, which will be assessed in detail later in the thesis, is the Internet. With its technological advancement it allows airlines to communicate efficiently with customers while at the same time making booking flight easier (Simarmata, RS, Keke & Panjaitan, 2016). Here, important influences are online travel agencies (OTA), which are websites like Expedia, Priceline, or Orbitz that allow for price comparison between numerous airlines. The research conducted by Simarmata, RS, Keke & Panjaitan assessed the effect of trust, satisfaction, price, user friendliness and shopping enjoyment on consumer's buying process. Their analysis showed a significant and positive influence for every variable. Interesting is their distinction. They conducted two models, one focusing on the variables effect on customer satisfaction and the other on the effect on buying behavior through OTAs for

domestic flights (Simarmata, RS, Keke & Panjaitan). The result connect to the study conducted by Johan, Noor, Bahar, Yan, & Ping (2014). Where as one phrases it as minimizing the difference between expected and perceived, here it is called trust. If customers can trust airlines, they know what to expect. The first model therefore showed the significant and positive effect of trust, price and user friendliness on customer satisfaction. Contradicting the concern expressed by Bindu (2013), the authors show that advertising and shopping enjoyment do not significantly affect customer satisfaction. The second model conducted takes it from this point onwards and finds that trust, satisfaction and price do have a significant and positive effect on consumer's buying process for a ticket through OTAs. Here they found, that the easy use of e.g. websites might influence consumer satisfaction but not their purchasing process. Though one could argue that since easy use influences consumer satisfaction, which influences the decision process, user friendliness has an indirect effect on a consumer's decision-making process. Furthermore, Johan, Noor, Bahar, Yan, & Ping found that shopping enjoyment as well as advertising do not have an significant effect on the decision to buy though an OTA, either.

Lastly, a different approach was taken by considering lean factors such as boarding time or clearance time as well as luggage capacity and their influence on consumer preference for an airline (Soomro, Hameed, Shakoor, Butt & Kaim, 2012). Furthermore, the simplicity of e-ticketing was considered. Contrary to the research mentioned by Johan, Noor, Bahar, Yan, & Ping (2014), the authors did find a positive impact of the ease of e-ticketing. Here it could be that the easy usage considered by Johan, Noor, Bahar, Yan, & Ping did focus not solely on the benefit of e-ticketing but more so on the entire process. Where as luggage capacity did not have an impact, boarding and clearance time do.

Though there are many more papers on consumer behavior, there were selected to give an impression on the factors that scholars have studied already. It is striking to see is that scholars often do not distinguish between different types of consumer behavior. If all consumers would follow the behavior outlined above, premium airlines could not exist due to the focus on price. Furthermore, airlines with poor safety standards like those of many Indonesian carriers, which are on the black list, would not still be in the market. This leads to the conclusion that not all consumers are rational and consistent in their believe and behavior. Therefore, consumer behavior as to be narrower classified and defined.

Generally, consumer behavior is classified in two types, namely "myopic and strategic" (Talluri & van Ryzin, 2004, p.223). A myopic consumer also referred to, as a non-strategic consumer is one that makes a purchasing decision immediately without focusing on the purchase time. A strategic consumer does focus on the time of purchase in order to minimize the price (Li, Granados and Netessine, 2011). As their goal is to maximize their utility in the long run, they are also called forward-looking consumers (Li, Granados and Netessine, 2011). In order to be able to validate strategic consumer behavior, the two consumer types segment the market

(Li, Granados and Netessine, 2011). The need to study the behavior of strategic consumer is to improve management of inventory and price (Li, Granados and Netessine).

As mentioned before, revenue management is the heart of every airline. One-way to influence revenue management in the airline industry are the prices of booking classes. Assessing which booking classes to open or close at which time before departure and at which price, is what drives the revenue management. Which booking classes are opened or not is depended on several different variables, one of which is consumer behavior (Levine, 2002). Depending on the airlines perception and classification of consumer behavior, different pricing methods are chosen. This conscious classification goes beyond the traditional perception of exogenous change in demand (Gallego & van Ryzin, 1994). By understanding consumer decision making, the appropriate, meaning profit maximizing strategy, can be chosen to be able to fully exploit a consumer's potential. This has in turn a direct effect on revenue management.

Furthermore, it is often believed that strategic consumer's demand means a switch from higher to lower prices (Li, Granados and Netessine). This would mean that strategic consumers have a negative effect on revenue management. However, the reach of the presence of strategic consumers is unclear. To understand their behavior better means being able to correctly manage and price an airlines seat inventory, which is challenged by the fast pace of inter-temporal price changes (Li, Granados and Netessine).

3.2.1 Myopic Consumers' Behavior

The underlying assumption of the myopic consumer is the finite- population model. (Talluri & van Ryzin, 2004). Though every population is finite in reality, it is assumed that airline customers do not immediately re-enter the market after making the purchase unlike for example FMCG consumers (Talluri & van Ryzin). This means that given the finite-population assumption, once a customer of that finite population has made his or her purchase, he or she is removed from the remaining population of potential customers (Talluri & van Ryzin). The resulting consequence is that only the remaining customers in the population are eligible for the potential purchase.

This assumption has a great impact on the dynamic price setting reacting towards this consumer behavior. The myopic consumer is best exploited using a price skimming strategy (Talluri & van Ryzin). As the authors define, once the current ask price is smaller than the myopic customer's valuation price, the myopic customer buys for the first time. Price skimming ensures that the asked price is not lower than the myopic customer's valuation. This is due to the fact that price skimming sets a higher price when launching the product or service (Machková, Král, and Lhotáková, 2010). Over time, as those customers who are valuing the product or service at a higher price, are served and leaving the market. Given the finite-population

assumption they are as well not reentering the market. As the population shrinks in size over time, only leaving those customers with a lower valuation price, the current ask price by the company is decreased over time (Talluri & van Ryzin). As the valuation price and the, then adapted, current price are aligned through this form of second-degree price discrimination, the firm is able to receive the highest price each customer is willing to pay.

The seeking behavior of the firm to price discriminate is what distinguishes the price decrease from a price decrease given an infinite population model (Talluri & van Ryzin). To prove that, an equivalent infinite population model scenario is assumed. Here, the customer valuation is unswayed by a past demand. As Talluri and van Ryzin show, this consistent distribution of customer valuation also leads to a constant distribution over time. Now, this implies that the dominant strategy would be to keep the price constant rather than decrease over time as in the case of the finite-population model of demand (Talluri & van Ryzin). Furthermore, Talluri and van Ryzin prove algebraically that revenue increases when the number of periods increases as well. Over time, the asked price and the valuation of the customer are approaching each other to a very close match. Referring back to the chapter on price discrimination, as the time periods are continuously and infinitely occurring, the entire consumer surplus can be obtained leading to perfect price discrimination (Talluri & van Ryzin).

As it is not the goal of any customer to be perfectly price discriminated, the question arises as to why customers do not deviate from the myopic behavior. Rational behaving consumers would detect this decrease in price over time and act accordingly (Talluri & van Ryzin). The difficulty to prove the existence of these non-strategic consumers, as the optimal pricing analysis is very difficult to conduct leads to very little research in this area (Li, Granados & Netessine, 2011). In the airline industry, some might see airline ticket pricing as an unsolved mystery; however, others use a strategic approach in order to find the best day to book a flight.

3.2.2 Strategic Consumer Behavior and its Effect on Revenue Management

The fact, that practically no flight has one constant price for all passengers and that some customers are aware of that, leads to a gamble. Both sides face this gamble, the customer and the company. For the customer, there is the potential that the price drops due to the opening of a lower booking class closer to departure. Furthermore, with fierce competition in place, complexity increases almost infinitely. (Li, Granados & Netessine, 2011). This is the airlines' gamble with unlimited variables. In which, for the most part, the strategic customer is perceived as one of the biggest threats. Comparing different empirical studies on the effect of strategic customers on revenue management there does not seem to be a general consensus. The question arises as to how strategic customers really are. As airline prices are very volatile, establishing the presents of strategic consumers is the key to understanding their behavior.

Unlike the empirical research done by Vulcano et al. (2010) or Newman et al. (2010), to name a few in the field of revenue management, strategic consumer's behavior creates the need to account for "inter-temporal choice behavior" (Li, Granados and Netessine, 2011, p.4) among multiple product choices in the airline industry. Furthermore, academic theory sees strategic behavior pressure on prices as the reason for their downward trend (Li, Granados and Netessine). However, there is not an extensive amount of literature on the effect that this behavior has on the market and the individual airlines. The research conducted by Udjo, Lubbe and Douglas (2013) shows the need for understanding strategic consumers. Aided by the transparency and focus set on price by OTAs, passengers have been able to observe and experience the fluctuation of price. Consumers have experience the relationship between ticket prices and time of purchase. This gave some consumers an incentive to analyze when booking a flight can be optimal. Moreover, these and other online decision support tools give consumers the means to support their strategic behavior (Martin and Rubin, 2013). This leads to the question of who is influencing whom. Do the prices influence the consumer or do the strategic consumer have an affect on the transacted prices?

This question is answered by the extensive research done by Martin and Rubin (2013). They started their research by comparing different routes, namely those that have fare prediction data available and those that do not. The findings show a significant relationship between lower ticket prices of around 3% and the availability of airfare prediction information (Martin & Rubin). Surprisingly, LLCs are not affected by the existence and distribution of those future fares but legacy airlines are. Furthermore, future airfare information has the most significant effect shortly after they are introduced but the negative effect is still present in the long run (Martin & Rubin).

This means that essentially, strategic consumers are able to solve the same task the airlines are faced with. They can anticipate future prices. What is striking is that this has nothing to do with magic or clairvoyant but with the availability of online decision tools. These allow consumers to have the knowledge to make an informed decision on whether to purchase or to wait (Martin & Rubin). The important statement made by Martin and Rubin is that strategic consumers do not have to be assumed but can be facilitated. Without the online tools, consumers would not have the ability to compete with the extensive algorithms applied by airlines for continuous price changes (Marin & Rubin). Thus it can be said online decision tools have a significant impact on the economy (Martin & Rubin). They allow for conscious strategically behaving consumers, which have the inside to drive down prices. Furthermore, strategic consumers believe that an advance purchase will lead them to a better deal. It is further claimed that even strategic consumers are time sensitive and are not willing to commit a substantial period of time for search of the best price (Udjo, Lubbe and Douglas). The want to buy online but have limited time for it, which might reflect the fast pace and constant busyness of today's society. With a constant stream of

information and their access, the Internet increased the fast pace of today's living. The ability to receive instant gratification for many needs, e.g. being able to compare prices easily and buy products 24/7 has tremendously alternated consumers' expectations. Consequently, companies face a different environment and have to react much quicker than before. In the airline industry, price management was completely altered because of the online influence in this industry. Therefore, the Internet's effect on today's consumer's behavior is outlined below

3.3 The Innovation Internet

The passenger jet was, and still is, one of the wonders of the world, a world whose other wonders the jet made accessible. Along with the personal computer, it ranks as the greatest technological innovation of the second half of the twentieth century. The computer turned your lowly desk into a cross between Harvard and Hollywood. The jet turned you into an adventurer. It freed you from the shackles of that desk and set you free to roam the world, to become a Lindbergh, an Earhart, a James Bond, and, if you had enough money and time, a jet setter. (Stadiem, 2014, p. 2)

Facilitating the connection between people but on a different level was accomplished by one of the biggest innovations in recent time, the Internet. It has majorly changed the way people communicate, research information, make purchases... the list is endless. It is substantial that as much as people innovated to change, this change also innovated human behavior towards it to a certain extend. In many cases, human behavior also changed significantly beyond the mere interaction with the innovation and had a significant impact on several other aspects of life. This is the case when looking at the innovation Internet. Remembering the original excitement the airline business brought with it, it is especially interesting to assess the impact of customer perception on this industry. Furthermore, given today's dependence and influence by the Internet, a deeper understanding can be reached when considering the impact the Internet has on customer behavior. Therefore, in the following, these underlying concepts will be discussed.

The Internet seems to have a major influence on human behavior in general. In his book *Business @ the Speed of Thought*, Bill Gates phrases it as "[t]he Internet is becoming the town square for the global village of tomorrow" (1999, p.114). A town square can be described as the center of attention. Personal interaction, trade, entertainment, at least in the olden days, took place on that physical space. With the Internet expanding over the last two decades, nowadays, a majority of those daily interactions take place online. In that sense, the Internet is becoming a virtual town square. The Internet therefore significantly influences people's behavior and their daily decision-making.

As the Internet's presence in more and more areas of people's daily occurs, people get more and more accustomed to the benefits of the Internet. Where as 30 years ago, people did not even know about the endless possibilities of the Internet, now people seem to not be able to live without it anymore. Where as in the past, the Internet could have been classified as a want or a desire, now it seems to be more accurately describes as a need. The difference between need and want can be classified as follows. "Need is defined as: the measurable discrepancy existing between a present state of affairs and a desired state of affairs as asserted either by an "owner" of need or ail "authority" on need." (Beatty, 2010, p. 39). More drastically phrased, a need is a necessity; something that one cannot live without. Where as the need defines the necessity to fill the lack of something, the want points towards the desire for something. An example would be, I need shelter, I want a house but I desire a mansion in Malibu. As more of consumer's daily actions are depended on the Internet, the position of the Internet itself among the need-want spectrum seems to be moving from a desire or want to a need. However, not all needs are of equal importance to consumers. Furthermore, they are more or less heavily influenced by numerous factors e.g. culture, environment, and social standing to name a few.

Abraham Maslow analyzed the human behavior in the cultural and social environment and concluded his findings in the "Hierarchy of Needs" (Machková, Král, and Lhotáková, 2010, p. 33). As the name suggests, in this theory, people's needs are grouped in five sections, as outlined by the black pyramid below. These five groups are then ranked and stacked as a pyramid according to their need of satisfaction from bottom to top (Machková, Král, and Lhotáková, 2010). In Maslow's pyramid, the range is from physiological to safety, belongingness – love over to self-esteem and reaches its top with self-actualization (McLeod, 2007). Only if the need of the bottom of the pyramid has been satisfied, can the next higher step be considered for satisfaction (Maslow, 1943). This means that the physiological need e.g. the need for water or food needs to be pleased before the need for safety can be satisfied.

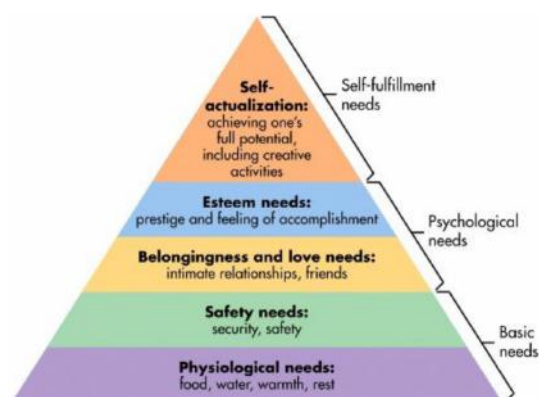


Figure 11: "Maslow's Hierarchy of Needs" (McLeod, 2007, p.1)

As Machková, Král, and Lhotáková (2010) point out, this pyramid is of great help to comprehend people's motivation, as one is able to understand their behavior better.

In the context of marketing, this means that one is more successful targeting the customer. With the possible difference in diverse cultures in mind, the marketer is able to understand which need is plausible to satisfy next. As the authors show, customers cannot be motivated to make purchases in higher steps of the pyramid if the lower one has not been satisfied yet. This is due to the fact that customer is most likely to be able to fully utilize the good or service at this point.

Since Maslow's development of the original five stages (1943), he himself expanded the pyramid and firstly added the cognitive and aesthetic needs (Maslow, 1970a). Thereafter, he placed the transcendence needs (Maslow, 1970b) as his final addition. Though the discussion about the evidence or the lack thereof regarding the study Maslow used as a basis for his hierarchy of needs, his way of thinking was revolutionary for its time and is still applied today. As Psychology Professor Margie Lachman is quoted saying that "He [Maslow] was saying that you weren't acting on the basis of these uncontrollable, unconscious desires. Your behaviour was not just influenced by external rewards and reinforcement, but there were these internal needs and motivations." (Kremer and Hammond, 2013, p.1).

3.3.1. The Internet and its Effect on Today's Society

As stated earlier, one of the most significant recent innovations is the Internet and with that more specifically the smartphone. Today's society is almost unthinkable without being connected via the Internet. People's engagement within the society completely changed since the revolution called Internet. Today's pace of life gets faster. At the same time hyper connectivity and immediate access to information can be gratifying and overwhelming. As the CEO of Geoloqi phrases: "Today and in the future it will not be as important to internalize information but to elastically be able to take multiple sources of information in, synthesize them, and make rapid decisions." (Anderson & Rainie, 2012, p.1)

To briefly test this hypothesis, a small survey of 47 respondents was orchestrated. A detailed description of the survey can be found in the appendix. The survey is aimed to test the dependence and reliance on the Internet among different age groups. What distinguishes this research from prior research done (e.g. Mitchell, Gottfried & Matsa, 2015) is the specification of ages of the respondents regarding the very basic information to today's society, like birthdays or phone numbers of family, friends and co-workers. The overall aim to better understand consumer behavior, the resulting question arises as to how to approach a customer in a world, which is already flooded with information. The outcome of the survey did indeed provide support to the hypothesis that especially younger people rely on online tools e.g. Facebook or offline apps e.g. calendar or phonebook to be reminded for even personal information. It is striking to see that the younger generation older generation did almost completely "outsource" this data to digital platforms thus creating a strong dependency on these.

The Internet meme below seems to combine the findings of the empirical research with Maslow's hierarchy of needs. An Internet meme (Schubert, 2003) is a concept in form of e.g. a video or a picture, which spreads through sharing via the Internet. Though these memes often have the intention to bring laughter and are mostly not taken too seriously, the one below might actually have more truth to it than most people think. As explained above, the lower step needs to be explained before pleasing the higher one. In today's society, where food can be ordered online, apartments are often found through online research and central heating in houses can be regulated via apps even when abroad, WIFI might become more and more a "basic" need that needs fulfillment.



Figure 12 "Internet meme of Maslow's hierarchy of needs" (Kremer and Hammond, 2013, p.1

It almost seems like that from a desire to manage something more efficiently through the Internet, a basic need for the Internet was created.

Obviously, the human can survive without WIFI whereas the physiological and safety needs as well as to a certain extent, the need for belonging cannot be substituted in order to survive. However, people today tend to utilize the Internet more and more, which in turn leads to a certain reliance and dependence on the Internet for daily life. Though some might see the Internet as a boon and bane, it cannot be denied that the Internet is present and used in a lot of people's daily routine. This means that people have an influence on the Internet (e.g. though sharing or providing content) but are in turn also influenced by it. In the business world, this translates to customers' behavior being potentially heavily influenced by the Internet. This is a phenomenon, which has changed tremendously over the last decade and keeps evolving daily, hourly, every minute. The Internet with all its pros and cons seems to

be simultaneously the opportunity as well as the threat in today's society and business world.

Considering the airline industry, the Internet alternated people's behavior completely. Not only the ability to purchase a ticket online but also the influence of media outlets, social networks and the structure of the flight search websites itself. Consumers' attitude today towards the "sensation" of flying, the ticket prices and the resulting competition between airlines has changed tremendously from the first commercial flights in 1908 (Burns and McDonnell, 2016). At the same time, the speed in change in customer perception in this industry is remarkable. Some might even argue it went from an outer space experience to an average bus ride.

What does that imply for consumer's buying behavior in the airline industry? This question is answered in the following section.

3.3.2. The Internet and The Airlines

Connecting that back to pricing strategies, a survey conducted by Lii and Sy (2009) evaluates the effect of online pricing tactics on consumer's response. They focused on the quantity purchased as well as the timing, multi-channels and buyer identification. These tactics were compared to the emotional, cognitive and behavioral act. Lii and Sy found that the cognitive behavior in form of perceived price fairness is significantly related to emotions. These in turn have an affect on consumers' behavior. Emotions furthermore mediate the behavioral act's and price fairness perception's relationship. The significance of emotions in the digital world is not to underestimate. An increase in social media usage between 2008 and 2016 in the USA alone was 78% (Statista, 2016a). That leads to a worldwide reach of 1.96 billion people and according to Statista this number is expected to grow to 2.5 billion by 2018. Facebook dominates that market with 1.71 billion monthly active users (Statista). Therefore, Facebook has a huge possibility to influence their users meaning the consumers. One way to do that is through their News Feed. It is the main page a user can visit where he or she receives an overview of all the posts their friends, pages they liked and suggestions appear. Though this at first sounds like a nice helpful feature, which it is to a certain extend, it also allows for user manipulation through targeting. Facebook explains this targeting strategy by saying:

The stories that show in your News Feed are influenced by your connections and activity on Facebook. This helps you to see more stories that interest you from friends you interact with the most. The number of comments and likes a post receives and what kind of story it is (ex: photo, video, status update) can also make it more likely to appear in your News Feed. If you feel you're missing stories you'd like to see, or seeing stories in your News Feed that you don't want to see, you can adjust your settings. (Facebook, 2016).

Facebook makes suggestions based on that information it has gathered on the consumer. This on the one hand can be efficient targeting but also means that once a consumer clicks something, he or she not receive suggestions for pages or advertising of something that do not follow the opinion of the sides clicked earlier. This leads to two major concerns. On the one hand, consumers do not receive information that will question their line of thought. On the other hand, a lot of consumers are not aware that this practice takes place. As the last line in Facebook's statement suggests, this is the common practice and can only than be changed afterwards. If users are not aware they are also not changing it. Therefore, an analysis on how social media influences the airline customers is of importance.

Bigne, Andreu, Hernandez and Ruiz (2016) performed such an analysis with a focus on low-cost airlines. The authors looked at the attitude drivers for online purchases and therefore focused on offline influences of personal and external nature as well as online C2C exchange of information. Their focus was set on repurchase decisions and word of mouth communication. The empirical research found that personal offline influences such as friends and family have no significant effect on e-WOM (electronic word of mouth) but do have a significant impact on WOM (word of mouth) and online repurchase decisions. External offline stimuli like the media influences solely their intention to suggest further low-cost airline ticket purchases on social media sites. These external offline influences did not have an affect on WOM or online repurchase decisions. Contrary, the authors found that C2C exchanges online did have a significant effect not only on WOM and e-WOM but also a customer's repurchase intention. WOM and e-WOM are underestimated factors influencing the airline industry. The airline industry though maybe seen as simple a mean of transport, is still highly impacted by consumer's concern for safety. WOM recommendations for or against an airport, route or directly the airline can have a ripple effect. They spread without being controllable. Hence, it is important to not underestimate the importance of a single consumer, even if that consumer just paid the discounted economy price.

This information can also be taken and used for airline ticket purchasing process and connected to the decision making process outlined above. As the figure below shows, for online purchases the process needs to be modified.

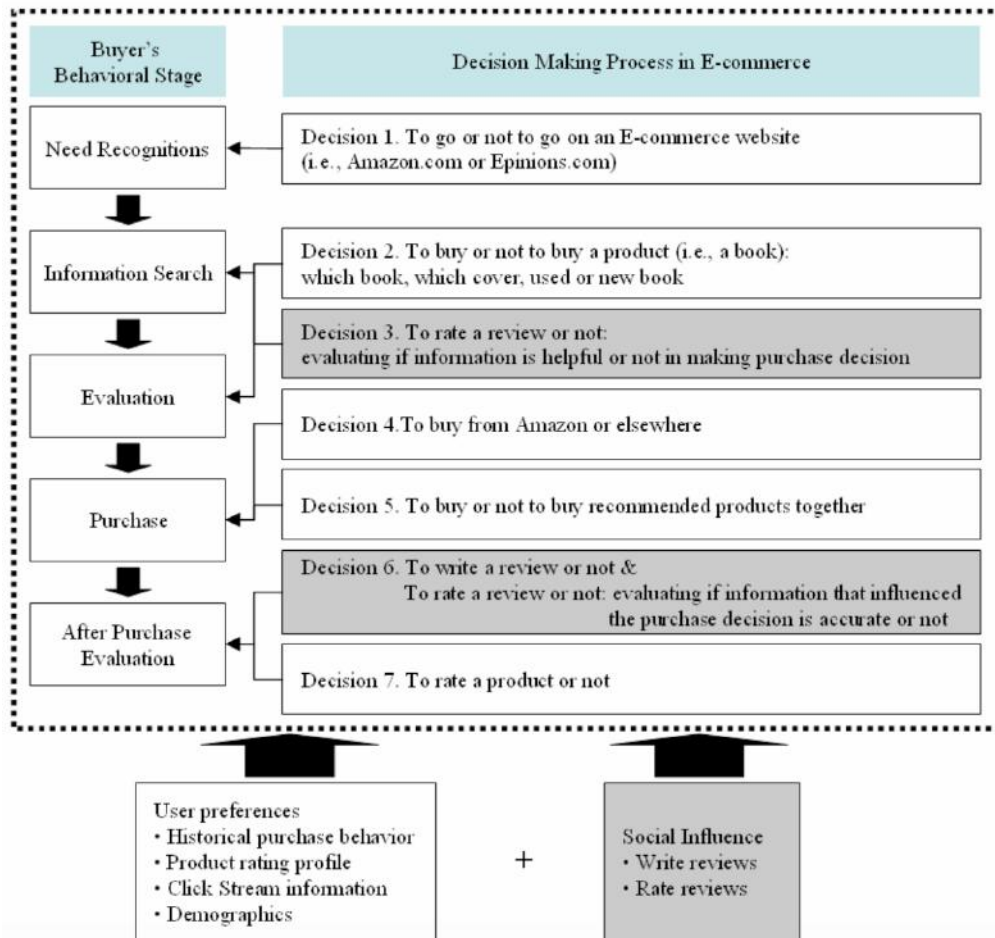


Figure 13 “Decision Making Process of Online Customers” (Kim and Srivastave, 2007, p. 295)

Supporting the statement made by Bigne, Andreu, Hernandez and Ruiz (2016), Kim and Srivastave realize the effect that communication based on trust has between people. What Bigne, Andreu, Hernandez and Ruiz researched for social media did Kim and Srivastave extend for online shopping in general. They took the information about communication and combined that with online purchasing behavior. Here they observed that, as people in general tend to be risk averse, the majority of consumers wait with a purchase for the verdict of early adopters. The opinion of early adopters is therefore especially important for new products. There is a visible trend where companies send an “average” consumer their product for review and thereby promotion on various websites. This is done on websites like Amazon or YouTube where people make a living of reviewing products. In a fast pace world which is dominated by pictures instead of text, YouTube has an advantage in that area. On the other side, on sides like Amazon, the consumers receive a review for the specific item they searched for. The information is pulled by the consumers where as YouTube mainly pushed new information on consumers through brand deals. Though of course, there are videos, which are easier to find because they review a single product. However, a lot of brand deals on YouTube are only a part of a video,

which could essentially be about something completely different. Margues Brownlee's channel is an example of a sole product review channel where as Zoella incorporates or combines various products in her videos. The products in her videos might then only be partially related to the topic of the video itself, which of course makes them harder to actively while it allows for creating a want that the consumer might know be aware of yet.

Marques Brownlee made it his job to critiquing and recommending products and posting that in form of a video. He has now over 4 million subscribers to his YouTube channel (Pandell, L., 2014) and he has collected over 530,464,726 views on his channel since his start 2008 (Youtube/MarguesBrownlee, 2016). To understand the outreach, it is as if every citizen of the United States of America and Brazil combined has viewed one video on his channel at least once. His channel is solely based around product reviews, however other YouTubers combine product recommendations with other content. In that field, Zoella is very successful British Beauty and Lifestyle YouTuber. With 11,397,691 subscribers and 876,163,958 total views on her channel, she is among the most successful (Youtube/Zoella, 2016a). For comparison, the Czech Republic has around 10 million inhabitants; Zoella has more subscribers on her YouTube Channel. By being able to not only promote products; she gives the viewers a feel of being honesty and genuine when recommending products. Viewers are able to establish a personal connection and trust with these YouTubers. It is not possible to assess the effect that her recommendations have on sales without inside information. However, when following the links in her video description box on the same day of her posting, the items were already sold out (for reference, Appendix C). For completeness, Swedish YouTuber PewDiePie has to be mentioned. His channel is the one with the most subscribers in the world with 50,536,835 subscribers and 13,924,893,764 views on his channel as of December 12th, 2016 (Youtube/PewDiePie, 2016). His videos average at around 3,5 million views per video uploaded. Given the fact that the world has a population of around 7 billion, it is as if every human in the world has at least seen one video of his, where as in actual individuals (50 million and counting) it is comparable to the population of South Korea. South Korea is a country, which is among the top 30 most populated countries in the world (Wikipedia, 2016). One should not compare these numbers with the absolute number of people voting in a country, consumption is clearly valued higher than politics.

Virgin Atlantic has utilized that potential so far the most, collaborating with various YouTubers. The most noteworthy is Casey Neistat, one of the most successful YouTubers with over 6 million subscribers and 1,3 billion total views (YouTube/CaseyNeistat, 2016a). His video with Virgin Atlantic titled "FIRST CLASS ON VIRGIN ATLANTIC!" received 2,364,504 views as of December 12th, 2016 (YouTube/CaseyNeistat, 2016b). Though it is beyond the scope of this thesis to assess the immediate and future sales that Virgin Atlantic gained through this video, it is sure that 2,364,504 people got an impression through a person that they might

trust due to repeated watching of his videos. Every YouTuber has the tools through YouTube to analyze the data of their viewers. Though YouTube is not the answer to every question, the numbers speak for themselves. Furthermore, as shown by Bigne, Andreu, Hernandez and Ruiz (2016) before, WOM and e-WOM exchanged online have a significant influence on repurchasing decisions. An example, that e-WOM can also influence consumers' in a negative way; can be given through the YouTuber Lilly Sign. Her YouTube Channel called IISuperwomanII has over 10 million subscribers with around 1.6 billion views (Youtube/IISuperwomanII). Though her Channel is usually of comedic and light-hearted nature, her negative experiences with mostly Air Canada made her want to share those.

Singh posted a video complaining about Air Canada's Service and crew competence titled "A Message to Air Canada" (Youtube, 2016a). This video alone reached over 2 million views and created a conversation in the comment section with over 10000 comments (YouTube, 2016b). Due to her comedic timing, all her videos are always done in a relatable way for the audience. Making her statements seem credible. The comments by viewers in the comment section often also support her viewpoint. This in turn means that those who have not made the experience yet, e.g. flying Air Canada have already a negative association. Another example would be the video titled "DO ALL AIRLINES SUCK?!" (YouTube, 2016c). Here she touches upon the subject of different carry on sizes between connecting flights as well as the additional fees for checking luggage with low-cost airlines (YouTube, 2016c). This video had around 1.7 million views and 11610 comments (YouTube, 2016c). Interesting about the comment section is that viewers started suggesting her airlines, which they consider better, e.g. Singapore Airlines or Emirates (YouTube, 2016c). Therefore, her video did not only show her point of view but also got a conversation going about this topic between viewers who might otherwise not have even thought about this topic. Referring back to Kim and Srivastave (2007), "consumers who may not have complete information about a product or service often make use of previous customers' opinions " (p.300). They found that people they trust influence consumers more than the companies' marketing efforts. High quality reviews have a positive direct effect on consumer's decision-making process, which then in turn can spread through social media networks (Kim and Srivastave). Considering the reach of some of these reviews on e.g. YouTube, companies could increase sales while driving down marketing costs, if they utilize the potential correctly. However, this utilization and the increasing number of brand deals on YouTube poses a potential threat. Some viewers might loose their trust if they feel like the YouTube Creators are only doing the brand deal for money and not because they do genuinely believe in the product or service. Furthermore, if too many YouTubers advertise the same product, consumer's trust could decrease while they might get a negative impression of the product due to over sharing. This could turn e-commerce into social-commerce. The short-term outlook of that might be prospering, however, the effect on society of a potential decrease in trust not in companies but in people is beyond the scope of this thesis.

An analysis conducted by Google (2014), YouTube's parent company, supports this point. Though their survey was about the entire decision making process of travellers online, their relationship with YouTube is important. The outcome of the survey of 5000 respondents is that "friends and family offline", the Internet, the TV and "friends and family online" critical are to for their travel inspiration (Google). They further show that social networking sites (83%) and search engines (61%) are the top online travel inspiration sources (Google). Out of those 83%, 42% answered that YouTube is their top inspiration (Google). Furthermore, they YouTube videos are most influential when in the early decision making process (Google). Focusing on the leisure travellers, they found that 65% used the videos when considering taking a trip, 48% when thinking about the nature of the trip and 61% when deciding on a destination (Google). Moreover, it is important to state that leisure passengers are using search engines like Google Search first before clicking on the respective company websites (Google). Google uses AdWords to provide advertising on their search engines. AdWords is a bidding system where those advertisements with certain key words, the highest bids in combination with a quality score are assigned top position on the website. (AdWords, 2016). Considering Google's AdWords service, consumers can heavily be influence through the results standing on top of the page. Here it is important to note that those key words entered by a consumer and the wording of the add might make consumer's believe they are clicking on an airline's website where as they are actually clicking on the one of an Online Travel Agency (OTA).

The influence of OTAs on consumer is not to underestimate. "One in three leisure travelers and one in two business travelers select an OTA for its superior site tools and options" (Google, 2014 p. 16). The figure below shows the reasons for this selection.

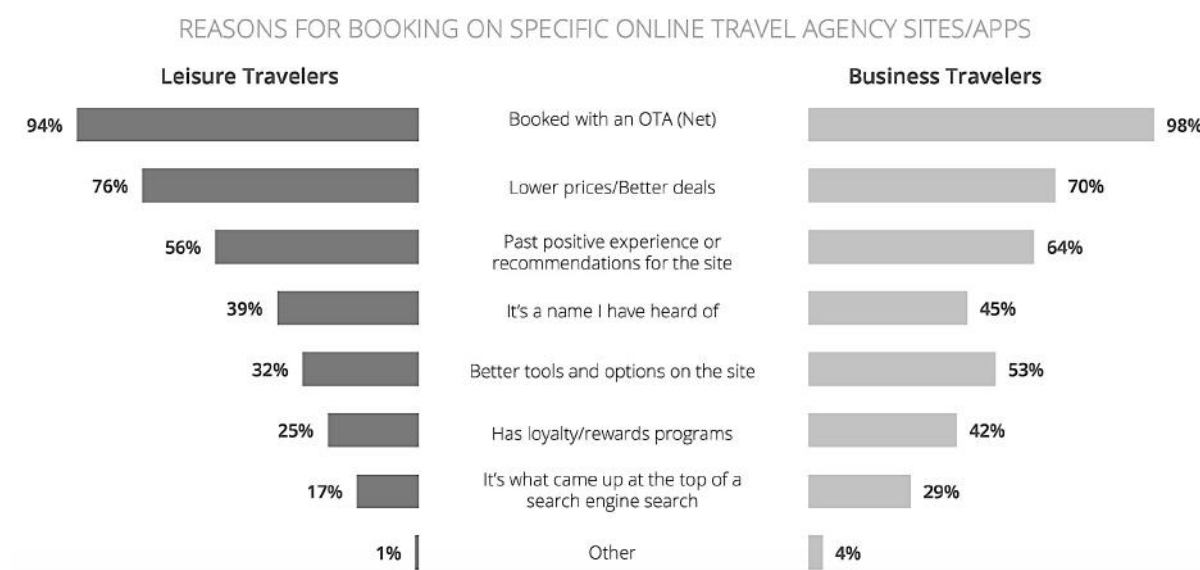


Figure 14: "Reasons for booking with OTAs" (Source: Google, 2014)

Due to consumer's perception on price discrimination and OTAs ability to compare industry wide, it is not surprising that price is the most important factor. However, it is important to point out that not a single OTA website offers an options other than a comparison on price, airlines and departure and arrival dates and time. Therefore, consumers almost do not have a choice but to be strategic. They can easily observe frequent price changes. Furthermore, they do not see the other benefits that they are missing out on e.g. free luggage, legroom. Therefore, an airline should either try to create traffic to their website to increase sales and prevent switching or negotiate with OTAs to widen their options on their website. Supporting this thought is that even frequent flyer loyalty programs do not keep consumers from switching. Moreover, 41% business travellers, which are normally the most loyal passengers, are less likely to plan a trip based on loyalty programs (Google, 2014). Combining the information about OTAs with the fact that search engines are often the starting point in a trip planning, it is not surprising that Google launched their own OTA called Google Flights in 2011 (CNN, 2011). Contrary to they Hotel Finder search side which shows search results influenced by their advertising relationships, flights is suppose to run free of paid relationships (Tnooz, 2011)

Though back in 2011, it was restricted to the US travel only, it re-launched the side in 2015 with more features e.g. the ability to conveniently share search finds with for example family members before booking (Brady, 2015). In 2016 they came out with an app called trips. This app does not only allowing for flight purchases but continue to support a consumer when on location (Newton, 2016). Information about restaurants, important landmarks, flight reservations etc. are all included in one app, which also works offline. This all in one feature does not only place a threat for airlines and OTAs but also for apps like Tripadvisor. Google seems to attempt to dominate the travel industry. A combination of the two, trips and flights in one app could be industry changing. At least, if consumers neglect the fact that Google can literally watch their every move, process it and try to react accordingly.

4. Empirical Study: Strategic Consumers and the Lack of Knowledge

Brexit. Trump. Erdogan. Charlie Hebdo. ISIS. Refugees. Paris 2015 November shooting. 2016 Munich shooting. Nice Attack. Unfortunately, the list can go on and on.

This leads to the question on how the airline industry and especially its consumers are affected by it in their decision-making. Rationally, safety should be priority more than ever before, especially in an industry prone to be involved in dangerous events. Given the possibility that safety is not the priority, the question arise as to how another factor e.g. price can become/stay the priority. Here, the influence of the media and OTAs is of interest. Finally, the question as to how airlines can counter act this potential trend is researched.

This chapter will first outline the research questions and explain the sampling. The data collection method and questionnaire design are described before coming to the data analysis. Finally, a conclusion on the research with an explanation of its limitation and further recommendation is provided

4.1 Research Questions and Sampling

This section of the market research consists of a description of the research and sample design used to conduct this research. The previously shown secondary research is the basis for this primary research. That shows clearly the existence of strategic consumers and how the online decision tools aid in that behavior. The secondary research also showed inconsistencies. Though scholars theorized that safety has to be the most important factor, consumers are still price focused possibly not always choosing the safest option available. The events occurring in the last 2 years in Europe but also worldwide cannot be directly compared to 9/11. The tragedy of 9/11 shook not only an entire nation but also society as a whole. Safety standards were updated or implemented. However, just like 9/11 people especially in Europe did not consider that terror attacks like Charlie Hebdo or the shooting in Paris in November 2015 could be right at their doorstep. The whole world seems to feel a little less safe. Therefore, it was wondered how this feeling created through the current global political situation reflects on the airline industry. An industry, which is aimed to bring people closer is now facing times where people seem to consider their differences more than what they have in common. Part of the questionnaire therefore focused on the change in consumer attitude due to a change in the political environment. Here it was also of interest to see in how far the media plays a role in consumer's behavior. This led to the creation of research questions three: *What is the relationship between countries' political stability and consumers' purchasing behavior?* and four: *What is the relationship between media press and consumer behavior?*

Furthermore, as shown by the secondary research, OTAs have a significant impact on the airline industry. However, in combination with the statement that consumers are strategic it led to the question of how strategic consumers are actually. Maybe consumers are solely focused on price because OTAs tell them to be. Therefore, research question 1: *Are consumers in the airline industry behaving strategically?*, 2: *What is the relationship between consumer perception on price discrimination and consumers' strategic behavior?* and 5: *What is the relationship between online travel agencies (OTAs) and consumer purchasing behavior?* have been established.

It is striking to see that OTAs solely offer a comparison on price as well as arrival and departure time, neglecting the other factors shaping a flight. To assess the possibly strong influence and lack of influence by airlines, consumers' knowledge on the product, they are strategically researching, as well as the difference between airlines is researched. This leads to the final research question 6: *Are consumers aware of product differences between airlines?*

To assess these questions, an online questionnaire was chosen. In order to observe potential differences between continents, regions or countries, the question was open to everyone with Internet access. Furthermore, it was created using Google Forms and in English language. To be able to assess potential outliers, the screening question "Have you ever booked an airline ticket?" was asked in the beginning. This question would allow understanding deviances then possibly explained by the fact that a survey respondent has had this experience yet, though this was not the case. There were no further conditions to answer the questionnaire.

The data was then analyzed. To understand cultural differences better a pivot table was used. As explained by scholars like Raassens, (2012) the sample size has to be of appropriate length (between 100 and 150 participants) in order to be appropriate. The goal was set on 150 and surpassed it with 154 respondents over the month of December 2016.

4.2 Data Collection Method

This section of the market research consists of a description on how the data for this research was collected. The goal of this market research is to give an insight on the influence of political events on consumer behavior. Furthermore, it is the aim to understand how well informed consumers are about the airlines. That is tied together with the effect of online environment. As mentioned before, a questionnaire was created to obtain these data. In order to reach the target group, this questionnaire was created in Google Forms. As the questionnaire also assesses consumers' behavior online, it was only fitting to distribute it through emails, social networks like Facebook and social communication apps like Whatsapp. Finally, the data from the survey was translated into digits.

4.3 Questionnaire Design

The general intention of the questionnaire was to understand political influence on consumer decision-making and price sensitivity in the light of media and OTA influences. Furthermore, the awareness of consumer between the differences of airlines is of interest.

Though potentially uncommon, the questionnaire did not have an introductory paragraph but immediately started with the screening question. This was done because consumer behavior and their perception on certain aspects are aimed to assess. Providing any information in the beginning might have been leading.

The entire survey is divided into six parts. The first part focuses on the factors that consumer perceive to be most important as well as a potential change in their evaluation of those due to recent political events. The second part assesses the respondents' research behavior prior to a booking. Here the focus was set on their perception of OTAs. The third section followed up on the influence of political events by questioning their itinerary planning when booking a flight. It is then put into context by giving a choice between price and safety. The fifth part concentrates on understanding what consumers consider as common practice in the airline industry, thereby testing their knowledge on the industry or lack thereof. This can give insight on why consumers are price driven and potentially impressionable and influenced negatively (from an airline's perspective) by the media or OTAs. The questionnaire is finished with questions about the respondents' demographic. This might give further insight on potential differences in answers.

In all, the questionnaire is created in a non-leading way. Its main objective is to understand a consumer's overall point of view and perception before going into detail of specific scenarios. The complete questionnaire can be found in Appendix D. An analysis of the outcome of the questionnaire is provided in the following section.

4.4 Data Analysis

In this part, the data obtained through the questionnaire will be analyzed in order to support or reject the claim made by the research question. The complete outputs can be found in Appendix D.

1. Research Question: Are consumers in the airline industry behaving strategically?

Though this research question was already extensively theoretically assessed in the previous chapter of this thesis, the empirical research also supports it. The question "What is the most important factor for you when purchasing a ticket?" was answered by 57,4% with price. Comparing this result with the time consumers spend researching, out of those 93 respondents 77 answered that they do not purchase

immediate but research. 44 of those 77 respondents even answered that they spend 3 days or more researching. This is the first indicator that at least some consumers in this sample behave strategically. Another support for this statement is that 72 out of the 154 respondents answered that they last booked with an OTA. As the purpose of an OTA is to find the best price, it can also indicate that strategic thinking is taking place.

How long do you normally research before purchasing an airline ticket?
(154 responses)

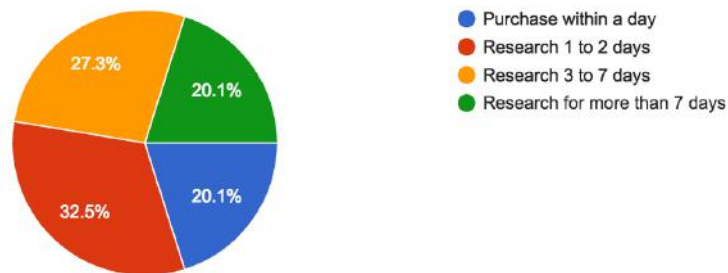


Figure 15: "Research behavior" (Source: Author, 2016)

This claim can be verified by the question "If you didn't answer "purchase within a day", why do you research of a longer period of time?", which was answered by 106 out of the 154 respondents. 80 of the 106 answered that they research due to fluctuating prices where as an additional 8 answered that they research for comparison between airlines, dates and price or accuracy of information. This answer leads to the second research question

2. Research Question: *What is the relationship between consumer perception on price discrimination and consumers' strategic behavior?*

Taking the findings from research question 1, the next step can be done. Comparing those that do not purchase immediately with the answer to the question "Do you think that airlines offer different prices for the same seat in the same travel class on any given flight?", leads to the outcome that 102 out of the 127 who answered with "yes" are also researching for more than one day. Given a sample of 154, 102 respondents shows great relation between consumer's perception on price discrimination and their strategic behavior. This is furthermore supported by the answer to the questions where the focus is set on when using OTAs. Here, 92,2% answered with Price.

Moreover, the question "When researching for a flight via an online travel agency (like Expedia). Do you think that these online travel agencies rank all their possible offerings by price, starting with the lowest?" can be compared to those that set their focus on price when making a booking. Here, consumers are almost evenly distributed. Of those 93 that consider price the most important factor, 47 think that

OTAs show all their offerings by correctly ranking them starting with the lowest price. 41 of the 93, do not think so. The rest of the consumers did not state an answer. Though this might be the first indicator of consumer's fallacy, at least 47 believe that they are strategic and obtain the best fare. In reality OTAs have contracts with airlines. As in the case with Lufthansa in 2015, they blacklisted the airline from their website (Hobica, 2015). However, as they are still under contract with the airline it cannot be done just like that. Expedia, Priceline and Kayak therefore simply didn't show the prices for the flight suggestion the consumer receives when searching. By doing that, the Lufthansa offer moved to the bottom of the page without showing the price. Only if a consumer clicked on it and followed the purchasing steps was the price disclosed. However, it is to assume that since like in this sample a least half of the consumers' believe that the lowest price is on top, bookings must have decreased for Lufthansa during that time. This is an indicator that consumers' perception of price discrimination and the effect on their decision-making is heavily influenced by OTAs.

3. Research Question: *What is the relationship between countries' political stability and consumers' purchasing behavior?*

Starting at the top of the questionnaire, consumers were asked to select their most important factor influencing their purchase. Out of those 154 respondents, here only 11.9% stated safety. The majority focused on price and departure and arrival time. The follow-up question, which asked if they evaluate the factors of decision-making differently due to recent political events, was answered by 46,8% with No. It is interesting to see is that only 27,9% answered with yes, which shows that at least their purchasing decision-making process has been altered by the political environment. The remaining 25,3% answered either with maybe or "I do not know". These 25,3% respondents leave room for discussion. One could argue that those that answered with a maybe (17,5%) are possibly subconsciously influenced. Where as the same could be said about those that answered with "I do not know", one could also argue that these customers have no interest in politics and do not follow the news. Though they might still be indirectly influenced, the influence that politics has on their behavior cannot be assessed.

It can be argued that whereas safety and political stability are not identical, the must be related. Feeling safe in political unrest is paradox. Therefore, a first indicator that safety might actually be higher valued by consumers as soon as it is taken away is provided through the question "Are there certain airlines you would not fly with?". 68,8% of the respondents answered with yes, meaning that there are airlines that they avoid. Analyzing their answers for the reason of their previous vote, 85 respondents stated that they would not fly with certain carriers to do a lack of trust in their safety. Additional 4 focused on the lack of plane maintenance, the risk of too little fuel filled up and a lack in comfort. In the same answer, consumer also mentioned poor employer treatment and safety in connection with reputation. 2

consumers indicated political reason for the avoidance of flying with certain airlines. Reputation was of importance for 6 whereas poor service experienced or heard of was a deciding factor for 12 respondents. Contrary, 20 respondents indicated that they are indifferent mainly stating, “Accidents can happen everywhere to everyone”. Additionally, 7 respondents stated that their focus is on price and that they will chose the lowest price possible Furthermore, several respondents expressed the wish to not fly low cost due to their concern on safety but due to budget constraints they do.

In order to assess not only safety concern but specifically the effect of political unrest, the answers of the question “When booking a multi-stop flight, do you consider the country or city where the stop/stops are made?” are compared with those of the question “Have you ever consciously avoided flying with an airline based in a political unstable country?”. Individually, the questions show that the majority of consumers consider where stops are made on long-haul flights. However, only 39% said that they have consciously avoided an airline due to their hub in a political unstable country. However, out of those consumers that answered that they consider where stops are made, which are a total of 89, 46 have done so because of the hub of an airline in a politically challenged country. Connecting this answer with the nationalities shows that Germans are making up a big part of that section. It has to be stated that though the sample is extremely diverse with 31 different nationalities, representing every continent except for Antarctica, 59 out of 154 are German. Therefore, the possibility of them dominating a group is much higher.

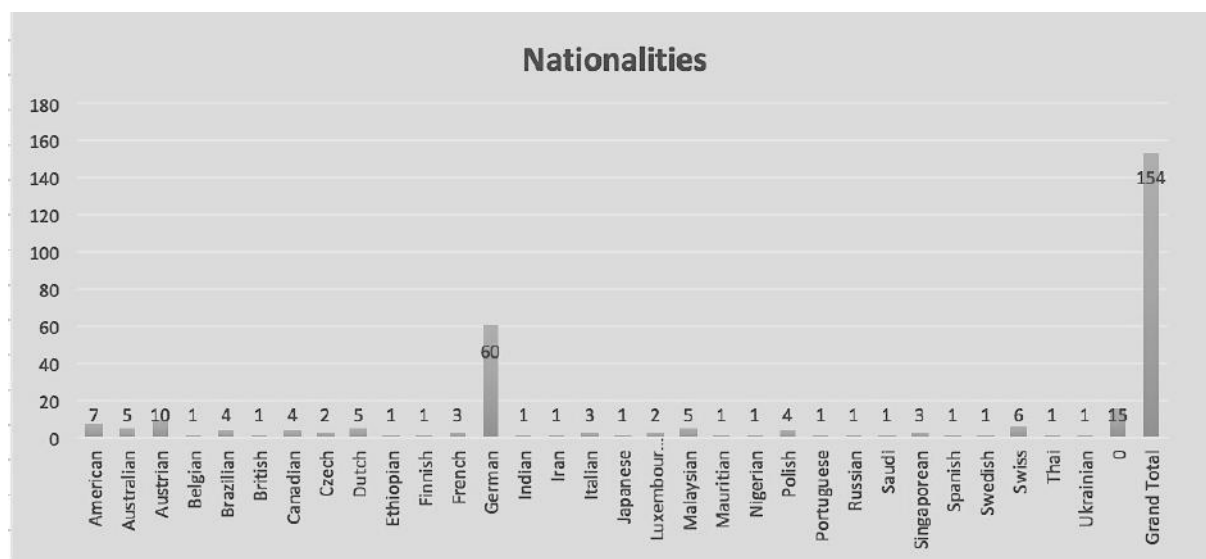


Figure 16: “Nationalities in Survey” (Source: Author, 2016)

Even more significantly is the statement when comparing the answers of “Would you book a multi-stop flight with stops in a city with political unrest?” with the follow up question if a price change would change their previous answer. Whereas 82,5% answered that they would not book a flight in a politically unstable region, 76,5 %

indicated that a price would not change their previous answer where as 3,9 % were unsure and 19,6% would change their previous answer. Here it has to be pointed out that the switch in answer can also result from consumers changing from they would book a flight in a politically unstable region but not for a higher price. This shows the extent of consumers' price sensitivity. However, what is of interest are those respondents that answered that they would neither consider booking a flight that connects in an unstable political country nor does a monetary incentive let them switch. This behavior is visible by 103 out of the 127/ 82,9% that indicated that they would not want to connect in politically unstable countries. The low switching of 24 respondents indicates that political stability has a significant effect on consumer's purchasing behavior. Furthermore, 68,2% of the respondents indicated that they consider the political stability today more than they did 2 years ago, supporting the impact of politics on behavior even more.

4. Research Question: *What is the relationship between media press and consumer behavior?*

Though the topic of media influence on consumer behavior is too extensive to fully assessed, it is apparent that 55,8% of the respondents last saw a media news story of the airline industry and not advertising for the airline industry. Though there is always the subconscious effect to consider as well as the repetition of media stories, the news of plane crashes and strikes has been remembered by consumers. As consumer previously indicated that bad service and recommendations would make them not fly with certain airlines regardless, the effect of negative news stories can never be positive. An exception might be if consumers have already experienced the airline and can trust their own judgment more than those of others.

5. Research Question: *What is the relationship between online travel agencies (OTAs) and consumer purchasing behavior?*

Where did you last purchase an airline tickets? (154 responses)

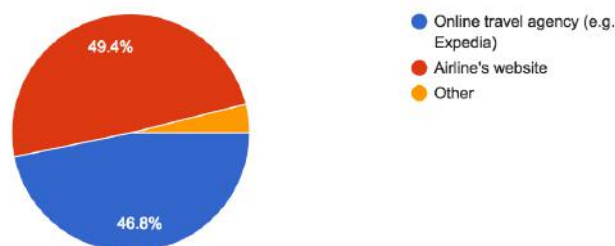


Figure 17: "Purchasing Point" (Source: Author, 2016)

The figure above shows an almost even split can be seen between those last used an airline's website and those utilized the service of an OTA. Out of the 6 respondents that indicated others, 3 used local agencies, 1 the airline connection through his friends and the remaining 2 were actually using OTAs as well. So far, one can only observe that OTAs dominate half the market regarding bookings. Comparing this figure with the answers given as to how long consumers research, it can be assumed that those other 80% that do not purchase within the first day did not only compare one airline's website. Though this cannot be supported through the data of this research, as the entire research process could not be assessed, it is unlikely.

Looking at the question on what respondents set their focus when using an OTA, 92,8% answered with price. Comparing that answer to the very first one ask about the focus, here only 57,5% answered with price. This can partially be explained by the option to select multiple factors for OTAs where as the first question was multiple choices. However, even comparing the two outcomes, it can be seen that twice, departure and arrival time as well as price had the most significant impact. However, considering OTAs, price seems to be almost always (92,8%) considered where as departure and arrival only was 44,8%. This can be related to the outcome of the question if respondents believe that *airlines offer different prices for the same seat in the same travel class on any given flight?* Here 127 consumers answered with yes hinted on the need to observe price changes strategically in order to not be "ripped off" by the airlines.

Though analyzed above, scholars have found that consumers are time conscious as much as they are price conscious. However, when looking on the question "*Which additional filter criteria do you miss on online travel agencies websites (e.g Expedia)? Select all that apply*". Respondents still went for the only price driven option presented (avoidance of additional fees) 52,6% of the time.

Therefore, it can be set that OTAs facilitate consumer's price sensitivity especially through the striking to display of price differences. However, it is also worth noting that only 11% indicated that no other factors are necessary in a OTAs flight comparison. The remaining respondents all had various suggestions on what an OTA could improve. If OTAs would shift their focus away from just price, airlines might have to compete less on price and consumers are able to see that different airlines means different product and service. That this is currently not the case will be assessed in the final research question.

6. Research Question: *Are consumers aware of product differences between airlines?*

Looking at the outcome of the research, one might get the impression that consumers think that they re strategic in their behavior though they are actually just following the OTAs lead. This is apparent when comparing the outcome of research question 5 with the answer respondents gave to the question “ *Different airlines offer essentially the same product only differentiated in price?*”. Here consumers where ask to rate on a 5 point Likert Skale, if they agree with that statement or not. Here 5 indicated a total disagreeing a 1 indicated agreement.

Different airlines offer essentially the same product only differentiated in price?

(154 responses)

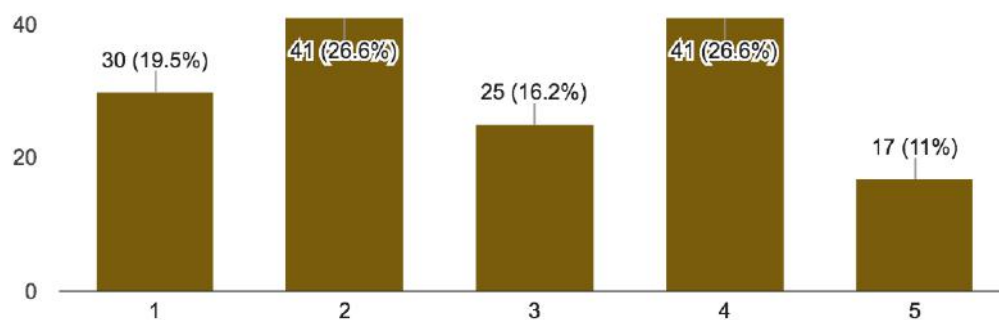


Figure 18: “The product” (Source: Author, 2016)

It is stinking to see that respondents seem to be very divided by this question. Their answer is very evenly distributed among the categories with the exception of 5, which is significantly lower.

Wensveen (2007) defines the airline’s product is not a tangible product at all but a service. Defining a service is challenging. It might not be as clearly distinguishable as tangible products are. When asking the respondents to define what they consider the product of an airline, 10 respondents indicated that they do not understand the question, 55 considered it as a service with benefits like comfort and entertainment, 82 considered the airline’s product the flight or plane itself. The remaining 6 understand the product of an airline as the food they offer. Taking this puzzling inside and combining it with the information shown above that 46,1% did not see a difference between airlines other than price, it becomes evident that consumers are not sufficiently informed about what airlines are actually offering and how they set each other apart. The price focus of OTAs is not helping. Though consumers are recognizing airline commercials and see them on various channels (dominated by social media and websites) it does not seem to inform consumers enough.

Do you think that given a certain travel class e.g. economy or business, the seat measures are standardized?

(154 responses)

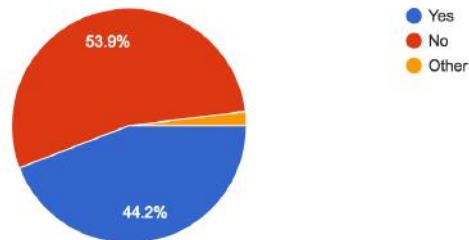


Figure 19: "Seat Standardization" (Source, Author, 2016)

The figure above shows that 44,2% of the respondents believes that seats are standardized. Different comfort does not seem to be recognized by that segment. Finally, when asking consumers why they believe prices in the airline fluctuate that frequently, 47 did not give an answer, 38 believe it is because of a profit increase for the airline, 22 considered price changes connected to timing of booking and 24 think it is due to yield management .

Why do you think do airlines charge different prices?

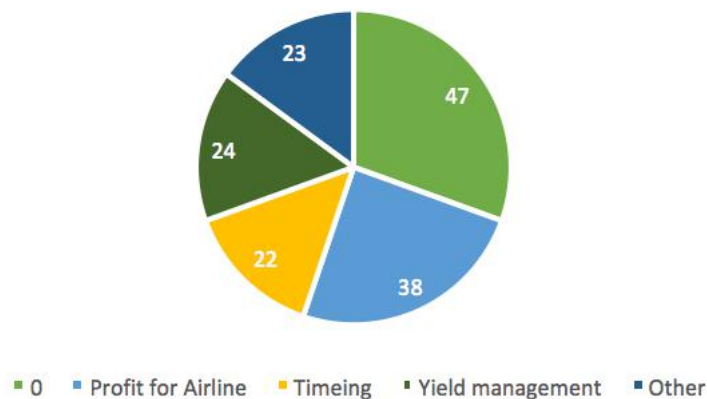


Figure 20: Price Differences (Source: Author, 2016)

Therefore, it has to be the airlines goal to improve the communication with their customers as well as potential ones. This could possibly decrease airline consumer's price sensitivity and allow for assessment of other factors such as fair employee treatment or environmental sustainability.

4.5 Limitation of the Study and Suggestions for Improvement

This section of the thesis assess the limit of the usefulness of information obtained as well as their relevance of conclusions drawn from the data obtained.

The survey conducted, has a sample size of 154 respondents. Given the outreach of the airline industry all over the world, the sample size has to be significantly increased to be able to general findings. Though a good variety of nations participated in the survey, more people of one nation have to take the survey in order to make claims based on cultural or country differences.

Furthermore, as the survey was conducted in English, those that do not have the skill to understand the language could not participate in it. This could potentially explain the small number of participants over the age of 55. Combining this information with the fact that the survey was distributed online leads to the explanation why the survey was dominated by the age group of 19 to 30 (80,4%).

Conclusion

The aim of this thesis is to provide a better understanding of the influencing factors on consumer decision-making in the airline industry. First the microeconomic significance of price discrimination was outlined to lay a basis for the discussions to come. The existence of price discrimination not only in monopolies was assessed as well as implied to the airline industry. By explaining the three types of price discrimination, it was established that the airline industry could be classified as 2nd degree price discrimination. Here it became apparent already that price discrimination cannot only be seen as a positive or negative impact on the economy and society.

On the one side, price discrimination allows for a frequent operating service with an extensive network available to everybody. The airline industry has thereby shaped today's economy and society, as we know it. Facilitating connection between those very far apart is otherwise only achieved through the telephone or the Internet. For the airline itself means price discrimination effective yield management. It allows assessing cost that occur e.g. volatile fuel prices as well as fluctuation in demand. By then being able to match the cost curve with the demand one, airlines can provide the desired capacity while operating efficiently. As this market is highly competitive, a deviation from this strategy would either lead to a unsustainable position or the forced exit of the market due to an uncompetitive cost structure. Though airlines might gain a monopoly position on a certain route, price discrimination ensures a competitive market. However, different viewpoints lead to various opinions on this topic.

Price discrimination is, as the word suggests a discrimination of some for the benefit of others. Though price discrimination can be economically justified, the ethical implication and the message it send to the society are different. This is reflected by the view of consequentialists versus deontologists. Consequentialists see on the act of price discrimination itself but assess it, if the consequence of that act is immoral or not (Edwards, 2014). Contrary, Deontologists focus on the moral of the act itself (Edwards). It comes down to the question between efficiency and fairness. The question of fairness is one that has to be very delicately handled by the industry. Where as discrimination of certain groups is socially acceptable, discrimination on other groups is not. This suggests that the individuals perception on price discrimination can only be generalized to a certain extend as the individual might feel differently about it based on his or her personal experiences.

The effect that price discrimination has on consumer behavior is assessed next. Here it is found that trust, service quality, reputation, the brand, ease usage of websites, consumer satisfaction, and of course price have an effect on consumer behavior. The list of influencing factors is not extensive though as the research of consumer behavior in the airline industry is extensive.

However, very few scholars lay the focus on the distinction between myopic and strategic consumer. Strategic consumers can essentially be defined as consumers that try to anticipate the airline industry's behavior and then react accordingly. By being able to assess when prices are the lowest or when not to book a flight, the consumer is trying to do the airline's job of yield management. Interestingly, LLCs are not affected by the existence of strategic consumer's reaction to price discrimination, as much as long established airlines, which compete on quality.

The influence on consumer perception through the Internet is assessed next. Here a visible trend is observable. Consumer trust moves away from companies and to individuals, which give an inside in their usage of the product or service. Many different companies do this across various markets successfully via e.g. YouTube or Amazon. Though Amazon is not applicable to the airline industry, the concept of peer recommendation is. This line of thought has yet to be exploited to its fullest potential.

The scholars, Martin and Rubin (2013) show an important connecting between strategic consumers and online decision tools. They see OTAs as a tool, which allows consumers to be strategic more than the consumer aims to be strategic himself. OTAs gather information and distribute it to the customer who reacts accordingly. That is the point where the primary research continues.

The research was conducted upon six different research questions, which aimed to identify consumers' strategic behavior and influence on price discrimination also considering the OTAs role in that. Furthermore, it was the general intention to understand the political influence on consumer decision-making and price sensitivity in the light of media and OTA influences. The awareness of consumer between the differences of airlines is of interest as well as the customers' knowledge on the service the airline industry provides.

The research found evidence for all six research questions, where the lack of knowledge was obvious. Therefore, recommended to continue the research in this field. OTAs effect on strategic consumers showed that consumers were party behaving strategically without understanding why prices fluctuate. This misconception on the consumer's side can be partially responsible for the price focus of this industry. OTAs compare mainly on price and do not do these entirely objective. The effect of ads on search sides as been analyzed in the secondary research and is also in the primary research visible. However, the commercials do not seem to inform people enough to understand that how airlines differ from each other. This is something that has to be followed up on, as it might give the airline industry the necessary push to move away from a sole price focus to a wider focus on the entire service the airlines provide or do not provide.

Finally, the effect of political instability on consumer behavior is assessed. Here it is clear that recent political and world economic events have influenced the consumer's view on certain aspects. In the regards to the airline industry, this means the concern for safety. Whereas customers might first intuitively always choose price, the study shows that political instability of countries leads even price sensitive consumers be more concerned about safety. Tying the two thoughts together, if OTAs also allowed for different factors in their research, consumers might be more aware and knowledgeable of their decision consequences.

Therefore, it is recommended to conduct a survey with an extensive sample size representing significantly all major countries or areas. Furthermore, ways have to be researched to effectively transfer knowledge to the customer with is mutually beneficial and does not solely steer in one direction. If brand deals like seen on YouTube could be an appropriate mean should be analyzed further. An increase in consumer understanding and knowledge could possibly decrease airline consumer's price sensitivity and allow for a focus on factors such as fair employee treatment or environmental sustainability. If done correctly, airlines, OTAs and consumers can benefit.

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YouTube/PewDiePie (2016). *PewDiePie*. Retrieved on December 12rd, 2016 from <https://www.youtube.com/user/PewDiePie/about>

YouTube/ISuperwomanII (2016). *ISuperwomanII*. Retrieved on December 12rd, 2016 from <https://www.youtube.com/user/ISuperwomanII/about>.

YouTube/Zoella (2016a). *Zoella*. Retrieved on November 21st, 2016 from <https://www.youtube.com/user/zoella280390/about>.

YouTube/Zoella (2016b). *Christmas Jumper Haul*. Retrieved on December, 2nd 2016 from <https://www.youtube.com/watch?v=chTVxX-ulMQ>

List of Figures

Figure 1: Global Annual Growth in air traffic passengers	06
Figure 2: Network Expansion	06
Figure 3: Allocational and Distributional Effects of Monopoly	09
Figure 4: Monopoly Price Discrimination	10
Figure 5: Producer revenue Figure in the perfectly competitive market	13
Figure 6: Producer revenue under perfect price discrimination	13
Figure 7: Two-Part Tariffs at Disneyland	14
Figure 8: 3rd Degree Price Discrimination through market separation	16
Figure 9: Market Segmentation by Air Carriers	22
Figure 10: Consumer decision-making process	29
Figure 11: Maslow's Hierarchy of Needs	38
Figure 12 Internet meme of Maslow's hierarchy of needs	40
Figure 13 Decision Making Process of Online Customers	43
Figure 14: Reasons for booking with OTAs	46
Figure 15: Research behavior	55
Figure 16: Nationalities in Survey	57
Figure 17: Purchasing Point	58
Figure 18: The product	60
Figure 19: Seat Standardization	61
Figure 20: Price Differences	61

Appendix A: Birthdays and telephone numbers survey

Over a 10 days time span the research was conducted via Google Survey. The outcome presented in graphs 1 and 2 below. The respondents were asked to rate their likeliness of remembering a birthday or phone number of family members, closest friends and immediate co-worker on a scale from 1 to 5. The answer 1 represents not being able to remember any birthdays or phone numbers by heart where as the answer 5 means that all phone numbers or birthdays of the respected category are remembered. It was followed up with the question of where the respondents will check for the information of a birthday or phone number respectively in case they do not remember it by heart. The full graphical presentation of all the questions can be found in the appendix.

Graph 1 below give an overview of where the respondents check first if they cannot remember a birthday by heart.

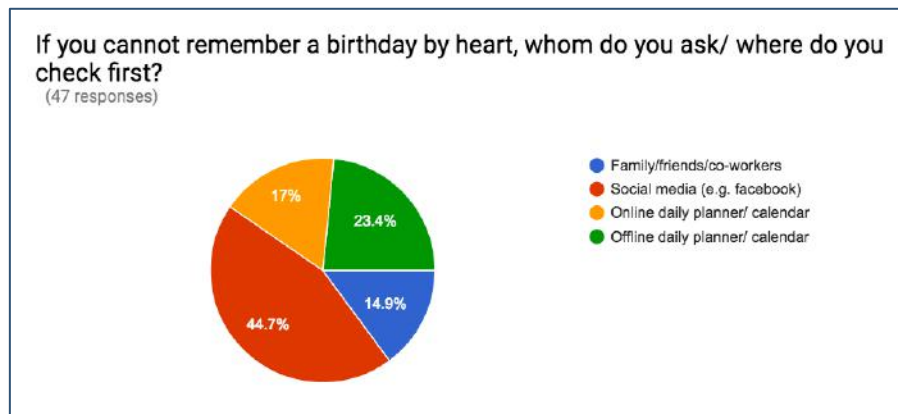


Figure 2: "Survey results regarding source of information consulted when unable to remember a birthday of a family member, friend or co-worker" (Author, 2016a)

It is striking to see is that 21 out of the 47 respondents (44,7%) use social media as a primary source of information over their own calendar or contacting family members, friends or co-workers. The possible implication this might have on the overall social engagement between people is beyond the scope of this paper. However, comparing it to the overall remembrance of birthdays something stands out. Where as 57.4% of the respondents have given a 5 in regards to remembering their immediate family's birthdays, this number decreases to 40,4% in the closest friends question (cf. appendix). When looking at the immediate co-workers rating of "5" regarding birthday remembrance, it stands out that only 8.5% have given this answer. Even more striking is that 40,4% indicated with a 1 that they do not remember any birthday of a co-worker. Under the friends and family section this rating was selected by 8,5% and 2,1% respectively.

To get a better grasp, the answers are grouped. Combining the rating of answer 1 and 2 as an indicator for not remembering and 4 and 5 as one for remembering birthdays one thing stands out. 10,6% people do not remember their immediate

families birthday by heart where as this increases for close friends to 27,6% and co-workers to a 59,5%. This result can have several reasons. On the one hand, people might not put much significance on birthdays anymore or do not care about social relationships in e.g. the work environment. This can be supported by fact that the survey was conducted in the German culture. Considering Geert Hofstede's six-dimension model, Germany is classified as an individualistic country (Hofstede, 2016). An individualistic society as defined by Hofstede is one where the individuals primarily focus on themselves and their immediate family's well being rather than the one of the whole group they belong to. Personal preference determines the individuals' loyalty and the parent-child relationship is in the focus of the rather small families (Hofstede).

At the same time, the question arises as to how this summed up ratio differs between different age groups. It is visible (c.f. appendix) that only respondents belonging to the age group of less than 30 years make up the 10,6% of those that forgot the birthday of a family member. Furthermore, out of the 57,4% that answered with a "5", 51,9% is belonging to the age group of over 50 (cf. appendix). Additionally, 93,4% of this age group answered with a 5. This distribution gets more prominent when comparing the results for closest friends and co-workers. It is striking that in all three questions, the over 50-age group is only present in the category 4 and 5. Furthermore, regarding the co-workers' birthday, this age group is the only one that answered with a 5.



Graph 1: "Age distribution of co-workers' birthdays respondents" (Author, 2016a)

This results leads to two possible conclusions. Either the over 50-age group is an exception and not representable or the trend that the older generation remembers these information better than the younger one has some truth to it.

A follow-up survey would need to be put into place to verify or falsify the first possible conclusion. However, the second one can be supported when looking at the results of the other four age groups. Comparing the results for both friends and co-workers,

there is a visible reoccurring trend for the age group 30-50 years. In both questions, there is an increasing trend of respondents of that age group in the higher remembrance categories. Regarding the friends category, 20% answered with a 2, 30% with a 3 and 50% with a 5 (cf. appendix). The same holds for the co-worker question, here 30% answered with a 1 and 70% with a 2. As visible in figure 3 above, the same holds true for the age group over 50 years with the exception of the category 5 under co-workers. Here a decreasing trend is visible in the over 50-year category compared to the percentage in that same age group at selected a 4.

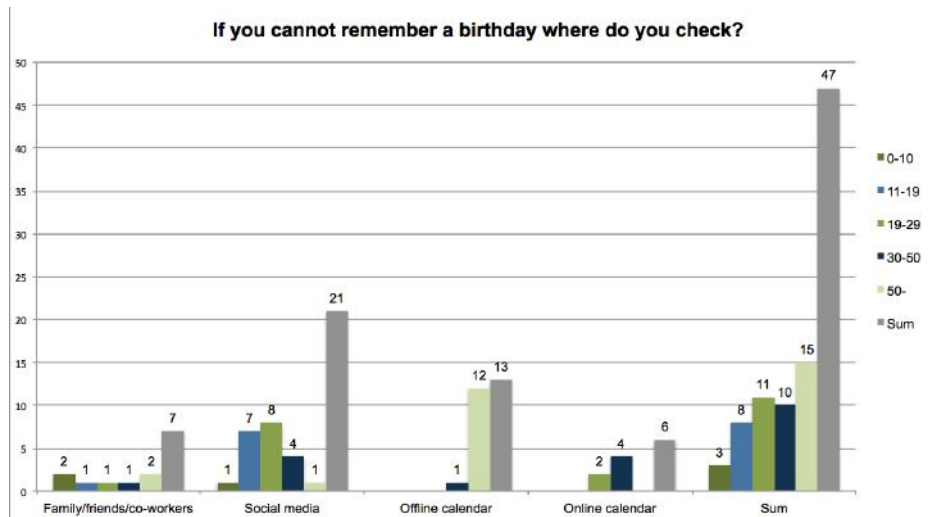
The exact opposite holds true for the younger age groups. Regarding co-workers' birthdays, 72,7% of the 19-29 aged respondents answered with a 1 and the remaining 27,3% selected a 4. The same is visible for the age group 11-19, though it is not completely stringent. Here 62,5% answered with a 1, 12,5% followed with a 2 and 25% answered with a 3. Nevertheless, the over all trend also in this age group is decreasing.

From this part of the research it can be concluded, that there is a decreasing trend visible with decreasing age regarding the storage of basic interpersonal information. Comparing between the younger ages groups, this statement does not stringent hold the younger the respondents get. One would assume that the younger the respondents get the less they remember these information. Therefore, it could be expected that a higher percentage of younger respondents (e.g. age group 11-18 years old) is answering with a 1 compared to those of a higher age group (e.g. 19-29 years old). As visible in graph 3 above, the 19-29 year olds are represented with a 72,7% of their population where as only 62,5% of the 11-18 year old respondents answered with a 1. The co-worker questions statutes only as one example and this trend is visible in all three questions asked.

Therefore, the question comes to mind, why this might be the case and whether or not this is of significant. As hypothesized above, today's consumers get flooded with new information constantly. Therefore, one possible explanation for this outcome could be that within the younger consumer segment (until age 30), those who are older are facing more information to store and process than those who are younger. Now the question arises whether this specific age group is more exposed to receiving and processing information or if interpersonal relationships matter less to them. It could be the case that out of all the age groups, this one most dominantly searches strategically for "new storage spaces" in today's society where they are required to process more information than possible. Regarding this topic, Cathy Cavanaugh, Professor at the University of Florida points out: "Throughout human history, human brains have elastically responded to changes in environments, society, and technology by 'rewiring' themselves. This is an evolutionary advantage and a way that human brains are suited to function." (Anderson & Rainie, 2012, p.1)

As the research shows, though most people of all ages tend to remember birthdays of those they have a family tie with, this does not hold for co-workers or even close

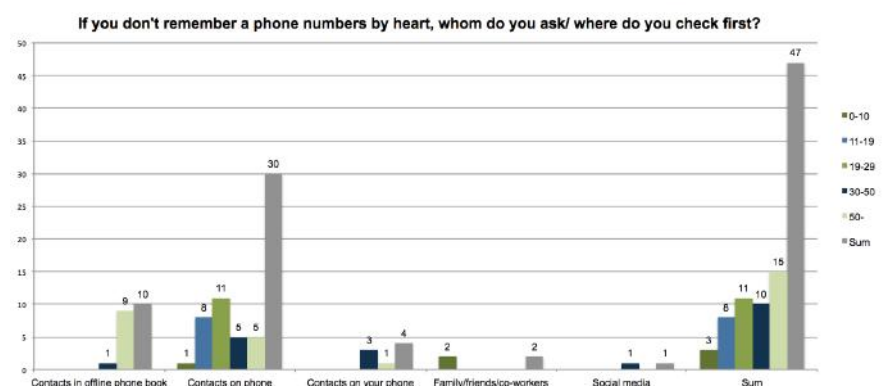
friends. In today's environment, people have more connections through e.g. globalization in their workplace. Furthermore, disregarding the level of relationship maintained, staying in contact with more people is fostered by Internet. Ever since a as founded and labeled those one is connected with as a friend, the definition of friends might also have been modified (Facebook, 2016a). Now more birthdays need to be remembered and the non-virtual friendships or acquaintanceships are shorter in time.



Graph 2: "Results per age regarding birthday remembrance" (Author, 2016b)

With an attempt to support the theory of utilizing new information storage spaces, the second part of the survey was conducted. It is important to distinct the difference between questions regarding birthdays and telephone number. The birthday of a person is a piece of information, which is fixed. In nearly all cases this information does never change. The only change that occurs is the people in a person's life.

Furthermore, whereas families used to have one phone number for the whole family, now every member has often several phone numbers as well as the conventional telephone network number



Graph 3 "Results per age regarding phone number remembrance" (Author, 2016c)

It is beyond this paper and survey to conclude on the greater extend this utilization of the Internet has on the overall human behavior. However, a general trend can be seen.

Part I: Birthdays and Telephone Numbers Survey Results

In the following, the survey questionnaire and results are shown.

QUESTIONS RESPONSES 47

47 responses

SUMMARY INDIVIDUAL

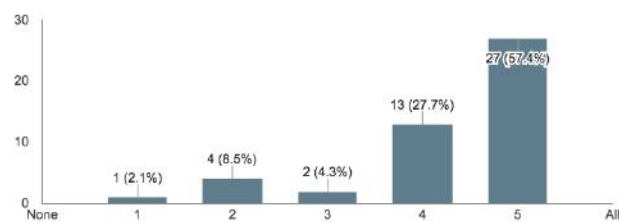
Not accepting responses ☐

Message for respondents

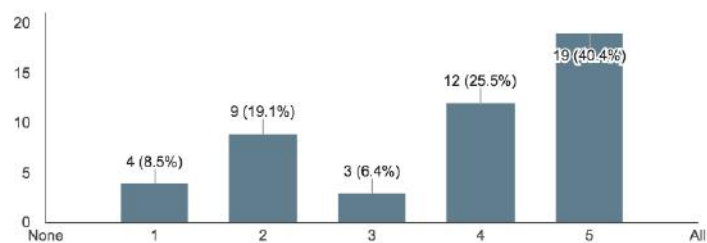
This form is no longer accepting responses

Birthdays

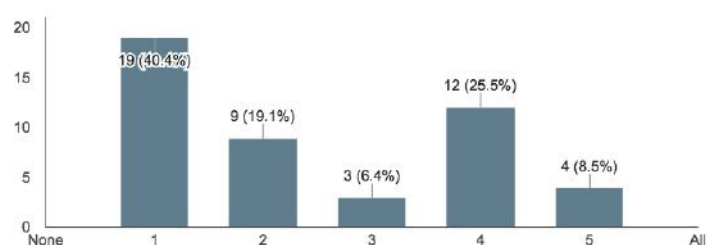
... your immediate family members' birthdays? (47 responses)



... your closest friends' birthdays? (47 responses)

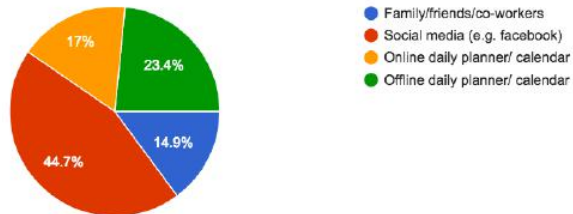


... your direct co-workers' birthdays? (47 responses)



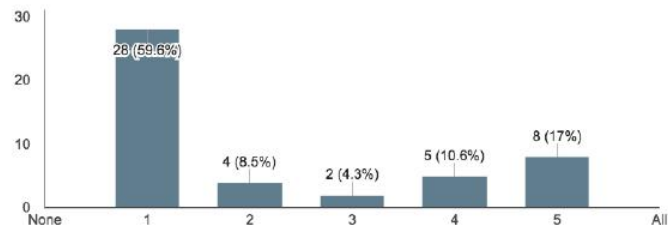
If you cannot remember a birthday by heart, whom do you ask/ where do you check first?

(47 responses)

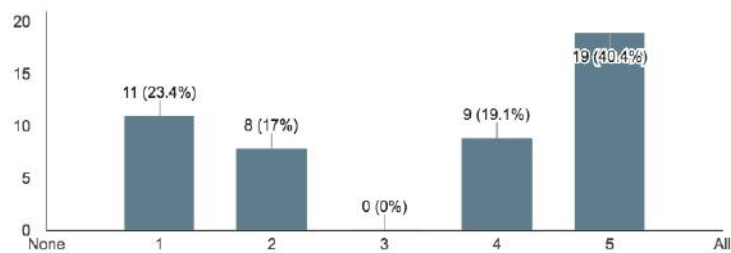


Telephone numbers

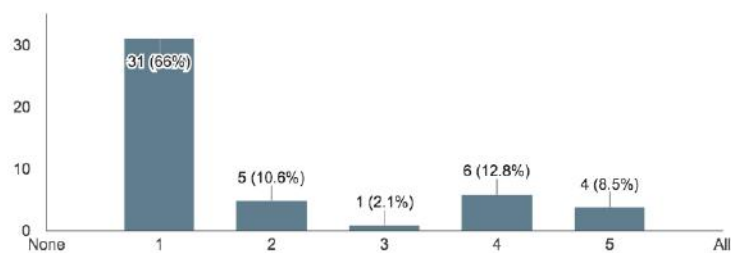
... your immediate family members' cell phone numbers? (47 responses)



... your immediate family members' landline numbers? (47 responses)



... your closest friends' cell phone numbers? (47 responses)

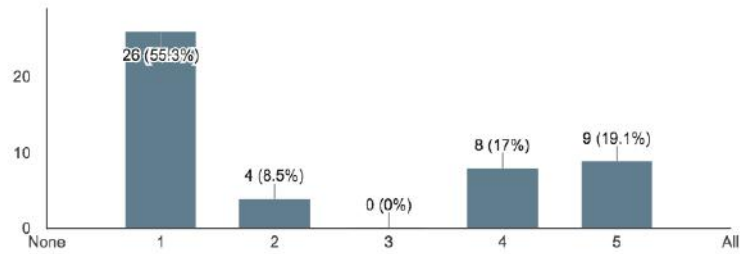


QUESTIONS

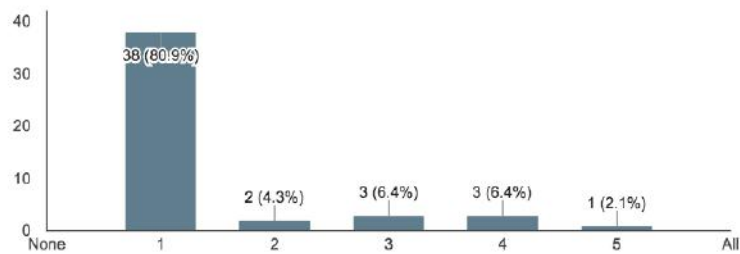
RESPONSES

47

... your closest friends' landline numbers? (47 responses)



... your immediate co-workers' cell phone numbers? (47 responses)

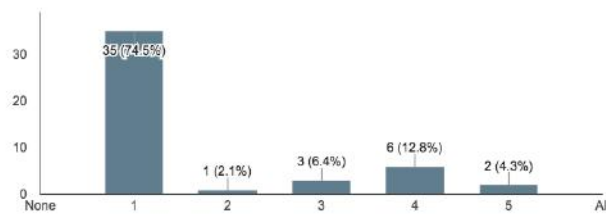


QUESTIONS

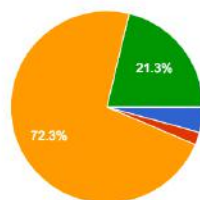
RESPONSES

47

... your immediate co-workers' landline numbers? (47 responses)



If you don't remember a phone numbers by heart, whom do you ask/ where do you check first?
(47 responses)



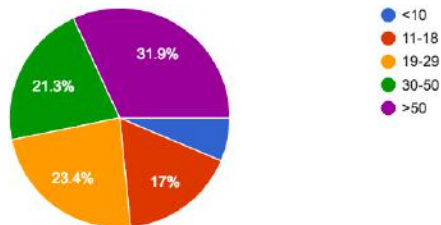
- Family/friends/co-workers
- Social media (e.g. facebook)
- Contacts on your phone
- Contacts in your offline address and phone book

Do you have any additional comments? (0 responses)

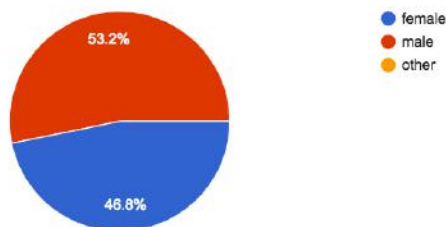
No responses yet for this question.

General

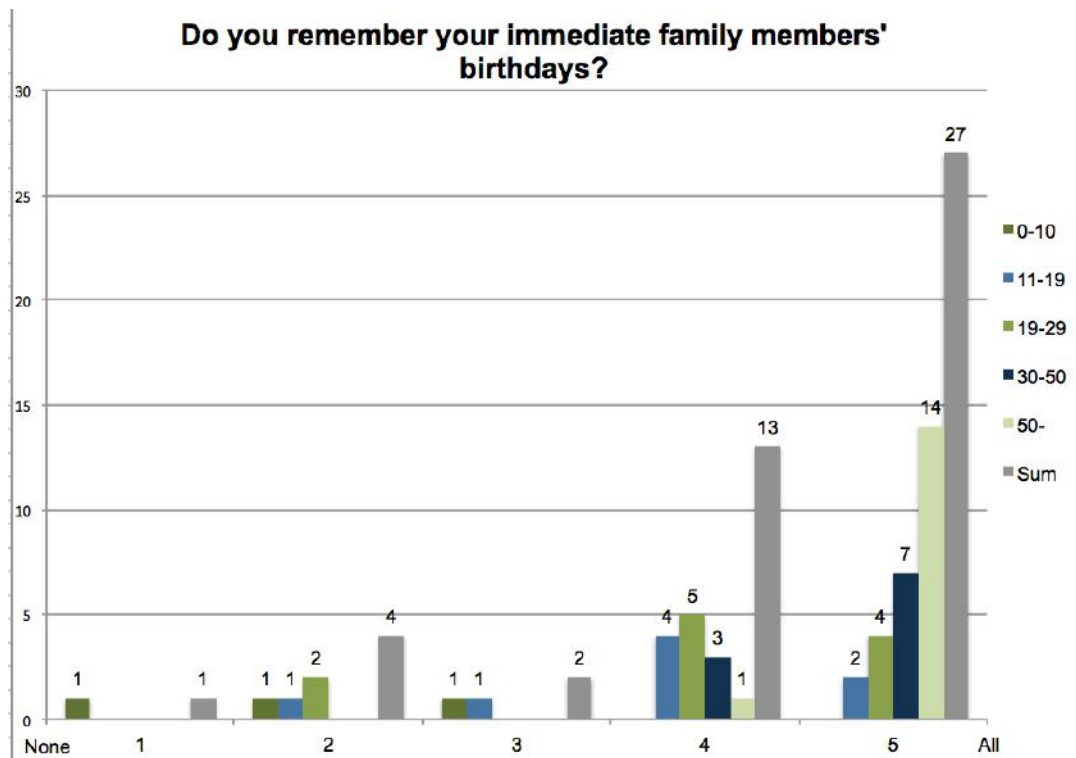
How old are you? (47 responses)

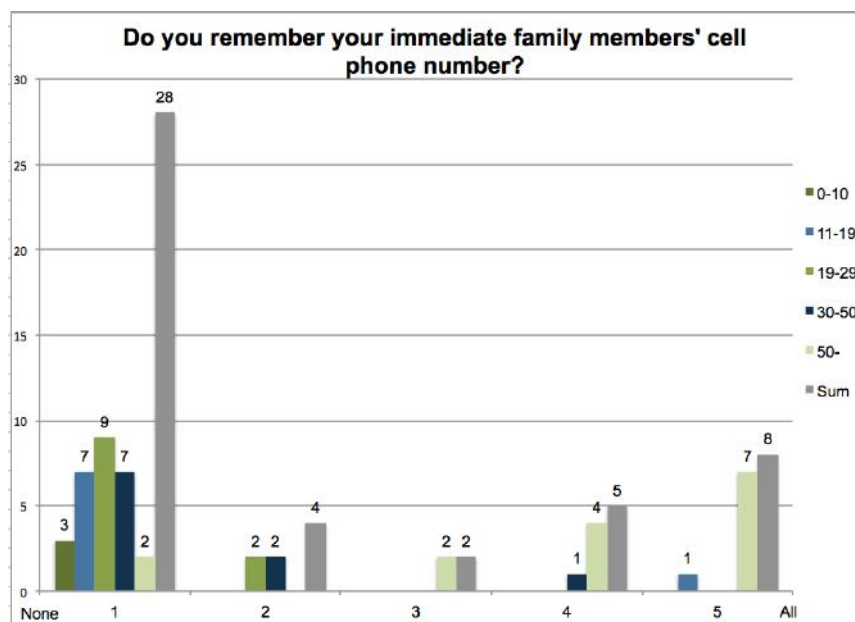
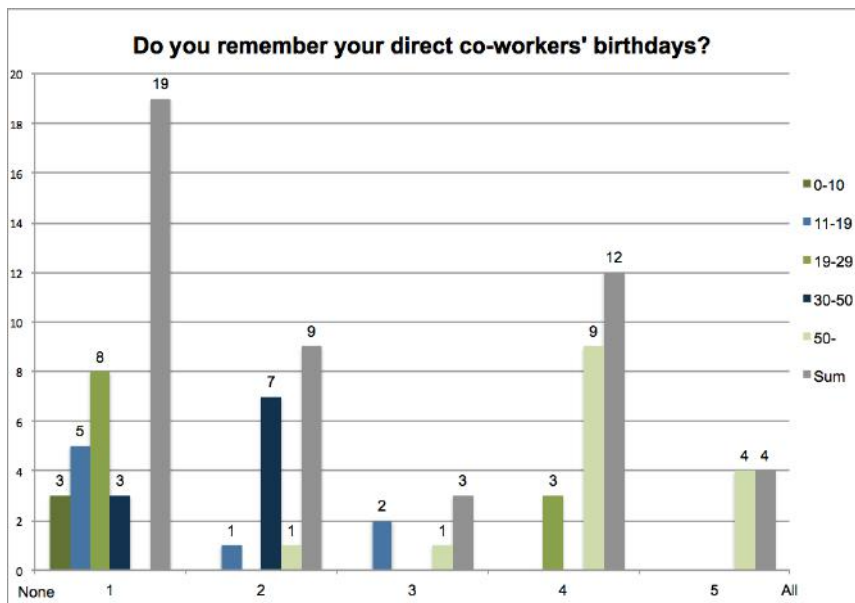
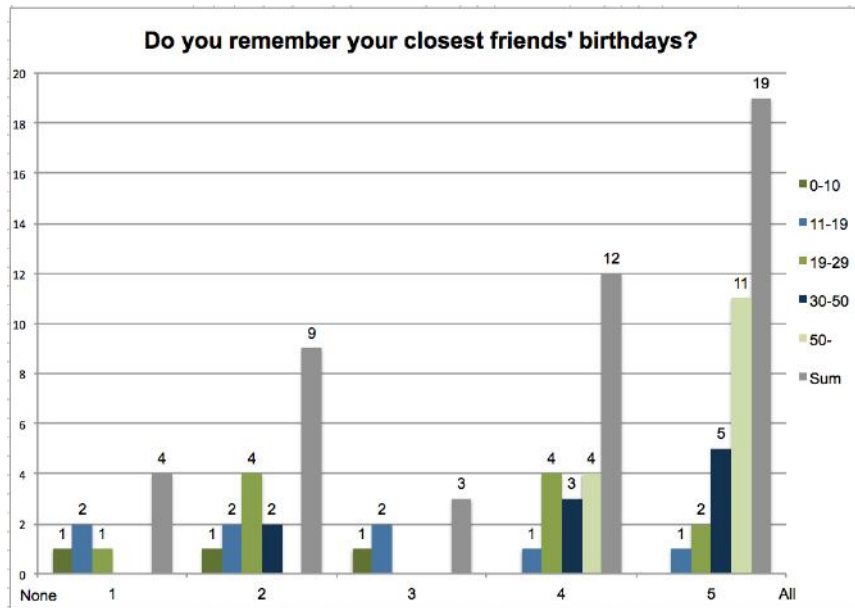


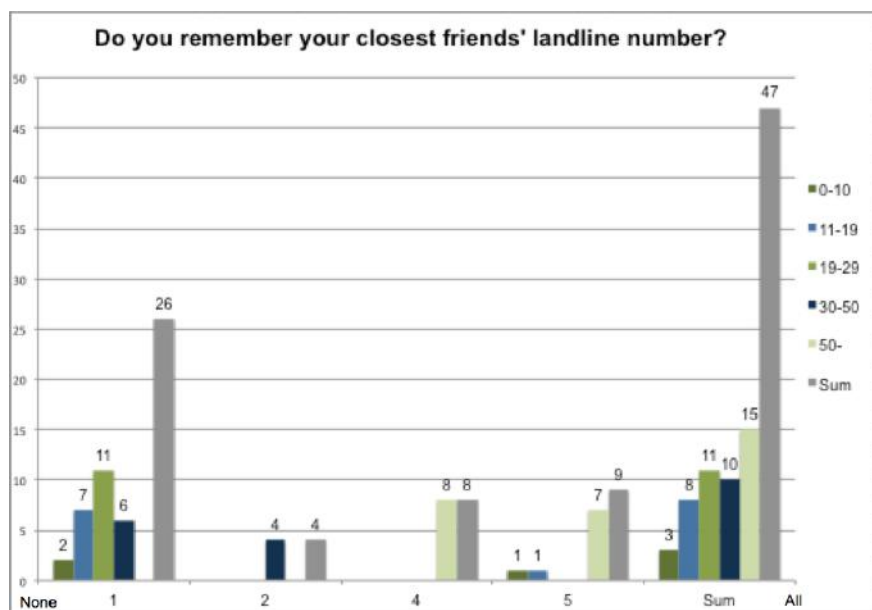
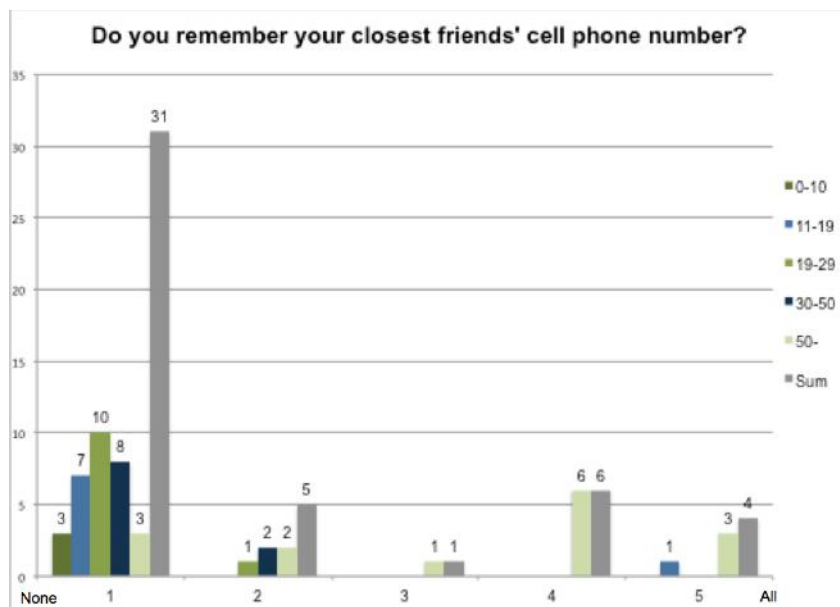
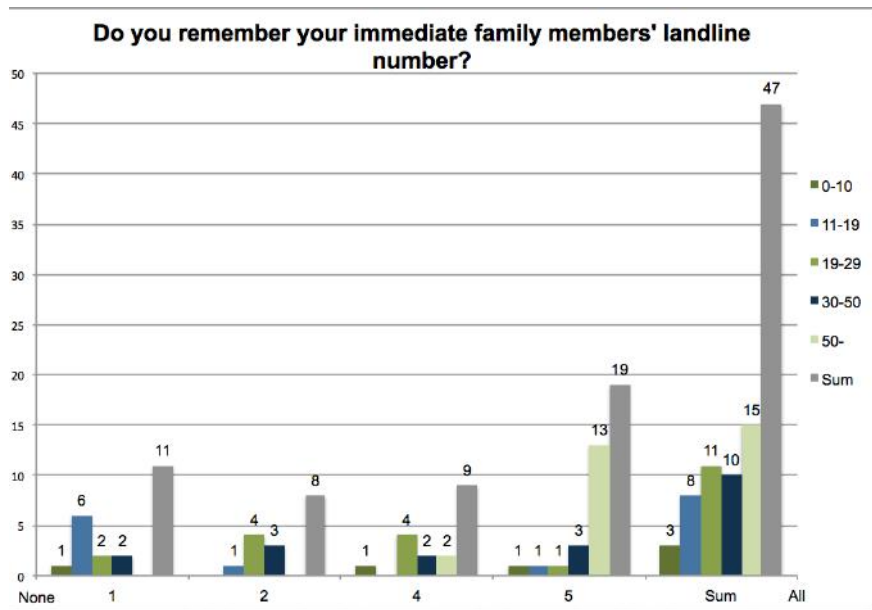
What is your gender? (47 responses)

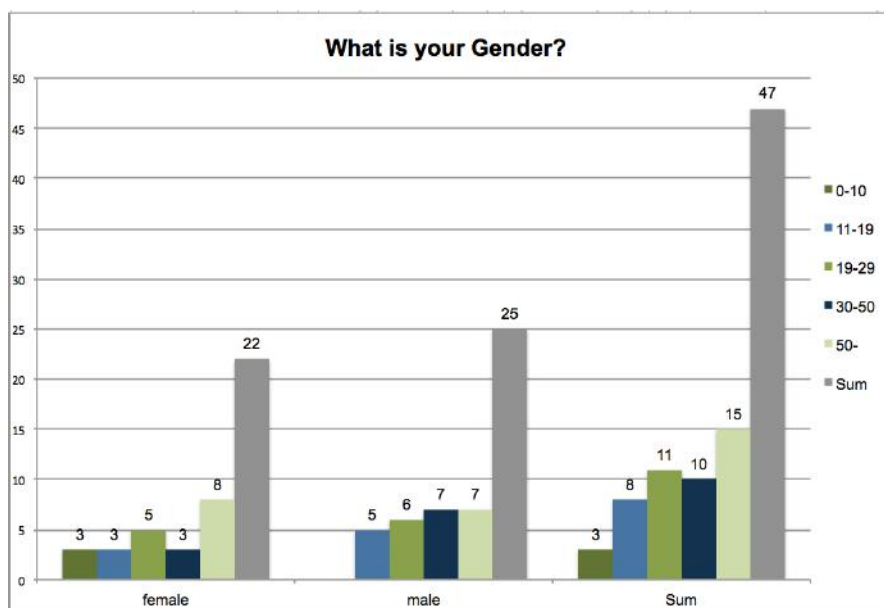
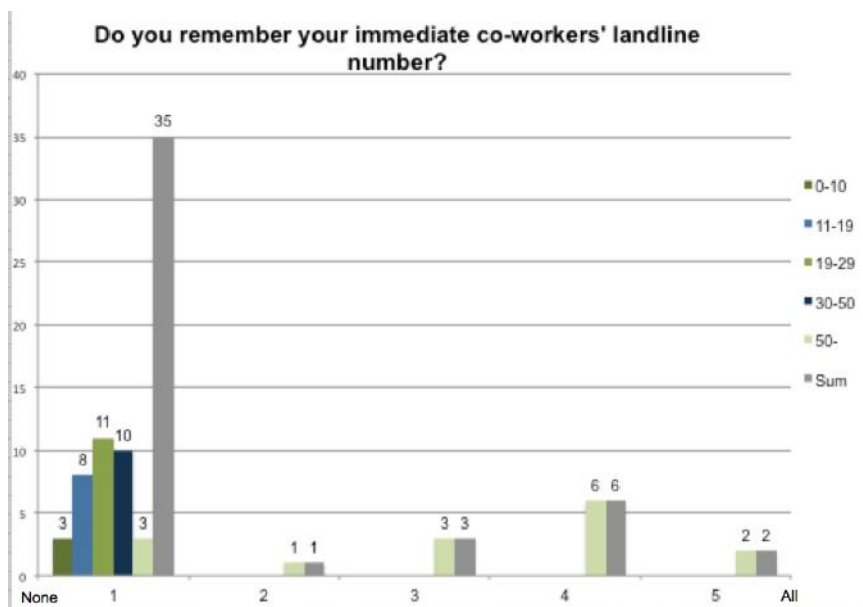
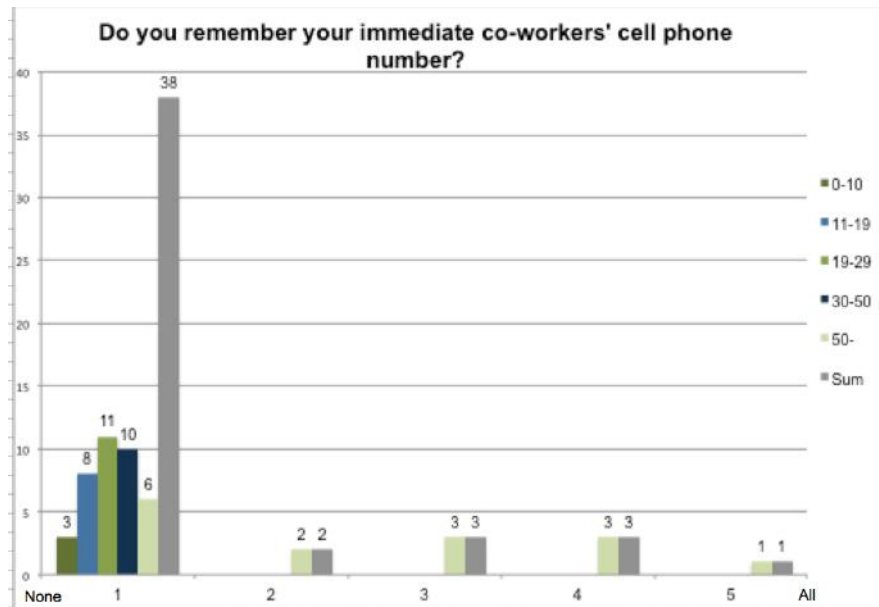


1.2 Calculated Results Birthdays and Telephone Numbers Survey









Part II: Questionnaire Birthdays and Telephone Numbers Survey

Birthdays and Telephone Numbers

Thank you very much for participating!

* Required

Birthdays

How well do you remember...

... your immediate family members' birthdays? *

	1	2	3	4	5	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	All

... your closest friends' birthdays? *

	1	2	3	4	5	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	All

... your direct co-workers' birthdays?

	1	2	3	4	5	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	All

If you cannot remember a birthday by heart, whom do you ask/ where do you check first? *

- ☐ Family/friends/co-workers
- ☐ Social media (e.g. facebook)
- ☐ Online daily planner/ calendar
- ☐ Offline daily planner/ calendar

NEXT

Page 1 of 3

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Birthdays and Telephone Numbers

* Required

Telephone numbers

How well do you know...

... your immediate family members' cell phone numbers?

	1	2	3	4	5	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	All

... your immediate family members' landline numbers?

	1	2	3	4	5	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	All

... your closest friends' cell phone numbers? *

	1	2	3	4	5	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	All

... your closest friends' landline numbers? *

	1	2	3	4	5	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	All

... your immediate co-workers' cell phone numbers? *

	1	2	3	4	5	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	All

... your immediate co-workers' landline numbers? *

	1	2	3	4	5	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	All

If you don't remember a phone numbers by heart, whom do you ask/ where do you check first? *

- ☐ Family/friends/co-workers
- ☐ Social media (e.g. facebook)
- ☐ Contacts on your phone
- ☐ Contacts in your offline address and phone book

Do you have any additional comments?

Your answer

BACK

NEXT

Page 2 of 3

Never submit passwords through Google Forms.

General

How old are you? *

- ☐ <10
- ☐ 11-18
- ☐ 19-29
- ☐ 30-50
- ☐ >50

What is your gender?

- ☐ female
- ☐ male
- ☐ other

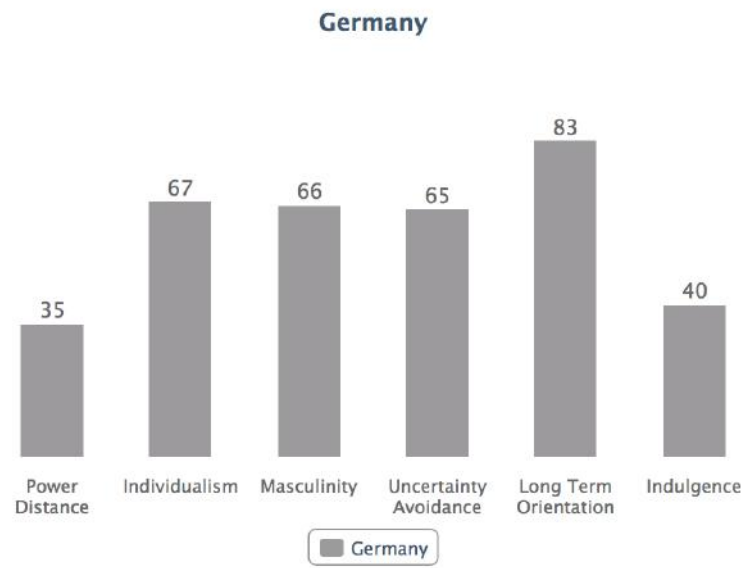
BACK

SUBMIT

Page 3 of 3

Never submit passwords through Google Forms.

Part III: Germany analyzed using Hostede's 6-D Model



Source: Hostede (2016)

Appendix B: Price Discrimination



PRODUCT INFO

MODEL	Spinner (4 wheels)
COLOUR	Metallic Silver
MATERIAL	Made of 100% Makrolon Polycarbonate
DIMENSIONS	55.0 x 40.0 x 20.0 cm
VOLUME	38.0 L
WEIGHT	2.2 kg
WARRANTY	Limited 5 year global warranty

Source: Samsonite (2016a)



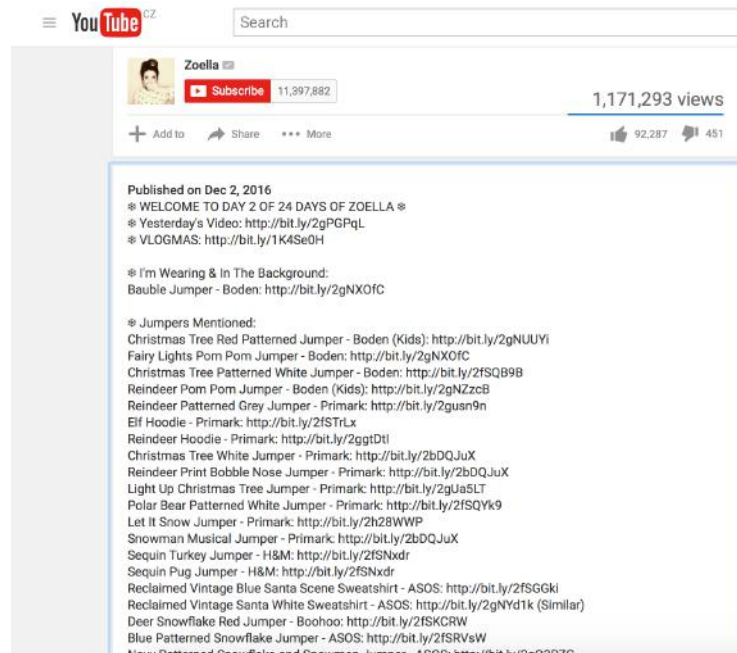
PRODUCT INFO

MODEL	Spinner (4 wheels)
COLOUR	Metallic Silver
MATERIAL	Made of 100% Makrolon Polycarbonate
DIMENSIONS	81.0 x 54.0 x 30.0 cm
VOLUME	124.0 L
WEIGHT	3.9 kg
WARRANTY	Limited 5 year global warranty

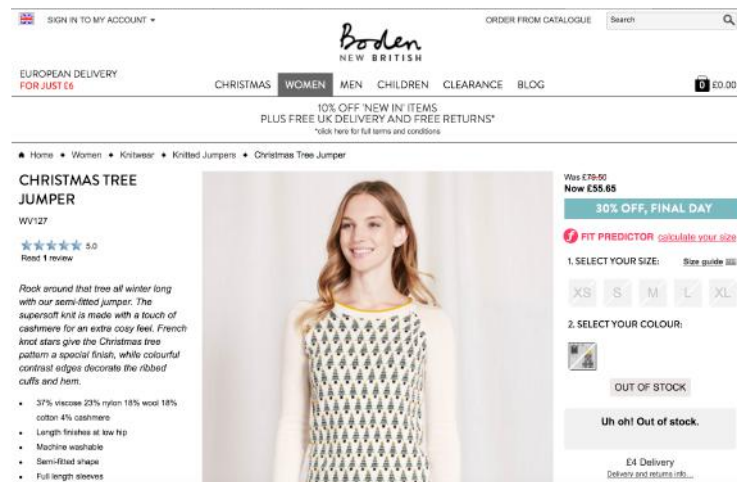
Source: Samsonite (2016b)

Appendix C: Beyond Price Discrimination

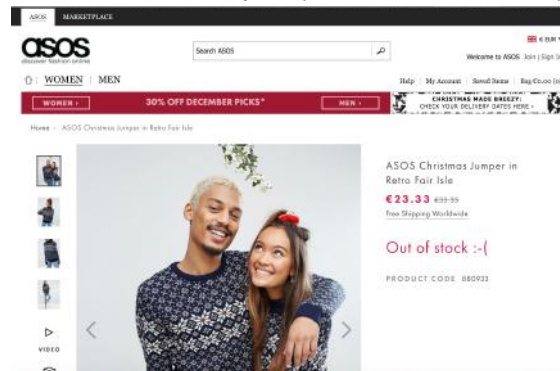
Part 1: YouTuber Zoella



“Zoella Christmas Jumper Haul” (Source: Youtube/Zoella (2016b))



“Christmas Tree Jumper” (Source: Boden, 2016)

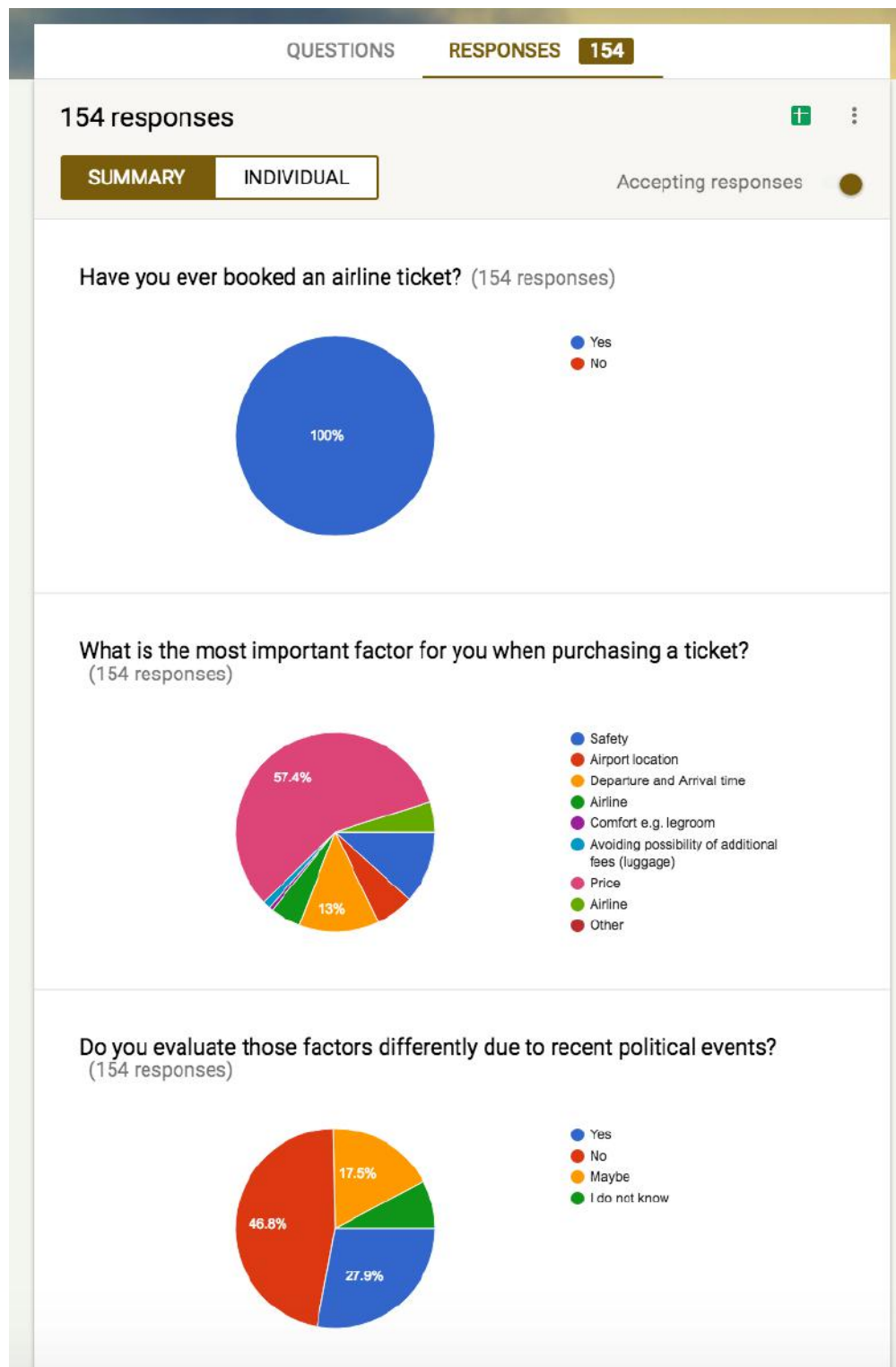


“ASOS Christmas Jumper in Retro Fair Isle” (Source: Asos, 2016)

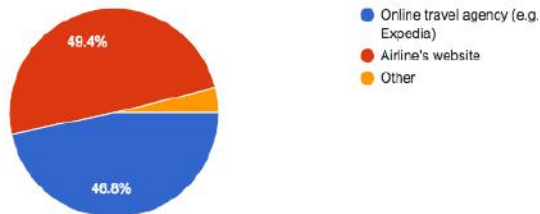
Appendix D: Airline Industry Consumer Experience Survey

This appendix shows the questionnaire and analytics of the airline industry consumer experience survey.

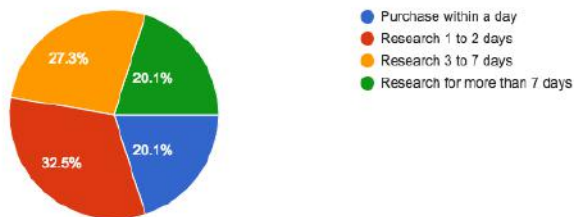
Part I: Empirical Results: Airline Industry Consumer Experience Survey



Where did you last purchase an airline tickets? (154 responses)



How long do you normally research before purchasing an airline ticket? (154 responses)



If you didn't answer "purchase within a day", why do you research of a longer period of time (106 responses)

To compare prices

Price

Price

To find the cheapest ticket

because I want to have the best price and this means most of the time sunday evening.

To see if prices going up or down

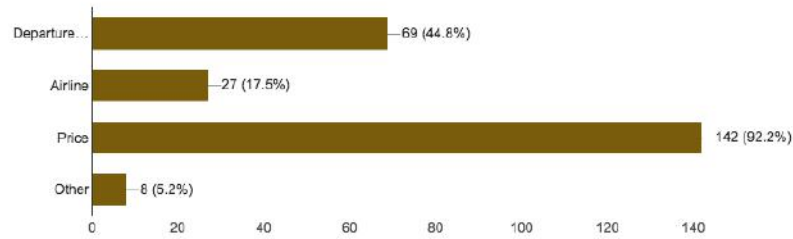
Lower Price

Need some time to rethink before buying the ticket

Most of the times I don't have a fixed date to go or urgency to book the flight

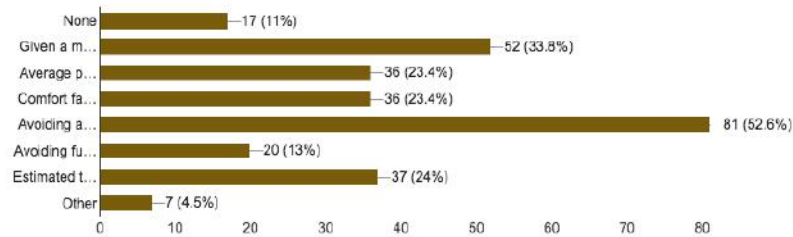
When you research via online travel agencies e.g. Expedia, you set your focus on:

(154 responses)



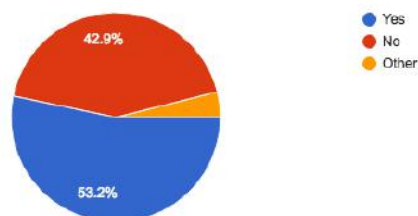
Which additional filter criteria do you miss on online travel agencies websites (e.g. Expedia)? Select all that apply.

(154 responses)

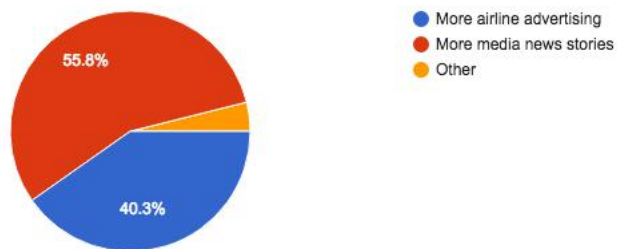


When researching for a flight via an online travel agency (like Expedia). Do you think that these online travel agencies rank all their possible offerings by price, starting with the lowest?

(154 responses)



Did you last see more airline advertising or more media news stories about the airline industry?
(154 responses)



Which airline was advertised/ what was the media news story about?
(112 responses)

plane crash

plane crash

plane crash

plane crash

plane crash

plane crash

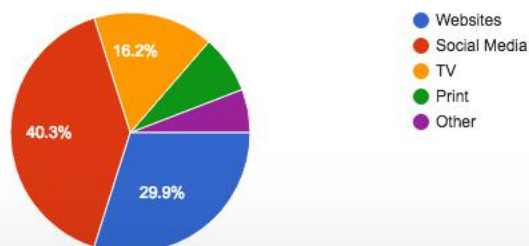
strike

strike

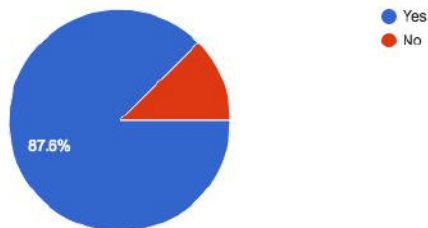
strike

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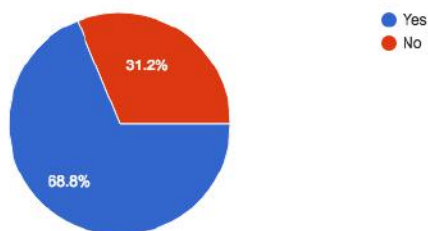
Where did you last see airline advertising? (154 responses)



Do you remember which airline you last flew with? (153 responses)



Are there certain airlines you would not fly with? (154 responses)



Please explain your answer (154 responses)

no different

Airlines for countries which are politically unstable because they normally fly over their home Base in that country

I accept all airlines

I am most interested in a reasonable price, thus I basically fly with every airline.

No-name airlines in countries outside of Europe because I don't feel safe when I don't know the airlines.

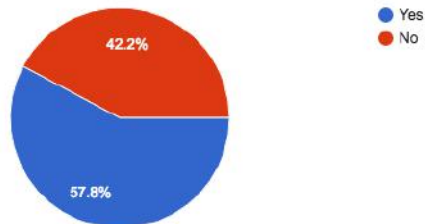
Some african airlines do not have the same safety standards as europeans, and i've made bad experience with ryan air

Safety/additional fees

Due to lack of safety and reputation

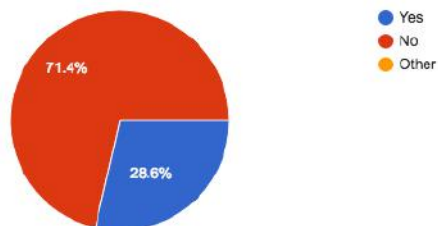
When booking a multi-stop flight, do you consider the country or city where the stop/stops are made?

(154 responses)



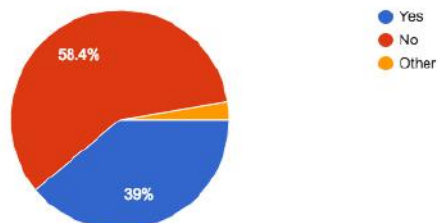
Does your answer change when you are flying with an airline you are not familiar with?

(154 responses)

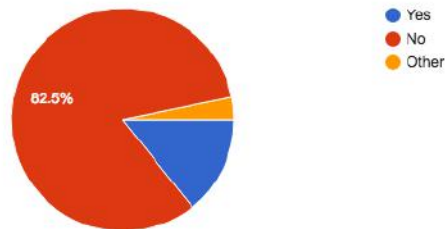


Have you ever consciously avoided flying with an airline based in a political unstable country?

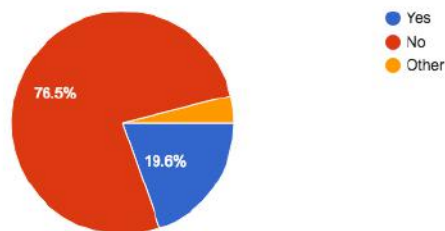
(154 responses)



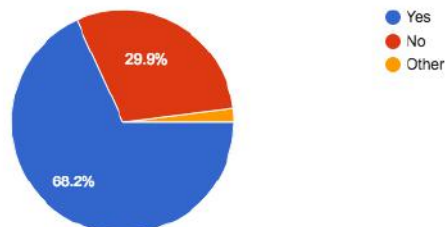
Would you book a multi-stop flight with stops in a city with political unrest?
(154 responses)



Would you change your previous answer if the ticket price were moderately lower/higher for a flight with stops in a politically stable city?
(153 responses)

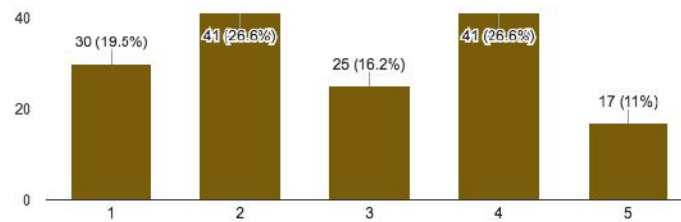


When flying, do you consider a country's political stability today more than you did two years ago?
(154 responses)



Different airlines offer essentially the same product only differentiated in price?

(154 responses)



What do you consider the product for an airline? (154 responses)

Safe trip

the Flight

Quality of the services

The journey from point A to point B

Transport from one place to another

+ the service around it like food, drinks, comfort, legspace, fast check-in etc.

This question is unclear. I suggest you rephrase it for clarity.

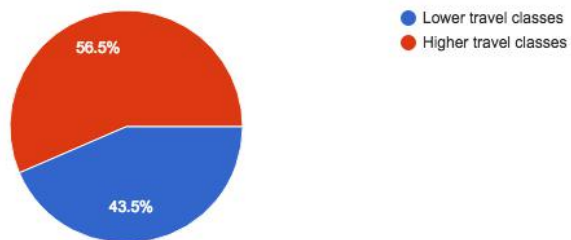
I don't understand this question.

Flight+food(long-distance)+comfort

Food, service

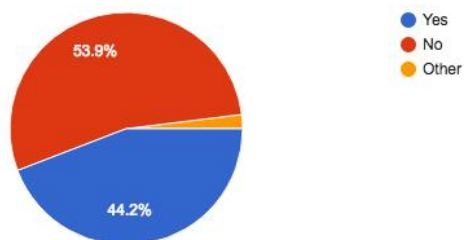
Do you think that product and service in the airline industry vary more between airlines in lower travel classes (premium economy, economy) or higher travel classes (business, first class)?

(154 responses)



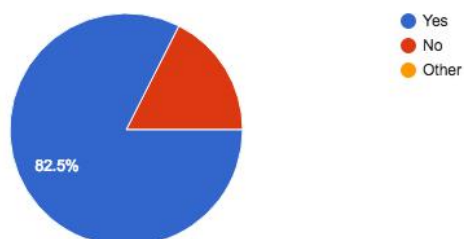
Do you think that given a certain travel class e.g. economy or business, the seat measures are standardized?

(154 responses)



Do you think that airlines offer different prices for the same seat in the same travel class on any given flight?

(154 responses)



If yes, why do you think do airlines charge different prices? (109 responses)

Yield management

Different times until departure, the closer the more expensive

Different times until departure, the closer the more expensive

Price depends on Date of booking

depending on demand - and this is related to departure times, season, price etc

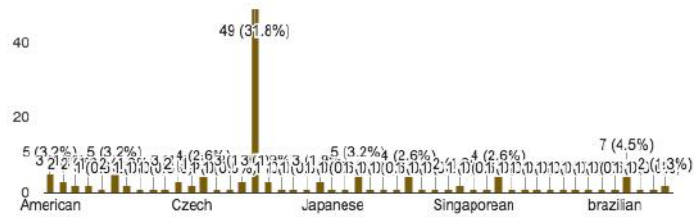
To generate as much benefit as possible by attracting different customer segments
yield management and discounts

Time of booking

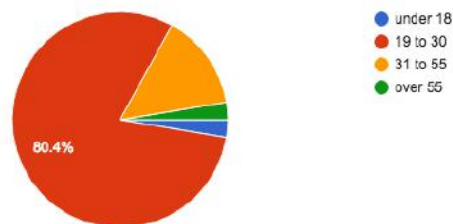
Reputation

time of booking, high/low season

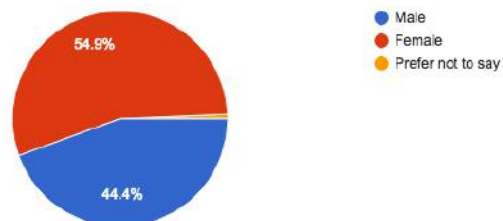
What is your nationality (140 responses)



What is your age? (153 responses)



What is your gender? (153 responses)



Thank you very much!

Part II: Questionnaire Airline Industry Consumer Experience Survey

Airline Industry Consumer Experience

Thank you very much for participating in this survey

*** Required**

Have you ever booked an airline ticket? *

☐ Yes

☐ No

What is the most important factor for you when purchasing a ticket? *

☐ Safety

☐ Airport location

☐ Departure and Arrival time

☐ Airline

☐ Comfort e.g. legroom

☐ Avoiding possibility of additional fees (luggage)

☐ Price

☐ Airline

☐ Other: _____

Do you evaluate those factors differently due to recent political events? *

Choose ▼

NEXT Page 1 of 6

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Airline Industry Consumer Experience

* Required

Where did you last purchase an airline tickets? *

- ☐ Online travel agency (e.g. Expedia)
- ☐ Airline's website
- ☐ Other: _____

How long do you normally research before purchasing an airline ticket? *

- ☐ Purchase within a day
- ☐ Research 1 to 2 days
- ☐ Research 3 to 7 days
- ☐ Research for more than 7 days

If you didn't answer "purchase within a day", why do you research of a longer period of time

Your answer _____

When you research via online travel agencies e.g. Expedia, you set your focus on: *

- ☐ Departure and Arrival time
- ☐ Airline
- ☐ Price
- ☐ Other: _____

Which additional filter criteria do you miss on online travel agencies websites (e.g Expedia)? Select all that apply. *

- ☐ None
- ☐ Given a multi-stop flight, selection/ avoiding of connecting airport/city
- ☐ Average punctuality of airline
- ☐ Comfort factors e.g legroom
- ☐ Avoiding additional service fees e.g. luggage
- ☐ Avoiding fully booked planes
- ☐ Estimated time to go through security at the given airport
- ☐ Other: _____

When researching for a flight via an online travel agency (like Expedia). Do you think that these online travel agencies rank all their possible offerings by price, starting with the lowest? *

- ☐ Yes
- ☐ No
- ☐ Other: _____

BACK

NEXT

Page 2 of 6

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Airline Industry Consumer Experience

Thank you very much for participating in this survey

*** Required**

Have you ever booked an airline ticket? *

- ☐ Yes
- ☐ No

What is the most important factor for you when purchasing a ticket? *

- ☐ Safety
- ☐ Airport location
- ☐ Departure and Arrival time
- ☐ Airline
- ☐ Comfort e.g. legroom
- ☐ Avoiding possibility of additional fees (luggage)
- ☐ Price
- ☐ Airline
- ☐ Other: _____

Do you evaluate those factors differently due to recent political events? *

Choose 

NEXT



Page 1 of 6

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Airline Industry Consumer Experience

* Required

Do you remember which airline you last flew with?

- ☐ Yes
☐ No

Are there certain airlines you would not fly with? *

- ☐ Yes
☐ No

Please explain your answer *

Your answer

When booking a multi-stop flight, do you consider the country or city where the stop/stops are made? *

- ☐ Yes
☐ No

Does your answer change when you are flying with an airline you are not familiar with? *

- ☐ Yes
☐ No
☐ Other: _____

Have you ever consciously avoided flying with an airline based in a political unstable country? *

- ☐ Yes
☐ No
☐ Other: _____

Would you book a multi-stop flight with stops in a city with political unrest? *

- ☐ Yes
☐ No
☐ Other: _____

Would you change your previous answer if the ticket price were moderately lower/higher for a flight with stops in a politically stable city?

- ☐ Yes
☐ No
☐ Other: _____

When flying, do you consider a country's political stability today more than you did two years ago? *

- ☐ Yes
☐ No
☐ Other: _____

BACK

NEXT

Page 4 of 6

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Airline Industry Consumer Experience

* Required

Different airlines offer essentially the same product only differentiated in price? *

	1	2	3	4	5	
Totally agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally disagree

What do you consider the product for an airline? *

Your answer

Do you think that product and service in the airline industry vary more between airlines in lower travel classes (premium economy, economy) or higher travel classes (business, first class)? *

- ☐ Lower travel classes
- ☐ Higher travel classes

Do you think that given a certain travel class e.g. economy or business, the seat measures are standardized? *

- ☐ Yes
- ☐ No
- ☐ Other: _____

Do you think that airlines offer different prices for the same seat in the same travel class on any given flight? *

- ☐ Yes
- ☐ No
- ☐ Other: _____

If yes, why do you think do airlines charge different prices?

Your answer

BACK

NEXT

Page 5 of 6

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Airline Industry Consumer Experience

* Required

What is your nationality *

Your answer

What is your age?

- ☐ under 18
- ☐ 19 to 30
- ☐ 31 to 55
- ☐ over 55

What is your gender?

- ☐ Male
- ☐ Female
- ☐ Prefer not to say

Thank you very much!

BACK

SUBMIT

Page 6 of 6

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Airline Industry Consumer Experience

Thank you very much for participating. Your response has been recorded.

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