



Retail Management: factors influencing profit  
maximization and customer satisfaction.  
A case study of airport operations and  
concession management.

Author: Jamila Alieva

Supervisor: Sujith Nair



**Student**  
**Umeå School of Business and Economics**  
Autumn Semester 2017  
Master Thesis, one-year, 15 hp

# ACKNOWLEDGEMENTS

*I would like to thank my supervisor Sujith Nair for guidance throughout the thesis process.*

*I would like to thank my dear friend Elena, who was my partner in crime in MSPME adventure.*

*I would like to thank my dear friend Robin, one of the greatest study-buddy the universe can offer.*

*I would like to thank my parents and my brother, being my eternal source of inspiration and love.*

*December, 2016*  
*JAMILA ALIEVA*

# ABSTRACT

Airport performance is highly depended on effective retail management and management of airport concession. This thesis is tend to find the answer for two research questions developed, with a purpose to offer optimization of the dependency in a most convenient way:

***What are the factors influencing successful retail operations in airports?***

and

***How to increase profit maximization and customers satisfaction through effective concession management?***

The purpose of these research questions is to discover what is retail management in airport business sector. How airport operations management planning, implementing and evaluating their strategic decisions to generate revenues. More specifically, the purpose is focused on customers satisfaction and profit maximization approaches discovering airports. What is a correlation between attributes affecting airport revenue generation and operations management approaches, applied in different cases, when building relations with concessionaires. After conducting the survey with thirty international airports around the world, the importance of each attribute creating direct impact on customer satisfaction was measured and evaluated. The correlation between airport concession management types and the profit maximization was also identified and discussed. The research also became a starting point to investigate more factors influencing retail operations in airports.

# TABLE OF CONTENT

1. Introduction	
1.1 Background .....	1
1.2 Research Gap .....	3
1.3 Research Questions and Purposes .....	3
1.4 Intended Contribution and Delimitations .....	4
1.5 Continued Outline of the Thesis .....	4
2. Theoretical Framework	
2.1 Retail Management and Airports .....	5
2.1.1 Customers Satisfaction .....	5
2.1.2 Profit Maximization .....	8
2.1.3 Airport Retail Management .....	12
2.2 Airport Operations and Concession Management .....	16
2.2.1 Airport Passenger and Retail Customers Growth .....	16
2.2.2 Definitions and Components of Concession Management .....	19
3. Scientific Methodology	
3.1 Ontology .....	23
3.2 Epistemology .....	23
3.3 Axiology .....	24
3.4 Research Approach .....	24
3.5 Research Design .....	25
3.6 Research Strategy .....	26
3.7 Data Collection .....	27
3.8 Literature Search .....	27
4. Practical Methodology	
4.1 Data collection .....	28
4.1.1 Sampling .....	28
4.1.2 Access .....	30
4.1.3 Questionnaire .....	32
4.2 Analysis Technique .....	33
4.3 Ethical and Societal Considerations .....	33
5. Empirical Findings	
5.1 Meaningful Attributes Related Content .....	34
5.2 Concession Management Type Related Content .....	35
5.3 Profitability Related Content .....	36
5.4 Managerial Efficiency Related Content .....	37
5.5 Customer Satisfaction Related Content .....	38
5.6 Summary of Empirical Findings .....	39
6. Analysis and Discussion	
6.1 Airport Operations Management .....	41
6.2 Profit Maximization & Customers Satisfaction .....	42
6.3 Airport Concession Management .....	43
6.4 Airport retail Management Evolution .....	45

7. Conclusion	
7.1 General Conclusions .....	47
7.2 Theoretical Contributions .....	47
7.3 Practical Contributions .....	47
7.4 Limitations and Suggestions for Future Research .....	48
8. Reference	
References .....	49

## Appendix

Appendix 1: Questionnaire Sample .....	54
--	----

## List of Figures

Figure 1. Growth in U.S. Air Travel (Appold & Kasarda, 2006, p. 53) .....	16
Figure 2. Air Traffic Growth 2004-2014 (Bouwer et al., 2015) .....	17
Figure 3. New Passenger Aircraft (Clayton & Saraswati, 2015) .....	18
Figure 4. Airport Sales Increase (Bamberger et al., 2009) .....	18
Figure 5. Perspectives of Airport New Growth Drivers (Bamberger et al., 2009) .....	19
Figure 6. Airport Retail Value Chain Forecast Evolution (Bamberger et al., 2009) ....	22
Figure 7. Meaningful Attributes Chart .....	34
Figure 8. Concession Management Type Chart .....	35
Figure 9. Profitability Chart .....	36
Figure 10. Managerial Efficiency Chart .....	37
Figure 11. Customer Satisfaction Chart .....	38

## List of Tables

Table 1. Top 30 busiest airports in the World for 2015 (WAC, 2016).....	29
Table 2. Summary of strategies .....	30
Table 3. Summary of attributes .....	39
Table 4. Summary of concession management types .....	40

# 1 INTRODUCTION

*The first chapter is aimed at introducing the research topic to give the reader a comprehension of its importance. It includes an introduction to the theories and concepts which are going to be discussed further in the theoretical framework. This chapter also defines the gap in the literature available at the moment and directly related to the topic. Finally, the research questions will be presented, discussing the purpose of this project, and the betrothed theoretical and practical deposition.*

## 1.1 BACKGROUND

According to Bouwer et al. (2015) these days many airports are operating beyond their capacity, due to a constantly growing number of passengers. Jakarta's Soekarno-Hatta International Airport, which was designed to operate 22 million passengers a year, handled more than 52 million in 2013. Guangzhou Baiyun International Airport in Guangzhou, accommodated over twenty percent of passengers beyond their capacity in 2014. Asian hub has exceeded planned capacity, due to many changes implemented to improve airport infrastructure since 1990s. Airports are very competitive nowadays and creating unique environments for their passengers, develop loyal relations with them and offer products and services to make them come back to a particular airport as part of airport concession management strategy to generate revenue coming mostly from the non-aeronautic sector.

The forecast for the year 2015, was a billion passengers travelling through US airports annually. Since for the last 30 years all airports around the world generate most of their profit from non-aeronautic activities, such as operations and retail in particular, all the passengers are considered potential customers and play a great role in airports' management (Appold & Kasarda, 2006, p. 54). Operations management of airports are fully concentrated on maximizing their efforts in optimizing concession management in the most effective way (Kim & Shin, 2001, p. 150). There are several factors influencing successful concession management in airports. There is a number of activities strongly associated with concession components in airport operations management, such as: convenience stores, drug stores, bakery stores; bookstores, souvenir stores, fashion apparel stores, sports stores, record stores, electronics stores; duty-free stores, food and beverage services, rent-a-car services; airport advertising services, telephone services (Kim & Shin, 2001, p. 151).

Other concession activities associated with services aimed to meet passengers needs include business facilities, leisure facilities, lounge facilities. Shopping areas, which have the most direct relation to concession management are divided into two categories. The first category is open to all the visitors, employees and obviously passengers. The second category is much more limited with access, where only ticket holders are able to access the area (Kim & Shin, 2001, p. 151). To optimize performance, airports implement induction of new standards in their assessment of operators tendering for concession contracts. Airports are looking for operators who can establish financial validity, resolute flexibility

and high-quality operational performance. These changes in airports' expectations enhance global operators' competitive advantage. The tendency among operators facing internationalization and reinforcement helps them achieve an improved professionalism, buying power, enlarged brand portfolio, offer rival and solid concession fees Bamberger et al. (2009). The strategy has a focus on customer satisfaction and the needs of passengers, with an aim to improve quality service management as one of the most important factors in airport retail management (Mederiros da Rocha et al., 2016, p. 20). Another forecast based on a study conducted by Chiappa et al. (2016, p. 109), is a social factor at airport-cities, associating it with a number of various activities available within the airport and driven by the industry. Some gateways in airports already follow the model of airport cities with a number of economic, regional and national strategic poles (Chiappa et al., 2016, p. 110). In the 90s there was a restriction on the sales of certain goods and services. Airports were competitive by not restricting with those regulations and having guaranteed sales, since passengers were able to purchase those products only in the free zone of airports (Freathy & O'Connel, 1998, p. 248).

Airport retail sectors had no clear structure due to several factors taking their roots in the traditional retail strategy. There are a number of reasons that drive passengers to increase revenues at airports, such as: extended waiting time; active usage of parking facilities; active usage of F&B retail (Chiappa et al., 2016, p. 107). There are a number of conflicting factors that create a challenge in conducting constructive and objective research to measure the quality of services at airport terminals with a focus on operations and retail management (Mederiros da Rocha et al., 2016, p. 24). Freathy & O'Connel (1998, p. 250) gave a forecast on the influence that airport retail will cause airport operations in the future. A Canadian airport in Alberta conducted research investigating service quality and retail management with a purpose to improve and future facilities, according to Littlechild (2012, p. 281).

Currently, a lot of work is done to optimize and focus on profitability with a lot of the commercial facilities available in airports. However, a lot can be improved through work with employees of airports and local residents, which would play one of the key roles in successful airport management (Chiappa et al., 2016, p. 108). Airports started to expand their retail operations, to manage the loss coming from partnerships with airlines (Freathy & O'Connel, 1998, p. 452). Consequently, more space in airports was dedicated to retail development, since airport retailing started being one of the key revenue generators.

Francis et al. (2002, p. 240) tried to introduce a comparison analysis measuring the success of different airport retail managements, however they faced a number of difficulties due to the very diverse range of services and approaches offered by airports. Airport revenues and profit maximization have key variables dependent on each other according to Graham (2009, p. 107). Airports are fully commercialized, which is very different from the earlier public utility sector strategy. According to Omar & Kent (2001, cited in Perng et al., 2010, p. 282), passengers are categorized as: travelers, browsers, occasional shoppers. Those discussions brings to the point that there are factors influencing customer satisfaction and profit maximization in the airport retail sector. More over, there is a connection between the impact of the factors and the strategic approach to manage airport concession to keep the operations management efficient and profitable.

## 1.2 RESEARCH GAP

There is an increase in customers served by airports, which has a direct affect on airport operations management and airport retail management in particular. The strategy has a focus on customer satisfaction and the needs of passengers, with an aim to improve quality service management as one of the most important factors in airport retail management (Mederiros da Rocha et al., 2016, p. 20). One of the most complex issues discussed by Freathy & O'Connel (1998, p. 251) is the purchasing behavior of passengers. International passengers are more likely to shop in airport stores, compared to domestic travelers. Business travelers spend less then leisure travelers (Fuerst et al., 2011, p. 283). There are a number of drivers significantly influencing revenue coming from the retail service, which operations management of an airport cannot influence. According to Kim & Shin, (2001, p. 150) concession is a payment that airports charge the operations sector for any retail activities within the airport.

Concession contracts allow business owners, companies or individuals to conduct commercial activities in accordance with a contract agreed with airports. New industry standards reinforce global operators, where major retail operators are following an extensive internationalization strategy. To optimize revenue, airports are developing new business models. According to Bamberger et al. (2009), research highlights two main concession management models that are becoming increasingly common: joint ventures between the airport and a global operator and direct operation of the retail space by the airport. Research was done in 1999 identifying important factors of concession operation management for the purpose of seeking the best strategic management of airport concessions (Kim & Shi, 2001, p. 150). This study is aimed to review the relevance and importance of existing attributes as well as existing strategies used to manage airport concession operations to increase customer satisfaction and profitability.

## 1.3 RESEARCH QUESTIONS & PURPOSES

The following questions arise, based on the problem background and the research gap:

***What are the factors influencing successful retail operations in airports?***

and

***How to increase profit maximization and customers satisfaction through effective concession management?***

The research has several purposes. The first purpose is understanding what is retail management in the airport business sector. It is interesting to understand how airport operations management plan, implement and evaluate their strategic decisions to generate revenue. More specifically, the purpose is focused on customer satisfaction and profit maximization approaches discovering particular segments of airports with the highest



number of passengers served. Secondly, it is important to identify factors influencing airport passengers' buying behavior. Lastly, it is important to discover the connection between attributes affecting airport revenue generation and operations management approaches, applied in different cases, when building relations with concessionaires.

## **1.4 INTENDED CONTRIBUTION & LIMITATIONS**

From a theoretical standpoint, the research is aimed to contribute evaluation and prioritization of attributes that influence customers satisfaction and profit maximization. Furthermore, this research is aimed to state the connection between attributes and airport concession management types. This research also aims to enhance knowledge about retail management in airport sector, which has its own specifics and approaches to success. Finally, this research contributes verification of important factors of concession operation management for the purpose of seeking the best strategic management of airport concessions (Kim & Shi, 2001, p. 150), which were discussed earlier. From a practical standpoint, there is an aim to create a reference point to Project Managers focusing on Retail sector in Airports that would help them conduct the strategic approach in managing sales, to maximize profit and increase customer satisfaction. This reference point can act as a practical example based on scientific researches done before, or it can ensure a way for managers to spot gaps to exploit the gratuity of their business in the decision making process. Due to time constraints and resources this research is forced to have some limitations. This study will be limited to thirty international airports. Furthermore, data would be collected through the quantitative approach only.

## **1.5 CONTINUED OUTLINE OF THE THESIS**

An Introduction chapter will be followed by a theoretical framework chapter. This chapter will introduce a discussion topic related to retail management and airports, specifically: customer satisfaction, profit maximization and airport retail management. The discussion will then proceed with airport operations and concession management, focusing on: airport passengers and retail customers growth as well as definitions and components. It will be discussed how the research was conducted from a theoretical point of view and what methodological point of departure was considered. Later, the discussion will be around practical methodology, data sampling approach, data collection method and the ways of data analysis. Following the analysis, empirical findings will be discussed in detail. Information will be supported by visual aids, such as charts and tables, for better understanding of the results. The next chapter will analyze and discuss the results related to earlier studies and market evolution forecasts. The aim of the chapter will be focused on the explanation of the results. The concluding chapter will be followed by a statement of general conclusions, practical contributions, and theoretical contributions. The research will finish with a references describing reliability and credibility of the research.

## **2 THEORETICAL FRAMEWORK**

*This chapter aims to discuss the theory behind retail Management and Airports as well as Airport Operations & Concession Management. The discussion is based on previous studies related to customer satisfaction, profit maximization and airport retail management. This chapter will also discuss modern findings by consultancy companies related to passenger and airport customer growth tendencies, influencing concession and operation management in the airport industry.*

### **2.1 RETAIL MANAGEMENT & AIRPORTS**

#### **2.1.1 CUSTOMERS SATISFACTION**

According to Fodness & Murray (2007, p. 495), there were no marketing strategies implemented in airports until 1980s. Managers started realizing the need to meet requirements of air passengers through offering enhanced services in airports. By 1990s, airports became competitive markets with a range of products and services oriented to service quality and strategies competing with other airports within the industry, stated by Lee-Mortimer (1993, cited in Fodness & Murray 2007, p. 495). Airports need to invest money into service quality development, because it has a direct connection with profitability of airports (Jiang & Zhang, 2016, p. 89). According to Aydin & Yudirim (2012, p. 220) both airports and airlines compete for market segment and customer loyalty based on satisfaction rates they can offer existing passengers.

Before 2009, there were a number of researches investigating customer satisfaction and airport service quality management in three airports in the United Arab Emirates, International Airport of Sri-Lanka, Melbourne International Airport (Jiang & Zhang, 2016, p. 89). By 2011 it was hard to perform international rankings of airports, due to a dramatic decline in service quality of Australian airports and passenger satisfaction in general (Jiang & Zhang, 2016, p. 89). A clean environment, stores available for shopping, efficiency of airport staff are several key attributes to identify customer satisfaction in Hong Kong and Italian airports (Brida et al., 2016, p. 2010).

A number of studies were conducted to measure passenger satisfaction. Rhoades (2002, cited in Fodness & Murray 2007, p. 496) developed airport factors according to stakeholders, but did not include any passengers into the study, among 150 respondents. The research indicated that the key attributes influencing customer satisfaction were: service issues, airport access, airport transport. Chen (2002, cited in Fodness & Murray 2007, p. 496) tried to combine both the framework and service quality theory, based on his research regarding a Taiwanese airport case study. He suggested a number of different attributes measuring customer satisfaction such as: comfort, processing time, convenience, courtesy of staff, information visibility and security.

Airports are transition points for different groups of customers like: passengers, airlines, employees, concessionaires, tenants (Fodness & Murray, 2007, p. 493). According to

World Airport Week (2000, cited in Fodness & Murray, 2007, p. 495), approximately one hour is spent by each passenger in service scale once the terminal has been accessed. Airports Company of South Africa (ACSA) predicted a growth in the number of customers and spent \$2.5 billion in 2006 to develop a new operations system, which would increase customers satisfaction in accordance to their needs, around all the airports in ACSA network (Lubbe et al., 2011, p. 225). Taiwan's airport is famous with a high performance of transport facilities and information support service offered to customers. Sri Lanka's airport is famous with a high performance of information display system to provide clear guidelines to passengers (Brida et al., 2016, p. 2010).

There is a group of airport customers with disabilities and their own list of expectations to provide full access to all the facilities available within the airport considering their special needs (Brida et al., 2016, p. 2010). Research conducted in the USA discovered a difference in service quality in airports for different groups of people, based on the masculinity related to their national cultures. Passengers with a lower masculinity group shared more positive feedback related to assessment of customer satisfaction (Pantouvakis & Renzi, 2016, p. 93).

The gap-theory methodology was developed by Murray to investigate the service quality of airports to evaluate customers satisfaction (Lubbe et al., 2011, p. 226). Customer gap is a challenge of airport managers to overcome through the fulfillment of customer needs. Customer gap helps to identify and improve the performance-value distance, consistently developing a 'win-win' strategy (Tsai et al., 2011, p. 1926). The gap can be closed through offering service quality expected by customers and perception of the service quality, which is reflected through three key attributes, such as: physical environment, interaction, outcome. (Tsai et al., 2011, p. 1926). To reach airport customers satisfaction, it is essential to develop and implement a service strategy considering both expectations and requirements of customers (Tsai et al., 2011, p. 1929).

Pantouvakis & Renzi (2016, p. 91), conducted research investigating attributes of customer satisfaction considering different cultures and nationalities of air passengers. Airport attractiveness is based on identification, recognition and implementation of unique attributes that contribute to customer satisfaction in each particular airport based on the cultural background of airports passengers (Pantouvakis & Renzi, 2016, p. 92). There is a high demand in meeting customer satisfaction for airport managers, as well as understanding customers needs with the service quality of an airport (Tsai et al., 2011, p. 1926).

A number of variables contribute to the general airport performance where customer satisfaction is one of the key attributes of an overall airport success assessment (Tsai et al., 2011, p. 1926). It was found that customer satisfaction through open and honest opinion is very important for service quality measurement and must not to be ignored (Lubbe et al., 2011, p. 225). A model with three main dimensions was developed to perform the importance of passenger satisfaction, such as: function, interaction, division (Lubbe et al., 2011, p. 225). To attain customer satisfaction in airport retail management, it is important to investigate customer needs and expectations. Every service has an attribute, which influence the attitude of airport customers based on airport service quality (Brida et al.,

2016, p. 2010). Airport operation management and passenger satisfaction as a customer has a strong connection to an airport's performance (Brida et al., 2016, p. 2010). Customer feedback plays a major role in building an image of airport service quality, reflecting on customer satisfaction (Brida et al., 2016, p. 2012).

The understanding of customer needs is essential and the most powerful tool to be competitive. Technologies have significantly improved customer satisfaction in airport operations, since there is no direct dependency on humans in many services offered by airports, such as: online gaming, electronic retail, vending machines. However, some services still require human interaction, which increases the dependency of airport service quality and customer satisfaction, such as: barber shops and restaurants (Ganguli & Roy, 2013, p. 1203). Services provided to airport passengers need to be monitored on a constant basis to offer the highest level of customer satisfaction, such as: parking facilities, connecting roadways, entries and exits of terminals (Brida et al., 2016, p. 2012).

Chung (2013, p. 106) identified the difference of passenger preferences based on their status as a customer – business or leisure travelers. According to the research, business travelers are more dependent on time variables, while leisure travelers have higher flexibility regarding cost variables, which has a direct impact on their satisfaction as customers (Chung, 2013, p. 106). It is very important to work with a realistic knowledge about passenger expectations, rather than developing knowledge about customer satisfaction based on services offered to passengers and their feedback regarding the services (Aydin & Yudirim, 2012, p. 220). This approach is very effective for future costs allocations and the decision making process from a long term perspective (Aydin & Yudirim, 2012, p. 220).

One of the main questions discussed by scholars is the criteria measuring customer to satisfaction and the tools implement the task (Kannan et al., 2012, p. 710). Fodness & Murray (2007, cited in Kannan et al., 2012, p. 711) created a conceptual model, which identified expectations of passengers as customers to meet their needs in airports for better service quality within airports. The model was aimed to support the decision making process in setting a strategy to choose the best approach in airport service quality management (Kannan et al., 2012, p. 710). Investigating and implementing passengers' expectations is a continuous process requiring interaction in all dimensions, such as background, ethnics and travels. Airport passengers becoming highly sensitive to customer service provided and their demands have a tendency to grow (Gilbert & Wong, 2003, p. 520).

There are a number of attributes discussed by Gilbert & Wong (2003, p. 522) in their research of US domestic airlines, such as: On-time arrival, Mishandled baggage, Airline safety, Flight problems, Reservations, Fares, Refunds, Customer service, Advertising and Frequent flyer programs. While international flights have a number of different attributes evaluating customer satisfaction, such as: Non-stop flight availability, Safety reputation, On-time reputation, In-flight service reputation, Frequent flyer program (Gilbert & Wong, 2003, p. 520). According to Fodness & Murray (2007, p. 493) there are a number of variables describing passenger expectations to fulfill customers satisfaction and the performance of airport service quality: routes, scheduling, location and prices.

It is important to never limit the identification of customers need and expectations to a certain number of variables due to high market and industry competition (Fodness & Murray, 2007, p. 493). Fodness & Murray (2007, p. 494) suggest ignoring the gap-theory model widely discussed in earlier studies and concentrate on service quality measurements instead, which in some cases might not be directly dependent on customer feedback. The main limitation is internal measurement tools, such as number of complaints, wait time for baggage, check-in service time.

External tools based on subjective and unique customer feedback also have their limitations, such as absence of consistent understanding of expectations. There is a risk of implementing the wrong strategy due to misinterpreted information during the decision making process, while improving the airport service quality management (Fodness & Murray, 2007, p. 494). Fodness & Murray (2007, p. 498) suggesting to airport managers to concentrate if measuring service quality for the several purposes: identify expectations of customers within home and competitive airports; concentrate on service quality, the ways to improve it and priorities wisely areas that need to be reconsidered; direct manager to build a strategy targeted on unique competitive advantage of each airport based on a service quality.

## **2.1.2 PROFIT MAXIMIZATION**

Major retail centers – that is how Davies (1995, p. 19) defines airports. According to Perng et al. (2010, p. 278) airport profit comes from aeronautical and non-aeronautical categories. More and more revenue is being generated from the non-aeronautical sector of airport business. Airports have become more than a transportation hub, they are also considered as entertainment entities because of their close association with tourism and retail. Any waiting time is considered as potential time to maximize profit of airports, in particular considering departure areas in airports (Geuensa et al., 2004, p. 617). According to Omar & Kent (2001, p. 227) 60% of tradition retail purchases are planned, where customers know in advance what they are intending to buy, and what amount of money they are willing to spend. While passengers have a totally different shopping approach different from the traditional retail shoppers.

In order to achieve a high level of profit maximization, it is essential to consider a variety of products and services offered by airports to satisfy customers needs and expectations (Perng et al., 2010, p. 279). There was research conducted at Gatwick airport analyzing drivers, motivating passengers to shop in airport stores Omar & Kent (2001, p. 228). The research proposes that two out of three passengers make spontaneous decisions to purchase while they are inside an airport store. Compared to traditional retail shoppers, passengers do not plan to shop, but they do, due to a specific environment inside of the airport Omar & Kent, 2001, p. 229). To maximize profit generated from the non-aeronautical sector, a strategy of retail and duty-free store allocation should be implemented. It was observed, that the most attractive shopping environment is associated with terminal departure sectors (Perng et al., 2010, p. 280).

Profit maximization has a direct connection with customer motivation to make purchases in airports, where passengers are categorized into four shopping motivations: functional motivations, social motivations, experiential/hedonic motivations, travel-related motivations (Chung et al., 2013, p. 107). There is certain a philological environment that influences passengers' motivation to shop in an airport, lead by excitement and time pressure (Chung et al., 2013, p. 107).

Profit maximization strategy includes a deep and concentrated analysis of passengers 'shopping behavior. Outbound shopping is in most demand by passengers, due to special physiological conditions, where they already have boarding passes and are excited about travel. It is also called 'happy hour', when passengers are mostly likely to shop, while waiting for a flight and spend money in that particular period of time (Perng et al., 2010, p. 280).

Airports have an advantage to maximize profit compared to traditional retail stores, as passengers are more likely to make a purchase due to time pressure and the special condition of being within a certain space, such as terminal. Travelers might have a clear understanding about the purchase they are planning to make, however they are more likely to switch to alternatives offered within the airport, due to time pressure and anxiety, which they are likely to experience while waiting to board (Chung et al., 2013, p. 108). Another competitive advantage airports have is convenience of product availability, which saves time and effort for passengers (Chung et al., 2013, p. 108).

According to Geuensa et al., (2004, p. 616) there are three types of motivations that lead passengers to purchase products or services in airports: functional motivation, social motivation, experiential motivations, travel-related motivations. Knowledge related to those motivations lead to profit maximization in the airport retail sector.

An interesting connection described by Geuensa et al.( 2004, p. 618) is that airports' retail businesses such as in-store shopping and allocation of products is not similar to traditional retail merchandising techniques. Most of the goods from different brands aimed at different purposes are usually allocated next to each other, which is not typical in traditional stores. The difference of products available in one spot might be classified as exotic, and is one of the motivators to shop more, which also leads to profit maximization (Geuensa et al., 2004, p. 618).

Perng et al. (2010, p. 281) state that men and women have different purchasing behaviors and profit is generated in different ways depending on gender. Women have a tendency to purchase books and fragrances, while men mostly purchase electronic and photographic products. There was another connection investigated among business travellers, who are more likely to shop in airports when they are travelling with colleagues. The research says that woman are more likely to shop close to departure gates, they also feel more inspired to spend money in large stores, so they are considered as more active shoppers, rather than men, who are more apathetic compared to female passengers (Perng et al., 2010, p. 281).

Airport marketing is becoming very creative and strategic, with an aim to maximize profit and create a competitive environment through the introduction of customer loyalty services

available in particular airports. Schiphol airport in the Netherlands offers casinos and golf to passengers. Singapore's Changi airport offers karaoke, a swimming pool and bathing facilities to compete with other airports for customer satisfaction and potential customer loyalty (Geuensa et al., 2004, p. 618).

As part of a marketing approach focused on the airport retail sector profit maximization, there are a big number of strategies evaluated, tested and implemented by different scholars and operation managers in airports. According to Omar & Kent (2001, cited in Perng et al., 2010, p. 282), passengers are categorized as: travelers, browsers, occasional shoppers. This lead to the technique of displaying product performance, which would motivate shoppers to spend more in a unique airport retail environment. Perng et al. (2010, p. 283) also discussed drivers motivating passengers to buy: value, holiday, gift-giving, guilt, reward, occasion, forgotten items, confusion, exclusivity, foreign currency. Other important factors influencing motivation are: convenience, low-price, social, intense social, experiential, and recreational, according to Perng et al. (2010, p. 283). There are a number of unique drivers each airport has to maximize the profit, through the competitive advantage with traditional retail stores, which are also available to passengers before or after visiting the airports: flexible price strategy due to ravel value system; convenient location of all the stores in an easily accessible space; unique variety and availability of products and brands; multilingual customer service (Geuensa et al., 2004, p. 619).

Chung (2015, p. 29) suggests airport concessionaires develop a strategy in choosing partners and brands, who will run airport businesses. Products should be well known, and brands should be widely recognized by customers of different cultural and ethnical backgrounds in order to guarantee revenue generation and follow the strategy of profit maximization. Products need to respond to customers needs, considering the fact that they are air travel passengers and should have specific needs within a certain period of travel time. Another important strategy widely suggested by Chung (2015, p. 29) to be used in airport retail is the display of information about products, to attract passengers' attention in a particular section of airports as well as the unique design of stores, which aim to rouse passengers' curiosity gaining them as customers. Chung (2015, p. 33) also investigated a connection between interest and intention of passengers as customers. Some passengers are simply convinced to shop at airports due to unique products or services available, such as souvenirs.

Airport revenue and profit maximization have key variables dependent on each other according to Graham (2009, p. 107). Airports are fully commercialized, which is very different from the earlier public utility sector strategy. There are many commercial opportunities available in the industry, so the airport retail sector was driven by motivation, freedom and the flexibility the market can offer. Another variable is related to airlines as an industry and the revenue from aeronautical charges. Aeronautical revenues do not bring most of the profit to airports as it used to be, due to high competition of airlines and pressure from airlines to influence aeronautical fees. That is why airports are more focused on profit maximization through retail business actively involving operations management (Graham, 2009, p. 108).

In general, airports do face challenges in profit maximization due to external competition and retailers offering products online. If earlier the unique competitive advantage of the airport retail industry was lower prices free from tax or uniqueness of goods with convenient availability, these day the online market has substituted those unique advantages through virtual accessibility (Graham, 2009, p. 109). Chung et al. (2013, p. 110) describes the excitement driven by the motivation to shop at the very last moment before passengers' departure as the 'happy hour' for operation and retail managers in airports targeted to maximize profit.

The main difference is a motivation driven to purchase due anxiety in most cases. From a number of options on how to spend time in an airport before boarding, most passengers prefer to shop, which is a great implication in operations management and profit maximization in particular (Omar & Kent, 2001, p. 227). The job of operations and retail managers in airports has a lot in common with purely business oriented jobs focusing on commercial orientation (Torresa et al., 2005, p. 364). These day most of the revenue generated by airports is categorized as non-aeronautical, which indicates that profit comes from commercial activities mostly. Over 60% of the profit at the Don Quijote airport in Spain is coming from non-aeronautical commercial activities (Torresa et al., 2005, p. 365).

According to Torresa et al. (2005, p. 366) focusing on profit maximization strategy, it is important to categorize and differentiate sources of non-aeronautical revenue channels, such as: parking, banking, restaurant, gift shops, vehicle rentals. Chung et al. (2013, p. 106) propose two key variables such as time and emotions, that lead passengers waiting for their airplanes to shop in stores next to the gate, as an approach to manage their anxiety. There is a curve describing the connection between the stress of passengers before the flight and the shopping motivation of the same passengers. According to the study, there is less stress observed once customers reach commercial activities, after the immigration and pre-flight security stages (Chung et al., 2013, p. 108).

Impulsive behavior is a main reason, why passengers turn into customers, once they arrive at an airport according to Bohm-Bawerk (1959, cited in Omar & Kent, 2001, p. 230). The negative side is that eventually passengers might be disappointed with unplanned purchases and experience a deep dissatisfaction associated with airport shopping. This is a dangerous factor leading to negative forecasts in profit maximization. However, impulsive behavior might also be considered in a positive way, when passengers are driven by duty-free offer or shopping gifts for friends and family, where no regrets are experienced after all (Omar & Kent, 2001, p. 227).

Time pressure is another important factor that has a close connection to profit maximization, where business travelers experiencing the time pressure are less likely to shop in airports. However, leisure travelers have a much lower level of time pressure and are more likely to spend money right before the departure (Chung et al., 2013, p. 109). There is a number of factors influencing impulsive decision to shop very last moment before the boarding and it associated with several independent variables, such as: fun, fantasy, social attraction, emotional attraction (Chung et al., 2013, p. 106).



### 2.1.3 AIRPORT RETAIL MANAGEMENT

According to Wattanacharoensil et al. (2016, p. 319) interactions and activities are two key variables describing airport retail business. Both of the variables has a strong association with necessary activities and discretionary activities. Chiappa et al. (2016, p. 109) gives a forecast to expect a growth in revenues generated from airport retail sector, due to growing number of passengers and changes associated with socio-demographic conditions.

There is an increase in customers served by airport, which has a direct affect on airport operations management and airport retail management in particular. The strategy has a focus on customers satisfaction and focus on the needs of passengers, with an only aim to improve quality service management as one of the most important factor in airport retail management (Mederiros da Rocha et al., 2016, p. 20). Another forecast based on study conducted by Chiappa et al. (2016, p. 109), is a social fact as airport-cities, associating it with a number of various activities available within the airport and driven by the industry. Some gateways in airports already experiencing a model of airport cities with a number of economic, regional and national strategic poles (Chiappa et al., 2016, p. 110). There is model classifying airport retail experience into three components such as: airport, passenger, public. Airport retail experience is associated with five types: staged, past, expected, perceived, and public (Wattanacharoensil et al., 2016, 319).

Fermie (1995, p. 5) discussed competition between airport retail and outlet malls within the city where airport is. Since outlet malls became a popular tourist destinations with all the privileges their business model can have, they created a big competition to many airports in USA and UK fighting for the customers, who traditionally would make the same purchases in airports before (Fermie, 1995, p. 6). Airports traditionally had a unique competitive advantage to capture a big population of passengers and consider them as potential customers, which had a positive effect on revenues. Once outlet malls created a good reputation through discounts and sales, airports lost the uniqueness of being a perfect space for a big amount of customers offering special prices (Fermie, 1995, p. 6).

Basically, most of the airports in UK located outside of the city and they do have a competitive advantage to offer goods and services to passengers, who did not manage to shop in a city center. Airports are the great alternative to retail stores in big cities with a range of goods a services available (Fermie, 1995, p. 7). In 90's it was restriction on sales of certain goods and services. Airports were competitive by not being restricted with those regulations and having a guaranteed sales, since passengers were able to purchase those products only in free zone of airports (Freathy & O'Connel, 1998, p. 248). Airport retail sector had no a clear structure due to several factors taking their roots from the tradition retailing strategy. Appold & Kasarda (2006, p. 50) described challenges of many US airports to operate retail management in a profitable way, due to many unique factors associated with each airport in particular. Dallas-Fort Worth airport could not attract retailers for the partnership, because no one would be interested to open their shops in airport. Management had to put special offers and discounts to encourage retailers operate in Dallas-Fort Worth airport. Miami airport experienced similar difficulties, so when the tender for the space was announced, only few candidates would participate, and the bid

process failed. According to Appold & Kasarda (2006, p. 52) even international gateways do experience challenges to sell the retail space, in spite of all advantages location and reputation an airport can have, such as Changi airport in Singapore.

A good forecast in airport retail management can be supported with an increasing number of travelers around the world and consequently an increasing number of airport customers, potentially generating revenue for non-aeronautic sector. There is a tendency for airports to grow and build new terminals as a respond for the existing demand to serve more customers flying (Fermie, 1995, p. 7). Schiphol International Airport decided to enhance commercialization process or airport retail management, by introducing shopping center in airport satisfying needs of both customers groups – travellers and non-travellers (Freathy & O’Connel, 1998, p. 249). Previously, commercialization was never a priority for airport operations management, since main focus was on processing passengers in a short period of time, to increase efficiency and passengers satisfaction (Freathy & O’Connel, 1998, p. 249).

Leisure and low-cost carrier passengers have the most positive impact on the airport retail sector as they tend to bring in the highest commercial revenues. There are a number of reasons that trigger this increased revenue at airports, such as, extended waiting time; active use of parking facilities; and active use of F&B retail (Chiappa et al., 2016, p. 107). Business passengers are infamous for their bad reputation as airport customers from a retail perspective. This is due isolated lounge zones where they have limited access to the retail amenities available to the majority of other customers (Chiappa et al., 2016, p. 107).

Fermie (1995, p. 8) The varied behavior of passengers at airports is an increasingly discussed topic.. Emotionally driven passengers are motivated by impulsive purchases, with the airport environment encouraging them to shop without any particular need for the items. However, studies suggest that the average UK passenger is unlikely to be impulsive while shopping in airports (Fermie, 1995, p. 8). Airports have constantly changing merchandise which is offered to a very diverse range of people coming from different ethnical groups and nationalities. This is likely to increase profit. (Fermie, 1995, p. 9)

There are a number of conflicting factors that create challenges in conducting constructive and objective research to measure the quality of service at airport terminals with a focus on operations and retail managements (Mederiros da Rocha et al., 2016, p. 24). Freathy & O’Connel (1998, p. 250) gave a prediction on the impact airport retail will have cause on airport operations in a future. The prediction discussed the general design of terminals with consideration given to retail space; strategies of each airport; and improvements in concession strategy with retailers. The possibility of different scenarios of concession management included different types of contracts for each retailer within the same airport and where contracts could be based on period of time or the turnover rate (Freathy & O’Connel, 1998, p. 250).

According to the study of Fuerst et al. (2011, p. 283) based on fifty four European airports, revenues strongly depend on the size of the airport. International passengers are more likely to shop in airport stores compared to domestic travelers and business travelers spend

less than leisure travelers (Fuerst et al., 2011, p. 283). There are a number of factors that significantly influence revenues coming from the retail sector, and there is not much operations management of an airport can do to manipulate these factors. Factors impacting revenue include economic development, airport size, airport volume, airport capacity, passenger composition, retail space and development strategy. One potential approach to increase revenue and to improve the efficiency of airport retail management includes strategic partnerships with airlines that are more likely to bring in passengers who are more inclined to shop, therefore, generating increased profit. (Fuerst et al., 2011, p. 283).

One of the most complex issues discussed by Freathy & O'Connel (1998, p. 251) is the purchasing behavior of passengers. The main difference with the traditional retail customer experience, is the time constraint that passengers have while making a decision in an airport store. Another common attribute of air passengers as customers, is the anxiety they feel before departure. This has an impact on their shopping experience (Freathy & O'Connel, 1998, p. 252). Lastly, traditional retail stores allow for the return of purchased items, while technically air passengers cannot implement this option. This fact has a direct effect on revenues generated in the airport retail sector compared to traditional retail stores outside of airports (Freathy & O'Connel, 1998, p. 252).

According to Medeiros da Rocha et al. (2016, p. 22) an assessment of airport terminals was carried out in order to classify work, objectives and techniques used to manage airport retail sector. The study covered several topics, such as: factors that influence the level of service; assessments of service levels using statistical analysis; uses of the perception-response curve concept; applications of fuzzy theory; applications of Data Envelopment Analysis; and assessments focused on the passenger guidance factor at terminals.

Correia & Wirasingue (2004, cited in Medeiros da Rocha et al. 2016, p. 22) have put forward a summary which describes key factors related to retail management and service quality in airport terminals including service levels at airports assessed in accordance with global standards; the amount of data tested and whether it was enough for a complete assessment of service quality and operations management in airport terminals; research investigating service quality and operations management focusing on retail sector in developing countries and boarding passengers (not transit passengers, which would require deeper investigation) (Medeiros da Rocha et al., 2016, p. 23).

According to Littlechild (2012, p. 280) for Sydney airport, operations and retail management are the primary sectors. Retail and commercial facilities are the key instruments in revenue generation among all and passenger activities available in airports. The airport in Alberta, Canada, conducted research investigating service quality and retail management with a purpose to improve and make a decision process for the introduction of future facilities, according to Littlechild (2012, p. 281). According to Chiappa et al., p. 106) there are a number of factors with major influence on the revenue generated from non-aeronautical profit and which have a positive affect on airport retail sector, such as: strategic moves towards commercialization and privatization; management of aeronautical fees related to airlines competition; passenger sophistication and experience based on needs and market competition; airports completion focused in tourism and hub airports.

It is hard to objectively evaluate the behavior of transfer passengers and their impact on airport retail management due to time restriction and their non-accessibility to the most of the activities bringing revenue to airports, such as parking facilities or vehicle rentals (Chiappa et al., 2016, p. 107). However, one of the greatest examples of active involvement of transfer passengers into airport retail services is at Changi airport in Singapore, offering transfer passengers a swimming pool, sauna, gym, cinema, and even bus tour of Singapore for those who's transfer longer than 5 hours (Chiappa et al., 2016, p. 108).

To increase effectiveness and efficiency of airport retail management many aspects can still be improved. Currently, a lot of work is being done to optimize and focus on profitability of the commercial facilities available in airports. However, a lot can be improved through, for example, working with employees of airports and local residents (Chiappa et al., 2016, p. 108). Traditionally, airports would measure their success in operations and retail management through the comparative analysis of performance and budget. Later, success measurement was extended to the comparison of different airports, with the aim of gaining from the experiences of competitors and adopting features and techniques with guaranteed success (Francis et al., 2002, p. 240). Freathy & O'Connel (2000, p. 639) discussed opportunities for a Single European market within airports, thus simplifying the purchase of goods and services. This would replace duty free stores and the whole of the current system. Proponents of this proposal argue its importance in the following terms: no frontier/immigration controls for intercommunity travellers; no customs barriers for intercommunity travellers and traders; transparency in airport accounting with no cross subsidization; communitywide procurement policies; competition legislation affecting aviation and airport commercial activities (Freathy & O'Connel, 2000, p. 640).

Freathy & O'Connel (1998, p. 452) look at the balance between commercial and aeronautical revenues. While competition has increased in the airline industry, aeronautical profit has declined dramatically. Airports started to expand their retail operations to manage the loss coming from partnership with airlines (Freathy & O'Connel, 1998, p. 452). Consequently, more space in airports was dedicated to retail development, with airport retail becoming one of the key revenue generators. Freathy & O'Connel (1998, p. 452) stated that British Airways generated 52% of their revenues from non-aeronautical charges in March 1998. Retail activities started playing a key role in airport operations management, prioritizing competition, long-term strategy planning and supply chain management to build the future success (Freathy & O'Connel, 1998, p. 455). Francis et al. (2002, p. 240) attempted to introduce a comparative analysis to measure the success of retail management of different airports, however, they faced a number of difficulties due to very diverse range of services and approaches offered by airports. To be objective and consistent in analysis part was double difficult, assessing airports who joined into global groups through the emergency in certain conditions. It was also an issue of confidentiality for the airports never belonging to the global groups, to share information. (Francis et al., 2002, p. 240).

## 2.2 AIRPORT OPERATIONS & CONCESSION MANAGEMENT

### 2.2.1 AIRPORT PASSENGERS & RETAIL CUSTOMER GROWTH

According to Bouwer et al. (2015) these days many airports are operating beyond their capacity, due to a constantly growing number of passengers. Jakarta's Soekarno–Hatta International Airport, which was designed to operate 22 million passengers a year, handled more than 52 million in 2013. Guangzhou Baiyun International Airport in Guangzhou, accommodated over twenty percent of passengers beyond their capacity in 2014.

Appold & Kasarda (2006, p. 53) studied US airports, looking at the changes they experienced over 25 years. By 2005, research showed dramatic growth in number of passengers and the development of airlines industry in general (Figure 1). The forecast for the year 2015, was a billion passengers travelling through US airports annually. For the last 30 years all airports around the world have been generating most of their profit from non-aeronautic activities, such as operations and retail with all the passengers considered as potential customers (Appold & Kasarda, 2006, p. 54).

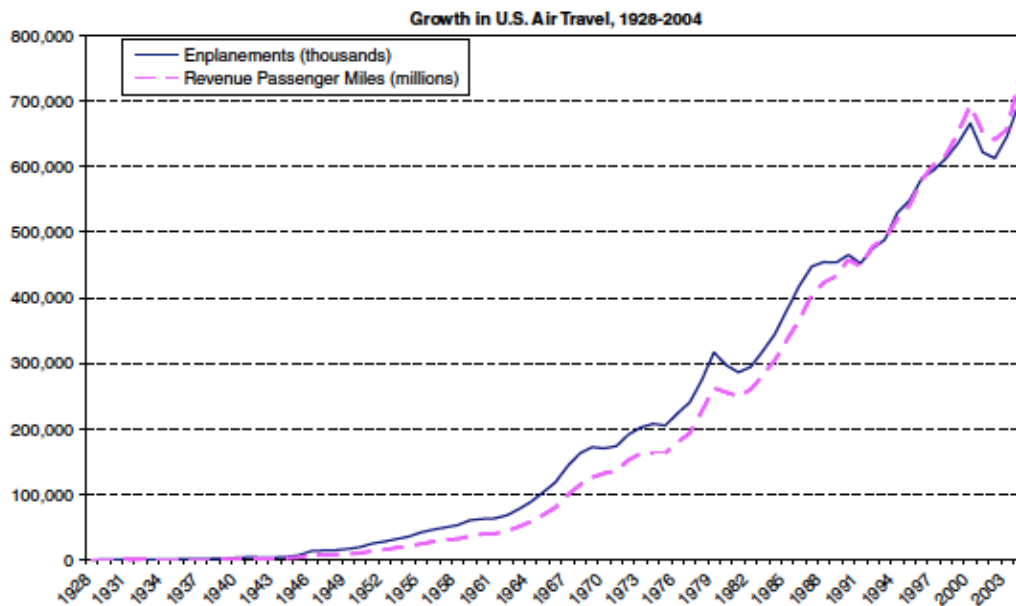


Fig. 1. Growth in US Air Travel, 1928–2004.

Figure 1. Growth in U.S. Air Travel

According to Bottini & Morphet (2015), over the past 10 years air traffic growth, which was once led by North America and Europe, is now fronted by the Middle East, the Asia-Pacific region, and Latin America, which have experienced strong growth over recent years. Europe's routes increased by 60% since 2004 (Figure 2). According to Bouwer et al. (2015), passenger growth is a continues process with most airports working to their maximum capacity. The impact of congestion is very meaningful. In a 2013 report, the UK Airports Commission suggested that maximum capacity work of airports in UK will cost airport infrastructure up to £20 billion over the next 60 years, economy cost would reach up to £45 billion (Bouwer et al., 2015).

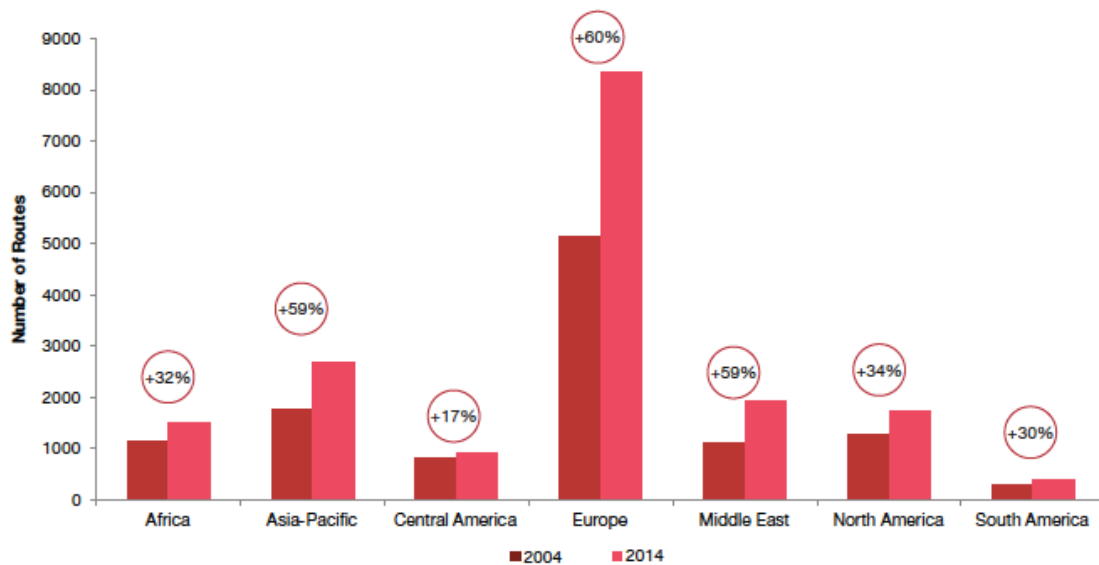


Figure 2. Air Traffic Growth 2004 - 2014

Clayton & Saraswati (2015) anticipate passengers growth by the year 2020, especially in Asia region (Figure 3). Asian hub exceeding planned capacity, due to many changes implemented to improve airport infrastructure since 1990s. Airports are very competitive nowadays, creating unique environments for their passengers to develop loyal relations with them and offer products and services to make them come back. This forms part of airport concession management strategy to generate revenues coming from non-aeronautic sector.

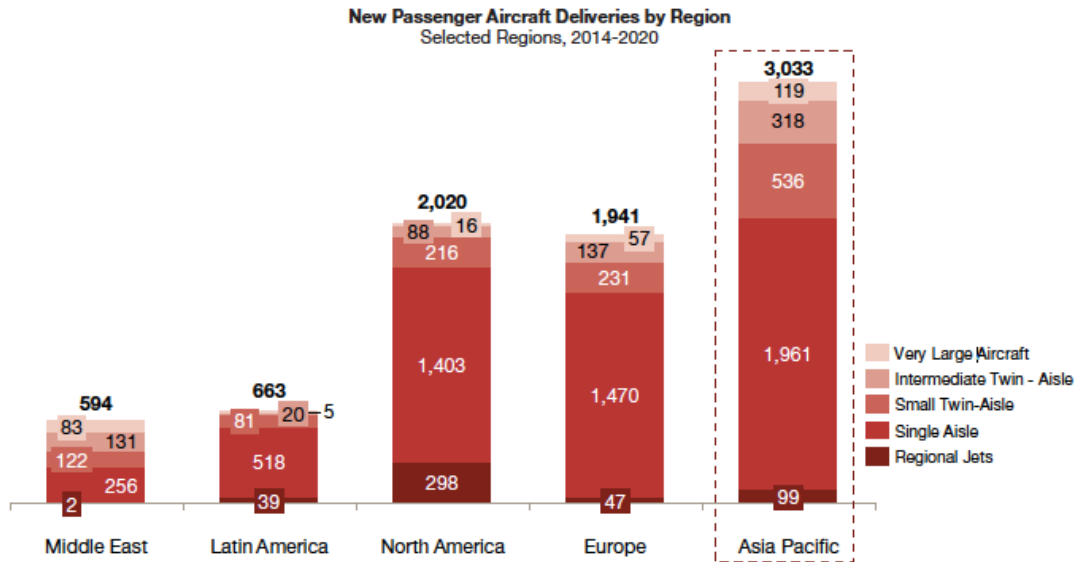


Figure 3. New Passenger Aircraft

Sales in airports increase (Figure 4), and airports' relations with retailers have a tendency to change based on dynamics of the industry, according to Bamberger et al. (2009). Figure 4 represents duty free airport retail dynamics for the period of 2002-2012.

Sales per category	CAGR 2002-2008*	Trend 2008*-2012*	Drivers
Perfumes & cosmetics	+17%	↗↗↗	■ Cosmetics booming market (skincare, make-up)
Alcohol	+12%	↗↗	■ Restriction on liquids compensated by high-end offer development
Tobacco	+7%	↗	■ Health awareness policies compensated by traffic growth
Fashion & accessories	+12%	↗↗	■ Dedicated surface increase ■ Offer enlargement
Confectionery & fine food	+16%	↗↗↗	■ Concept improvement ■ Local destination products development
Duty free airport retail	+13%	↗↗	

Annual growth ↗ 0-5%   ↗↗ 5-10%   ↗↗↗ >10%

Figure 4. Airport Sales Increase

Bamberger et al. (2009) discussed factors that encourage airport growth, illustrating that perfumes and cosmetics remain key products for revenue generation. Figure 5, representing duty free airport retail category mix evolution comparing years 2008 and 2012.

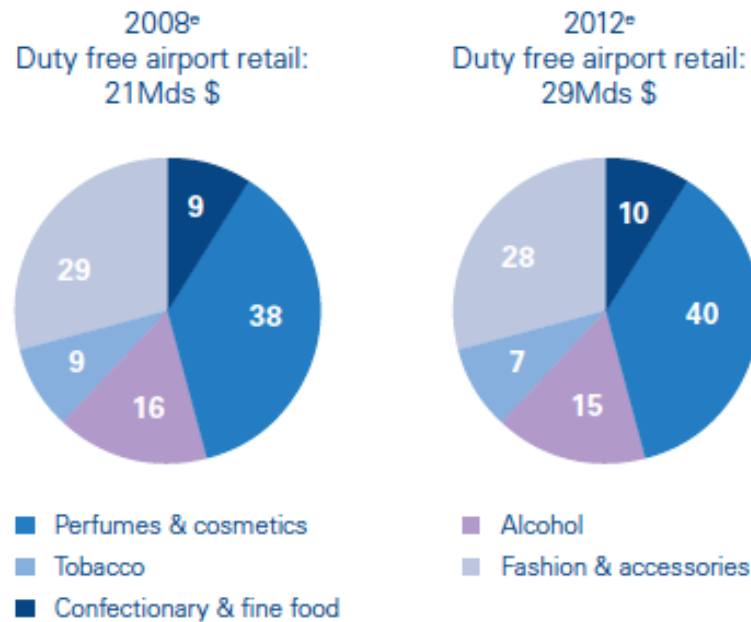


Figure 5. Perspectives of Airport New Growth Drivers

## 2.2.2 DEFINITIONS & COMPONENTS OF CONCESSION MANAGEMENT

According to Kim & Shin, (2001, p. 150) concession is a payment that airports charge the operation sector for any retailing activities within the airport. Concession contracts allows business owners, companies or individuals to conduct commercial activities in accordance with a contract agreed with airports. There are a numbers of activities strongly associated with concession components in airport operations management, such as: convenience stores, drug stores, bakeries, bookstores, souvenir stores, fashion apparel stores, sports stores, record stores, electronics stores, duty-free stores, food and beverage services, rent-a-car services, airport advertising services and telephone services (Kim & Shin, 2001, p. 151). Other concession activities which are associated with services aimed at meeting passengers' needs include business facilities, leisure facilities and lounge facilities. Shopping areas, are divided into two categorize: the first category is open to all the visitors, employees and obviously passengers and the second category is much more limited with access only to tickets holders (Kim & Shin, 2001, p. 151).



Successful concession management is key to generating revenues, according to Kim & Shin, (2001, p. 150). Operations management of airports are focused on optimizing concession management in the most effective way (Kim & Shin, 2001, p. 150). There are several factors influencing successful concession management in airports.

Traffic handled by an airport has a direct affect on sales and concession contracts. The more passengers there are flying, the more potential customers can be expected among those passengers and more attractive concession contracts will be for retailers. However, airports are not in control of passengers. Rather it is the airlines who have the contracts with them and are in charge of them (Kim & Shin, 2001, p. 152).

Space location plays a meaningful role in commercial activities, according to Kim & Shin, (2001, p. 152). The departure lounge is always considered to be the best location and sales are the highest whenever the stores are close to the departure gates and airport lounge areas. Location should also be convenient and easily accessible, avoiding the use of elevators or stairs. Easily accessible stores and restaurants have a higher turnover and are more profitable. Design is another factor affecting sales, revenues and concession contracts in airports. How the space between land side and air side is designed is strategically important s it has a direct influence on location of the stores and restaurants next to the gates and the behavior of passengers i.e. their motivation to shop (Kim & Shin, 2001, p. 153).

Rental fees and contracts always affect the revenue of concessionaires (Kim & Shin, 2001, p. 154). Airports' concessions mostly generate fees based on a percentage of total annual sales or turnover. It is important to take account of the length of contracts as this will reflect the level of investment required by the concessionaire and that the percentage fee increase as higher turnover thresholds are reached (Kim & Shin, 2001, p. 154). Marketing strategy is another important way to generate revenue from concessions. The pricing strategy of concessions has an influence on airport operations as well (Kim & Shin, 2001, p. 153).

According to Kim & Shin, (2001, p. 153) passenger traffic is another variable affecting airport concession management. There is a big difference between opportunities for domestic and international airlines. Domestic airline passengers cannot be considered as duty free customers due to airport regulations. While international airlines passengers are potentially valuable customers who are likely to generate profit and do not have any restriction accessing stores (Kim & Shin, 2001, p. 153). Tax free service is another advantage accessible to international flights passengers. It offers one of the greatest advantages that the airport retail sector can offer.

Airport retail and operations management develop a strategic approach in building relations with retail stores, cafes, restaurants and any other services aimed at serving passengers to generate non-aeronautic revenues. The strategy includes development of concession contracts to maximize profit of airports and, at the same time, offering attractive conditions to airport partners and so creating a competitive environment for their

business to operate within the airport territory (Kim & Shin, 2001, p. 153). There are a number of management styles of airport concessions including master concessionaire, free management, developer approach, direct lease and direct management.

Master concessionaire is a particular category of concession whereby the principal concessionaire operates most of the airport space. Fee management is where management companies are hired to operate the concessions and get paid by those companies by way of monthly fees and a percentage of the net operation incomes derived from the concession operations. The developer approach is where a commercial developer is hired to design the concession facilities similar to traditional retail malls and where the airports have a lack of direct control. Direct lease is where airport operations departments are responsible for the leasing of space and monitoring of each individual concession operator i.e. the airport retains control of the individual concessions. Finally, the direct management approach is found to be the least preferred method of managing airport concessions (Kim & Shin, 2001, p. 153).

To optimize performance, airports are implementing new standards in their assessment of operators tendering for concession contracts. Airports look for operators who can establish financial validity, flexibility and high-quality operational performance. These changes in airports' expectations enhance global operators' competitive advantage. If they are facing internationalization and reinforcement, this will encourage them to improve their levels of professionalism, buying power, enlarge their brand portfolio and offer rival and solid concession fees Bamberger et al. (2009).

New industry standards reinforce global operators, where major retail operators are following an extensive internationalization strategy. To optimize revenues, airports developing new business models. According to Bamberger et al. (2009), research highlights two main concession management models that are becoming increasingly common: joint venture between the airport and a global operator and direct operation of the retail space by the airport.

At the same time, Bamberger et al. (2009), suggest limiting direct operation to major hubs for a number of reasons. For instance, it cannot output in a long-term multiplicity strategy. The approach of operating the retail sector without delegating responsibilities limits airports' competitive advantage precluding them from operating abroad or extending their retail activities beyond the airport. Focus on prices alone will not increase revenues and margins, they must be maintained by innovative ideas, according to Bamberger et al. (2009). Figure 6 shows airport retail value chain forecast evolutions, suggested by Bamberger et al. (2009).

In order to better mastering airport retail, airports should consider several questions, such as airport's retail performance, gap analysis, revenue optimization, optimal concession management model, local environment, creation of new operating models for airport concession management as suggested by Bamberger et al. (2009).

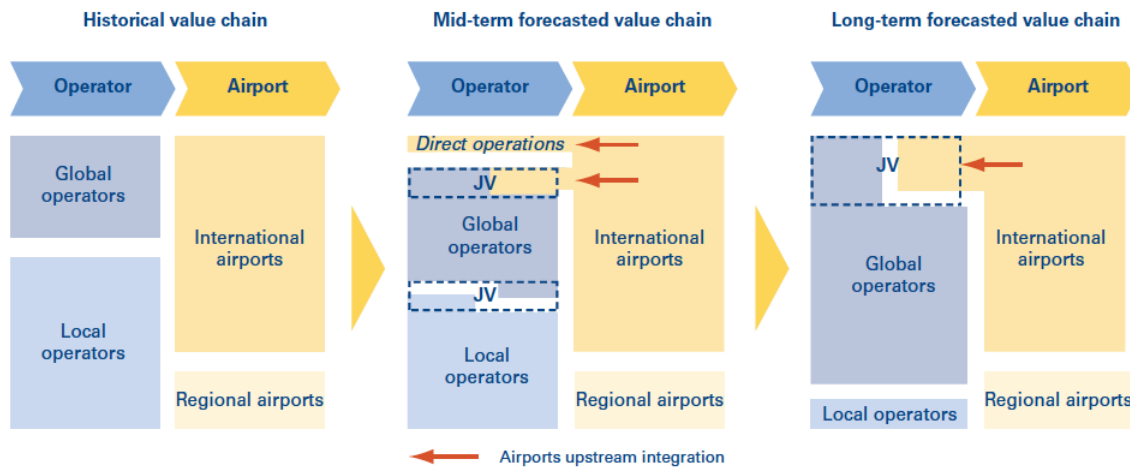


Figure 6. Airport Retail Value Chain Forecast Evolution

In spite of disagreements about concession management models, the most important factor remains the same - capability of partners in the value chain to work effectively together and measure their success in meeting the *this word is not correct. I do not know what you mean* ahead (Bamberger et al., 2009). Effective partnership will be vital in order to expand, evaluate concept quality and improve performance, all of which will help partners to realize market opportunities and confront challenges.

Setting various?, however, stays a sophisticated challenge for both airports and operators. Key success factors recognized through best practice may allow partners to establish a better understanding of the areas they need to address, but customizing the ?and applying them to develop retail execution effectively on a given platform is very challenging, according to Bamberger et al. (2009).

Moreover, these key ?implicate a broad range of expertise (infrastructure, purchase, logistics, legal, marketing, etc.), which makes adjusting them even more problematic for airports and operators who find themselves having to co-ordinate a broad range of resources (Bamberger et al., 2009).

### **3 SCIENTIFIC METHODOLOGY**

*In this chapter, philosophical points of departure are debated in detail along with epistemological and ontological stances. This chapter also includes philosophical points of view in terms of research approach and design. Reasons for choosing the theories are argued and explanations of how theories were found are described.*

#### **3.1 ONTOLOGY**

According to Ritchie et al., (2014, p. 5), ontology is responding to a philosophical question regarding the disposition of the reality in which we are living. Ontology is also described as a hypothesis about nature and social reality. The reality can be objective or subjective, as well as external or cognitively constructed on a personal basis (Long et al., 2000, p. 190). According to Saunders et al. (2009, p. 110), there are social actors and social phenomenon, with the latter stemming from an objectivist view. According to Bryman & Bell (2011, p. 37), a subjectivist view is based on a belief that there is a dependence between social phenomena and social actors. This thesis is a purely constructionist viewpoint, since all the factors influencing profit maximization and customer satisfaction in airport retail and concession management are ever changing factors due to dynamics of the industry and behavior of customers. The research is strongly dependent on social actors providing answers. The research question also illustrates constructionist tendencies, since specific individuals are required to respond the questions raised.

#### **3.2 EPISTEMOLOGY**

According to Saunders et al. (2009, p. 113), epistemology is a study answering questions related to knowledge definition and acceptance as a knowledge, once the meaning is clarified. Knowledge basis and their transformation are described by Ritchie et al. (2014, p. 6), as epistemological assumptions. Long et al. (2000, p. 191) suggest that epistemology is a possible form of studying natural science and social science in the same scope. Epistemology can be considered in different research philosophies, such as positivism, realism, interpretivism and pragmatism and as a combination of these philosophies (Saunders et al., 2009, p. 114).

According to Bryman (2008, p. 30), the positivist point of view is aimed at guiding researchers' elaborate hypotheses that can be tested on a value free basis. It is hard to define positivism, however, the main idea is connection of social reality and natural science (Long et al., 2000, p. 191). Realism is another epistemological position, which does have similarities with positivism based on combination of methods with natural science, according to Bryman (2008, p. 31). Reality can be perceived differently since humans use their senses to define realism (Saunders et al., 2009, p. 114). According to Rubin & Babbie (2014, p. 57), the world is complex and the complexity of the world

creates a challenge to define scientific principles. This epistemological position is defined as interpretivism. The nature of interpretivism is very subjective since all humans are social actors, but the way they are acting is always different and the aim of researches to identify subjectivity of each social act studied (Rubin & Babbie, 2014, p. 57). Interpretivism is the epistemological position used in this thesis, mainly due to great differences arising from comparing social actors. Airports do have different approaches to operating retail management and developing relations with concessionaries. It is important to be subjective while interpreting their answers. There is a high dependency on social actors that will be observed during the research and the knowledge gained from the research will not be objective or generalizable.

### **3.3 AXIOLOGY**

According to Saunders et al. (2012, p. 137) there is an effect outside of this thesis. It is a value dealing concept called axiology. Axiological skills of researchers are demonstrated through the values they share (Heron, 1996, p. 11-12). It is important to acknowledge that authors' personal values and prejudices have significant influence on current research. Before the research was started, there was information and opinion about the topic chosen, which is called prejudice according to Bickman and Rog (1998, p. 77). Saunders et al. (2009, p. 151), suggest that having prejudice regarding theories and organization creates the risk of bias. It is a fact that personal prejudice influences research, however, maximum effort can serve to avoid those prejudices influencing the studies. During the masters program, there was a lot of knowledge gained about project management, strategic management, retail management and operations management. The knowledge gained had a prejudicial impact on the subject studied, but maximum effort was made to learn more about the chosen topic to minimize this prejudice.. Travels and media also impacted choices made and topic selection. The primary goal was to concentrate on academic articles in order to avoid any type of prejudice.

### **3.4 RESEARCH APPROACH**

According to Saunders et al. (2012, p. 145), three research approaches can be applied in conducting research, namely, deduction, induction, and abduction. The deductive approach considers predictions and tests hypotheses which may undermine those predictions, as well as trying to specify conclusions from the outset by way of a general statement (Ketokivi & Mantere, 2013, p. 71). Blaikie (2009, p. 86) suggests following predefined steps when using the deductive research approach, such as developing hypotheses, discovering theories to assist in developing conclusions, investigating whether or not a new hypothesis can help add useful information to the topic, collecting data to identify if the hypotheses can be accepted or refused, accepting or refusing the initial hypotheses. According to Blaikie (2009, p. 86), the deductive approach tests existing theories thus identifying the reliability of the hypotheses, in turn, confirming or rejecting the explanation of hypothesis on a given topic. The opposite of deduction is the inductive approach that generalizes research using specifics as a starting point (Ketokivi & Mantere, 2010, p. 316). According

to Saunders et al. (2012, p. 145) the inductive approach starts from the phenomena, which motivates one to collect data, consequently resulting in theory development around said phenomena. According to Blaikie (2009, p. 83), the inductive research is necessary when observing a group of people or social phenomena and generating a small generalization about it. Collecting data should lead to patterns or common characteristics which would allow for the implementation of a generalization (Blaikie, 2009, p. 84). The abductive approach is a combination of deductive and inductive approaches, according to (Saunders et al., 2012, p. 147). This research approach involves collection of data, identification of phenomena, investigation of patterns, development of new theory or modification of existing theory (2012, p. 145). Ketokivi & Mantere (2013, p. 72) suggests observing theory or social actor to investigate the uniqueness of some specific factor, while applying abductive research approach.

The abductive approach was to be used while writing this thesis, since the research is aimed at checking the relevance of existing hypotheses associated with attributes influencing customer satisfaction and profit maximization in airport retail sector, as well as airport concession management approaches impacted by those factors. The research undermines the existing hypothesis as the studies were carried out more than fifteen years ago, and airport and retail industry are very dynamic. The research is following predefined steps suggesting by abductive research approach, such as, developing hypotheses, discovering theories to assist in developing conclusions, investigating whether or not a new hypothesis can help add useful information to the topic, collect data to identify if the hypotheses can be accepted or refused, accept or refuse the initial hypotheses.

### **3.5 RESEARCH DESIGN**

According to Saunders et al (2009, p. 151), there are two types of research design: quantitative and qualitative. Ontological and epistemological positions influenced the research design that was chosen (Bryman & Bell, 2011, p. 27). According to Creswell (2009, p. 3), data collection and data analysis are also defined through the research design, which leads to the clarification of strategy and procedures. When collected data is associated with numbers, such as data collected through the survey, it is quantitative (Jones, 2011, p. 203). Creswell (2009, p. 4), proposes quantitative research as a connection between attributes which can be assessed through the statistics. Conversely, qualitative research is associated with non-numerical data, when the data collection process relates to interviews (Ritchie et al., 2014, p. 31). Creswell (2009, p. 4), proposes qualitative research as a collection of opinions and decision of individuals and the reasons behind that. The research approach which merges both qualitative and quantitative methods is mixed-method research (Creswell, 2009, p. 4).

Research design approach aims to answer research questions that are not possible to implement through the qualitative research approach. To use interviews for collecting data would be beyond the scope of this paper. A quantitative research approach was chosen for this thesis since data would be collected by survey. Through the use of quantitative study, 'what' was the main question asked to retrieve numerical data for measuring the relevance

of required variables to proceed with the relevant analysis and conclusions. Quantitative research design is balanced with the epistemological and ontological conjectures. Through the use of a constructionist epistemological approach and an interpretivist ontological approach, we aim to lead quantitative research, where individual actors would assess and position factors influencing profit maximization and customer satisfaction.

### **3.6 RESEARCH STRATEGY**

It is very important to identify a particular strategy that will lead to answering certain research questions and respond to the research objectives (Saunders et al., 2012, p. 141). A vast variety of strategies aim to meet different research aims, such as: experiments; surveys; case studies; action research; grounded theory; ethnography, and archival research (Saunders et al., 2012, p. 141). A survey was chosen as it is deemed the best approach answer the research question, as well as support the selection of research design and philosophical assumptions.

The survey was designed in order to receive answers from operations managers of the world's busiest airports according to WAC (2016), focusing on retail management and airport concession management. The aim of the survey was to run internet-mediated questionnaires to discover the factors influencing profit maximization and customer satisfaction in airports' concession management. According to Saunders et al (2012, p. 360), questionnaires are a method of data collection where questions are supposed to be answered in a predefined sequence. There are two main types of questionnaire that can be conducted according to Saunders et al (2012, p. 363). These are interview-administered questionnaires and self-administered questionnaires. Interview-administered questionnaires include telephone questionnaires and structured interviews.

Self-administered questionnaires includes postal questionnaires, delivery and collection questionnaires, intranet and internet mediated questionnaires. Internet-mediated questionnaires are used for this thesis. According to Whitehead (2011, p. 109), the internet-mediated approach to conducting research is beneficial in cases where it is hard to reach people due to geographical location. More over, this approach helps to relieve discomfort, feelings of being judged, or diffidence and may strengthen exposure. Internet studies introduce fewer obstructions to involvement such as keeping meetings or putting questionnaires in the post, Whitehead (2011, p. 110).

The goal was to collect information from all over the world, targeting airports which operate in major hubs and serve large numbers of passengers. An internet-mediated questionnaire was deemed the best approach to meet this goal in a short period of time. The questions were based on literature reviews and previous research studies. Thus, questions were designed regarding concession management attributes, types of concession management, profitability, customer satisfaction and efficiency of each airports' concession management type. All questions were compulsory to answer and were based on rating scales answers, to identify importance and relevance of each attribute of airport concession management discussed (Saunders et al., 2012, p. 381).

### **3.7 DATA COLLECTION**

There are two types of data that can be collected – primary data and secondary data (Bickman & Rog, 1998, p. 24). According to Blaikie (2009, p. 162), primary data is always collected directly from the original source and aims to satisfy the demand of the study. As opposed to primary data, raw data (Saunders et al., 2009, p. 257), has already been collected by somebody else for a different purpose (Blaikie, 2009, p. 161), however it is still valid for further analysis. The usage of secondary data has its advantages and disadvantages. On one hand, it is very convenient to use data that has already been collected for convenience and to save time (Shiu et al., 2009, p. 141), however on the other hand according to Saunders et al (2009, p. 271), the relevance and quality of secondary data can be doubtful, since different scholars have different aims while collecting data. For this research, first hand primary data was collected through the use of questionnaires. It was essential to collect data that responds to this particular topic with a very narrow focus on the questions raised. This approach rejects the use of secondary data from the very beginning, due to lack of relevance of any secondary data. Earlier studies had collected data related to customer satisfaction and profit maximization in airport concession management however this research was conducted more than fifteen years ago and so the data is not valid anymore. This is due to the dynamics of the industry and the limitation of research with a narrow number of participants. Through the collection of primary data, this research increases its objectivity, reliability and relevance.

### **3.8 LITERATURE SEARCH**

A literature search was conducted in order to investigate what scholars have already written about this topic. According to Hart (1998, p. 11), it is important to express the intention to discover philosophical traditions. The selection of the topic and defining the strategy to implement a literature review to investigate the chosen topic are mature decisions often based on foregoing obligations with a view of research Hart (1998, p. 11). The search terms used were profit maximization, customer satisfaction, airport concession, airport operations, retail management, airport management, and various conjunctions of the preliminary adverted terms. Furthermore, the Umeå University Library search engine, the Heriot-Watt University Library, the Web of Science, and Google Scholar were used as primary search engines. Moreover, a number of articles from consulting companies were reviewed to get a clear idea of the actual problems and industry potentials using sources like: McKinsey, Price Waterhouse Cooper and Arthur D Little. The literature search and the deep review of it made a significant impact on the research question statement (Bickman & Rog, 1998, p. 78). Theories and concepts were chosen based on the literature search which resulted in the selection of studying customer satisfaction, profit maximization, airport operations management, retail management, and airport concession management.



## 4 PRACTICAL METHODOLOGY

*This chapter is aimed to describe how data was gathered in a practical sense. It begins which the discussion on how the decision related to sampling was done. It proceeds with a description of access strategy and questionnaire. Finally, it is discuss how the data was analyzed, as well as ethical and societal considerations.*

### 4.1 DATA COLLECTION

#### 4.1.1 SAMPLING

The research question was a qualifier in the population selection for the most appropriate data collection, according to Patton (1980, p. 100). The most suitable population to respond to the thesis' research question would be airport employees working in the airport concession management sector, as well as operations managers, strategic project managers focusing on retail projects and business development managers. According to Creswell (2009, p. 205), the population can be sampled in two different ways: a random or non-random sample. According to Copas & Li (1997, p. 55), random-sampling is associated with equal chances of being asked within the sample population and is widely used in statistical analysis. Non-random samples do not guarantee equal chances for the sample population to be selected whilst gaining data (Copas & Li, 1997, p. 55).

For the thesis, a non-random sample was selected as the most appropriate way to respond to the research questions. There is no aim to establish statistical generalizations and the focus of the research is predefined with airport operations. A random sample would not bring expected results as no value would be added in order to reach the main purpose. Consequently, a non-random sample was identified as the most suitable approach in order to keep the focus on a certain number of airports, to reach the main purpose and to find the answers to the research questions (Saunders et al., 2012, p. 281).

It was also important to make a strategic decision about the sampling selection, based on the literature review. It is a known fact that airports have non-aeronautic revenues coming from passengers, who spent their money right before the departure. The connection is obvious, the more passengers visiting airport, the higher probability for the airport to generate profit as every passenger is a potential customer. Consequently, chances are high, therefore the aim of the research is to investigate those factors influencing customers satisfaction and profit maximization. For this reason, the strategic decision was taken to sample only the busiest airports from all the airports in the world (WAC, 2016). A list of airports can be seen in table 1. This non-random sampling increases the chance of an effective result, which would contribute to practical methodology. The busiest airports already experience a higher number of passengers who are potential customers that can generate non-aeronautic revenues. For this reason, these particular airports were chosen as a sampling group in order to collate information from the most experienced professionals whom face the daily challenge of satisfying the needs of a vast number of passengers (customers) to maximize airports' profit.

Table 1. Top 30 busiest airports in the World for 2015  
Source: World Airport Codes<sup>1</sup> (2016)

<b>Airport</b>	<b>Country</b>	<b>IATA</b>	<b>Passengers 2015</b>
Hartsfield Jackson Atlanta International	United States	ATL	101,489,887
Beijing Capital International	China	PEK	89,938,628
Dubai International	United Arab Emirates	DXB	78,010,265
Chicago O'Hare International	United States	ORD	76,942,493
Tokyo International	Japan	HND	75,316,718
London Heathrow	United Kingdom	LHR	74,989,914
Los Angeles International	United States	LAX	74,704,122
Hong Kong International Kai Tak	Hong Kong	HKG	68,342,785
Charles de Gaulle International	France	CDG	65,771,288
Dallas Fort Worth International	United States	DFW	64,072,468
Atatürk International	Turkey	IST	61,836,781
Frankfurt am Main International	Germany	FRA	61,032,022
Shanghai Pudong International	China	PVG	60,053,387
Amsterdam Schiphol	Netherlands	AMS	58,284,848
John F Kennedy International	United States	JFK	56,845,250
Singapore Changi International	Singapore	SIN	55,449,000
Guangzhou Baiyun International	China	CAN	55,201,915
Soekarno-Hatta International	Indonesia	CGK	54,053,905
Denver International	United States	DEN	54,014,903
Suvarnabhumi (Bangkok)	Thailand	BKK	52,808,013
San Francisco International	United States	SFO	50,057,826
Incheon International	South Korea	ICN	49,412,750
Kuala Lumpur International	Malaysia	KUL	48,934,118
Madrid Barajas International	Spain	MAD	46,814,739
Indira Gandhi International (New Delhi)	India	DEL	45,981,773
McCarran International (Las Vegas)	United States	LAS	45,356,580
Charlotte Douglas International	United States	CLT	44,876,627
Miami International	United States	MIA	44,350,250
Phoenix Sky Harbor International	United States	PHX	44,025,393
George Bush Intercontinental Houston	United States	IAH	42,962,381

<sup>1</sup> Available from: <https://www.world-airport-codes.com/world-top-30-airports.html> [Retrieved 10.10.2016]

#### 4.1.2 ACCESS

According to Bryman & Bell (2011, p. 277), there is a need to develop a strategy on how to access and obtain information. In this research it was very important to guarantee that the questionnaire will be responded to by the right person.

Table 2. Summary of Strategies

Airport	Airport Web-Site 'Contact Us' Form	Direct Contact on Airport's web-site	Airport Facebook Page	LinkedIn Contacts
A1	x		x	x
A2	x	x		x
A3	x		x	
A4	x		x	
A5	x			
A6	x	x		x
A7	x		x	x
A8	x	x	x	
A9	x			x
A10	x			x
A11	x	x	x	
A12	x			x
A13	x			x
A14	x		x	
A15	x	x		x
A16	x			
A17	x			
A18	x	x	x	x
A19	x		x	x
A20	x	x	x	
A21	x			x
A22	x	x	x	
A23	x		x	
A24	x			x
A25	x	x		x
A26	x		x	x
A27	x			
A28	x		x	
A29	x	x		x
A30	x		x	x

Firstly it was important to identify who could be the most appropriate person in each airport to reply to the questions most accurately. Table 2 is a summary of the strategy implemented to access the relevant contacts.

All thirty airports were encoded with ID numbers that do not match the sequence of airports from the Table 1 in order to keep the information confidential and relevant to ethical norms.

Each airports has a 'contact us' form which is aimed to create two way communication between airports and airport customers. This form was used as the first means of communication where it was possible to send a letter with a request. The request letter provided a brief explanation about the purpose of the research; the scope of the questionnaire, and enquiries about the most suitable contact regarding research participation. The biggest challenge faced in most cases, was that the 'contact us' form allowed only a limited number of symbols. Consequently, request letters had to be very short, therefore delivering the information to the right contact took up a lot of time and effort and affected the timing of the research. Usually, up to five people were involved until the final contact was reached. The final contact was given a link to a questionnaire in order to respond. The whole process took three to five weeks. When successful, the final contact took up to a week to respond to the questionnaire.

In the more limited cases, airport websites had the direct email addresses of people responsible for certain activities. Those people were contacted via emails. This provided a better opportunity to explain the aim of the research and who is required to participate in the questionnaire, without any word limitation (symbols), as in 'contact us' form. The main challenge with this approach was to understand the organizational structure of each airport and distribution of responsibilities in order to get in touch with a right contact. The other challenge was the willingness and enthusiasm of contacts to redirect the request further, so the questionnaire will be completed by the right person.

A large number of airports have Facebook pages which have the 'contact us' form along with advertisements and the news feed. In some cases, it was possible to send a direct message with the same request as in 'contact us' form. This made it possible to attach the files with the full research purpose and request description with no word (symbols) restriction. However, with some airport Facebook pages it was not possible to send messages, which was not of benefit.

The final source for contacts was the LinkedIn social network for professionals. Who works in a particular airport, what position and what responsibilities they hold are all visible publicly. The main challenge here was the restriction to contact people until 'connected' with a profile. To overcome the challenge, the solution was to switch to a premium account and therefore have wider access to contacts. The premium account service is not free, so this approach requested certain investments. Moreover, the ability to contact people is restricted on daily basis and contacting people does not always guarantee the a response.

Table 2 is a summary of airports where the communication process was established, with an explanation of what channels were available or used. This table however does not detail whether there was full participation from all airports, even though communication was established.

#### **4.1.3 QUESTIONNAIRE**

According to Saunders et al. (2012, p. 363), there are a number of factors based on the research question and the research objectives that can influence the choice of questionnaire: types of question; number of questions; importance of reaching a specific respondent etc. Based on the importance of the research factors; the questionnaire was designed in five sections. Each section contained one only question, which was compulsory to respond to. These questions contained several answers, which were to be ranked according to their relevance to the question and importance to the respondent.

There was no requirement to construct questions, since similar research had been implemented earlier (Kim & Shin, 2001, p. 153) and the same variables and attributes were investigated and assessed for relevance and importance. The questions were asked in Korean airports only. This research was broader in terms of participant numbers and the diversity of countries where airports are located. At the same time, all questions were individually designed with clear guidelines to the answers. The answers are the key elements in this questionnaire since the questions are a combination of the forced-choice and rating questions (Saunders et al., 2012, p. 378). It was also important to follow the structure suggested by Saunders et al. (2012, p. 372) when a researcher is clear about the data required and designs a question; the respondent decodes the question in the way the researcher intended and answers the question; the researcher then decodes the answer in the way the respondent intended.

While constructing the questionnaire, the order and flow of the questions was also considered, as suggested by Saunders et al. (2012, p. 387). The layout of the questionnaire was implemented using a template suggested by Google and distributed through the tools offered by Google via email. This approach was chosen as a very convenient way to collect and analyze information. The length of the questionnaire was considered with the purpose to respond to the research questions and objectives only. The average time to respond to the questionnaire was approximately seven minutes.

There was no structured cover letter to the questionnaire since it was a long process of finding the most relevant people to respond referred to as a pre-survey contact by Saunders et al. (2012, p. 397). When the participants were starting the questionnaire, they were already familiar with the purpose of the research and why their participation is important. A questionnaire introduction was also unnecessary, due to the same reasons. Saunders et al. (2012, p. 390) discuss the challenges internet-mediated questionnaires can face, so it was important to overcome those challenges and establish direct communication first than invite the participant to respond to the questionnaire.

## **4.2 ANALYSIS TECHNIQUE**

Quantitative analysis techniques assist in the process of analyzing and interpreting data (Saunders et al., 2012, p. 414). In this research, data was collected through the internet-mediated questionnaires by using Google tools. Questions were divided into five sections; each section had one question only with a number of answers which were to be ranked from one to five points. When using Google tools to distribute questionnaires and collect the results, all the data automatically gets exported into an Excel file (.csv format), so it can be analyzed and interpreted.

As suggested by Saunders et al. (2012, p. 415), the data was prepared by quantitative analysis and the type of charts deemed suitable for best explanation of the results was already determined. The data was ranked (ordinal) to make it easier to predict what the format of the results and how to interpret them. Regarding the data layout, it was decided to keep the data related to each section in separate Excel sheets. Data was to be sorted and calculated. It was important to rank attributes offered as answers to the questions, so the excel function could be used to estimate the average score and measure the popularity of each attribute. For convenience, a number of values associated with each question were presented in the form of pie charts to measure the difference and popularity of the answers.

## **4.3 ETHICAL & SOCIAL CONSIDERATIONS**

This thesis is relevant to a group of stakeholders: airport managers; operation managers; retail managers; project managers and most importantly airport passengers. Throughout the whole process of the research, society in general was considered. If the airport operations sector improve and develop their customer satisfaction work based on this research, society can benefit. Airports can benefit by improving and developing of the needs of the customer and maximizing their profits by taking into consideration these needs as the primary important facts in the airport concession management strategy. For those who have already chosen the path to success in goals mentioned above, this research may be a source of inspiration and motivation to keep working towards the implementation of business goals through the satisfaction of customers needs. It is important to state that this thesis will not provide any negative conclusions or implications which may affect any of the stakeholders mentioned above. The research is aimed only to support and guide those who are looking for help and suggestions without any direct blame on others about the wrong strategic management approach or low attention to customer needs. It was crucially important to be as ethical as possible, considering society at large during the whole research period. The list of all airports chosen to participated in a survey is transparent, whilst the survey respondents are kept anonymous. Furthermore, which response associated to which airport is kept anonymous to ensure that no sensitive information given away and may negatively affect the airports. However, maximum transparency with the respondents was maintained giving a clear explanation of the research purpose and expected outcome. Another ethical factor considered was the ability to apply reliable and accessible sources for the thesis.

# EMPIRICAL FINDINGS

*This section aims to provide information relating to the results from the conducted survey and in particular the questionnaire. The evaluation and results are based on different concepts and theories discussed earlier in the theoretical framework, such as: customer satisfaction; profit maximization; airport retail management; and airport concession management. This section is objective and all the discussions discussed further in the analysis.*

## 5.1 MEANINGFUL ATTRIBUTES RELATED CONTENT

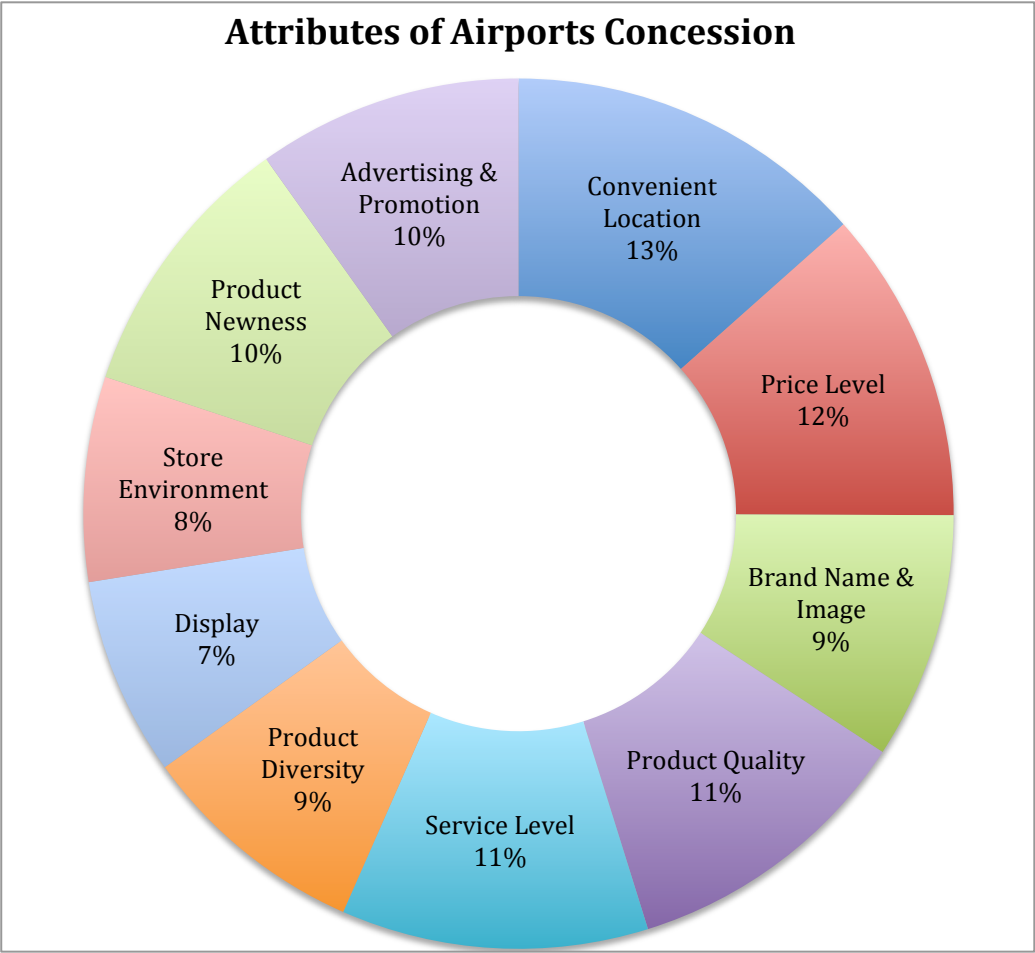


Figure 7. Attributes of Airports Concession

There are ten attributes of airport concession, measuring and differentiating customers satisfaction and airports revenue. Figure 7 shows the results of the average scores ranked by percentage assessing both customer satisfaction and concession profitability. According to the results in Figure 7, there is no significant difference in the scores of all the attributes. However, it is possible to make the assumption that some attributes are more likely to affect profit maximization and customers satisfaction than others. According to Figure 7, ‘Convenient Location’ is one of the most significant factors affecting customers behavior positively. It also plays a significant role in airport profitability. ‘Price Level’ is another attribute that is very effective and comes second after ‘Convenient Location’. ‘Service Level’ and ‘Product Quality’ are next with similar scores; however ‘Service Level’ ranks slightly more higher and is more meaningful in measuring customers satisfaction and airport profitability. ‘Promotion & Advertising’ ranks similarly to ‘Product Newness’. ‘Brand Name’ & ‘Image’ has almost the same importance as ‘Product Diversity’. ‘Store Environment’ does not rank as an important indicator for customer satisfaction or airport profitability compared to the other attributes. ‘Display’ is the least meaningful attribute of the ten attributes.

**5.2 CONCESSION MANAGEMENT TYPE RELATED CONTENT**

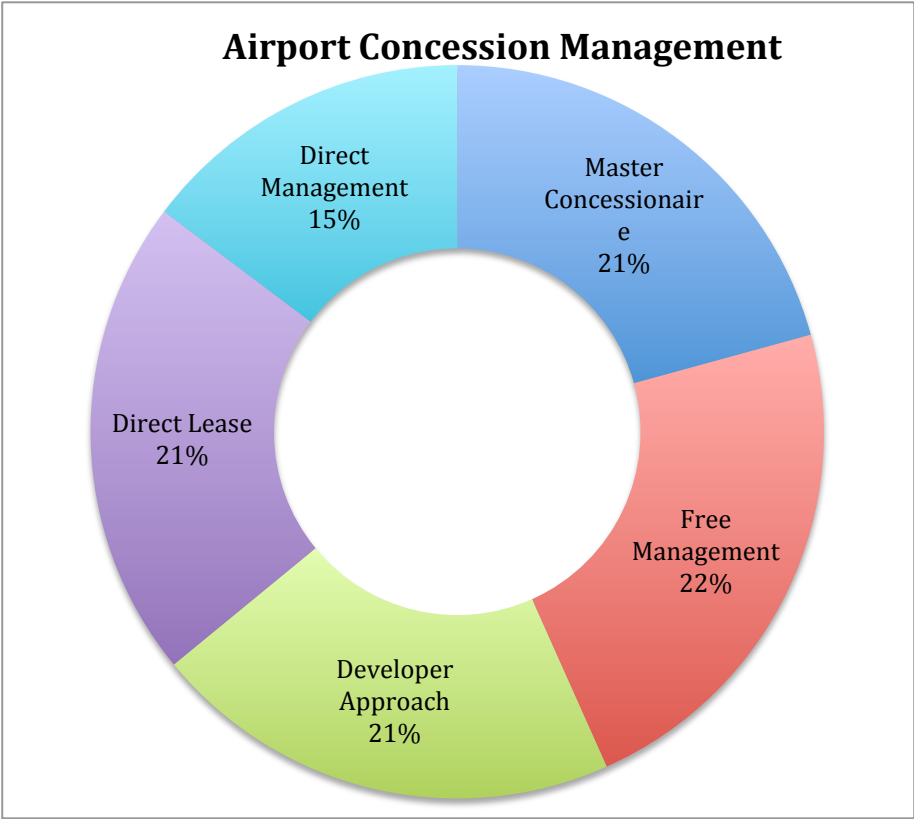


Figure 8. Airport Concession Management



There are five types of concession management charted in Figure 8 describing the relevance of each airport concession management type: 'Duty Free, Food and Beverage and Retail product categories. 'Free Management' concession type takes the leading position with 22% with an average rank of 3.76 points. Second place is shared between 'Master Concessionaire' and 'Free Management' with an average score of 3.46, which is 21% of the total score, according to the Figure 8. 'Direct Lease' takes 21% with an average score of 3.54 points when evaluating the popularity of airport concession management types. 'Direct Management' is the least popular type with 15% and an average score of 2.46 points.

**5.3 PROFITABILITY RELATED CONTENT**

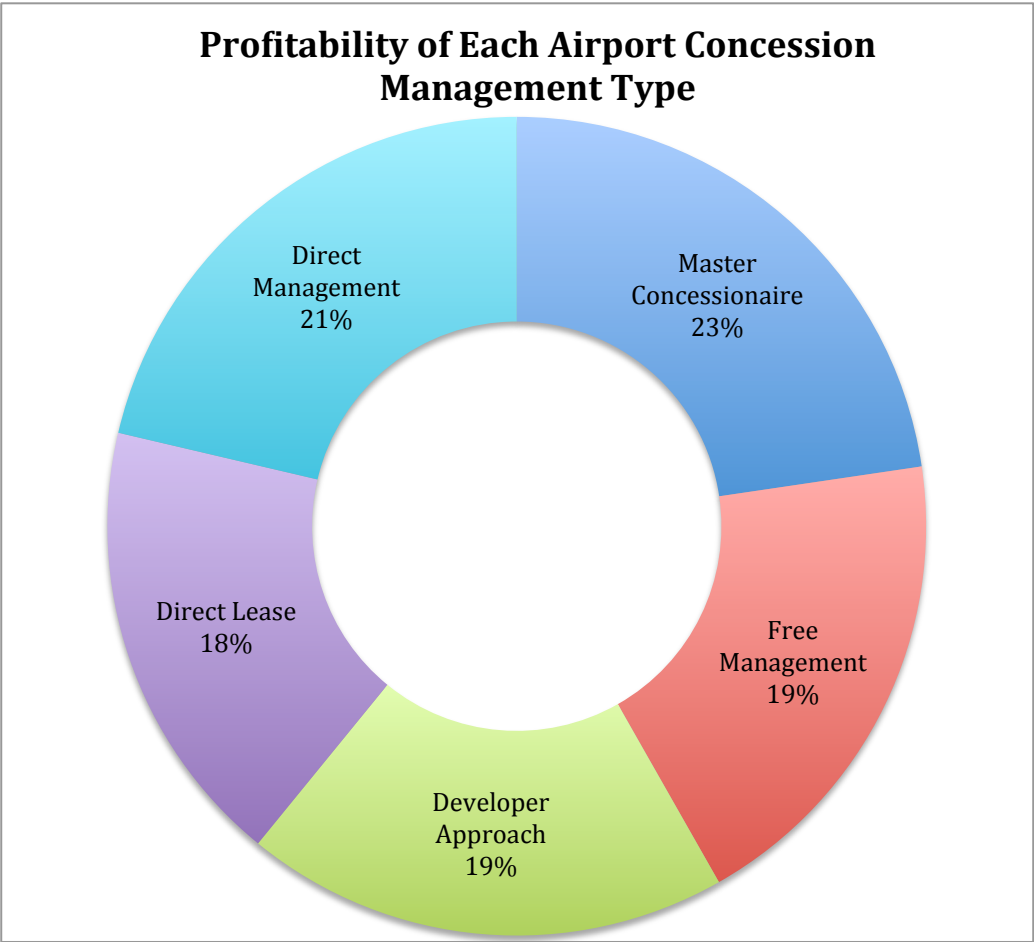


Figure 9. Profitability of Each Airport Concession Management Type

There are five type of concession management shown in Figure 9 with the aim to identify the most profitable contract type among airport concession management types. ‘Master Concessionaire’ is the most profitable type of concession management with 23% and a score of 3.92 points between an average rank of 1 to 5. Second place is ‘Direct Management’ with a of score of 3.69, and 21% of popularity. Third place is shared between ‘Free Management’ and ‘Developer Approach’ with 19% and 3.31 points. By a small margin, the least popular spot is ‘Direct Lease’with 18% and a score of 3.07 points.

**5.4 MANAGERIAL EFFICIENCY RELATED CONTENT**

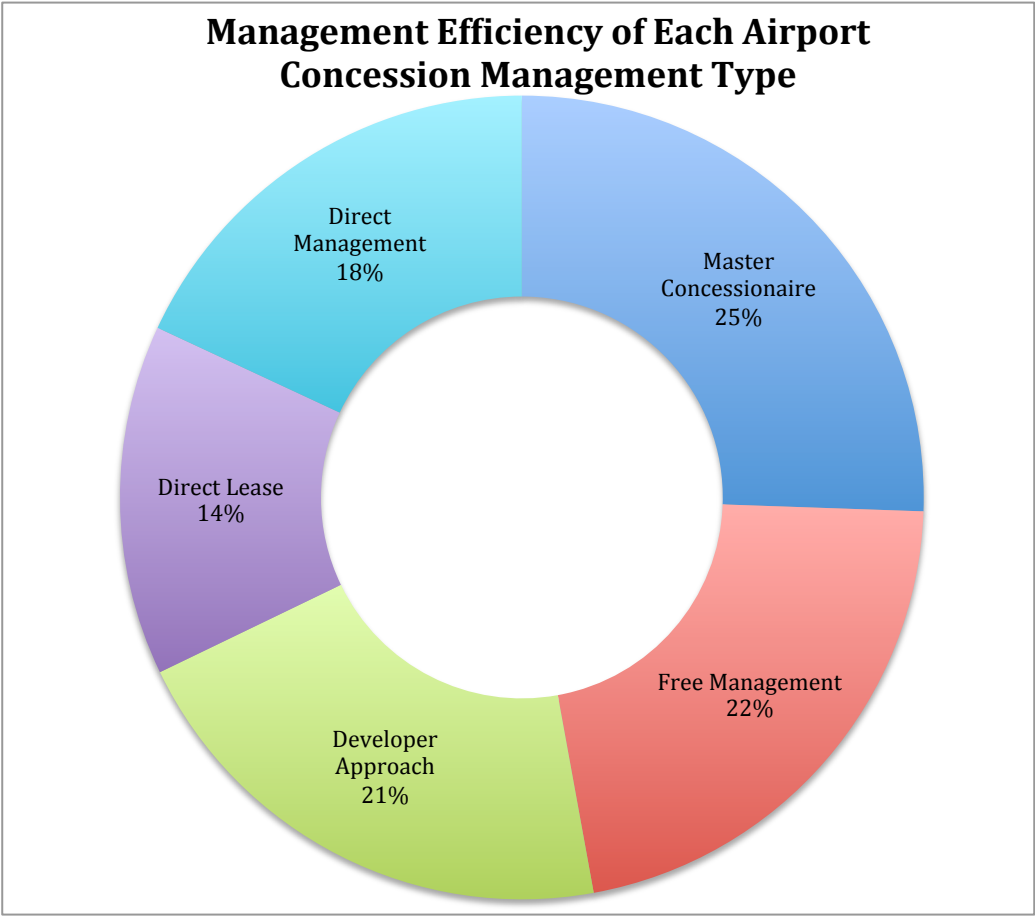


Figure 10. Management Efficiency  
of Each Airport Concession Management Type

There are five types of concession management illustrated in Figure 10 with the aim to identify the most efficient contract type among airport concession management types. The leading contract type is ‘Master Concessionaire’ with 25% of the overall assessment and 4.46 points between an average ranking of 1 to 5. ‘Free Management’ is in second place and considered as an efficient concession management type from a managerial perspective, with a score of 3.77, which is 22% of the overall assessment. ‘Development Approach’ is third with 22% and a score of 3.61. The next position is occupied by ‘Direct Management’ with 3.15 points, which is 18%. In last position is ‘Direct Lease’, with 14% of the overall assessment and 2.46 points.

**5.5 CUSTOMER SATISFACTION RELATED CONTENT**

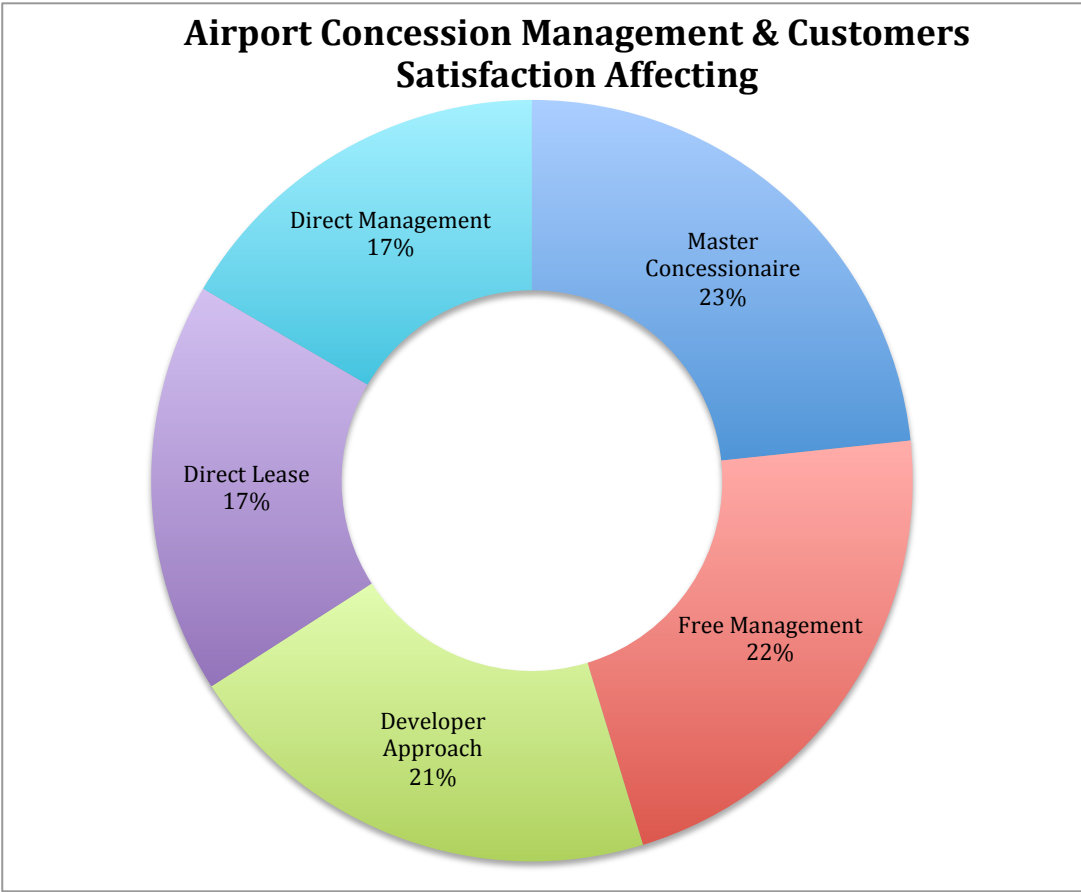


Figure 11. Airport Concession Management & Customers Satisfaction Affecting

There are five types of concession management shown in Figure 11, with the aim of identifying the type with the highest effect on customer satisfaction. According to Figure 11, 'Master Concessionaire' with 23% from overall assessment and 4 points between an average rank of 1 to 5, is considered to have the highest influence on customer satisfaction. 'Free Management' is also considered to have a significant influence on customer satisfaction, with an average score of 3.77, which is 22% of the overall assessment. 'Development Approach' with 21% and an average score of 3.54 points is third spot. Fourth is 'Direct Lease' with 3 points, which is 17%. Lastly, 'Direct Management', with 17% but only 2.85 points is classified as the least efficient contract type.

## 5.6 SUMMARY OF EMPIRICAL FINDINGS

Table 3. Summary of Attributes

ATTRIBUTE	VALUE	%
Convenient Location	4.62	13%
Price Level	4.00	12%
Service Level	3.92	11%
Product Quality	3.77	11%
Product Newness	3.46	10%
Advertising & Promotion	3.38	10%
Brand Name & Image	3.15	9%
Product Diversity	2.92	9%
Store Environment	2.62	8%
Display	2.54	7%

There are ten attributes of airports concession, measuring and differentiating customers satisfaction and airports revenue. The most relevant attributes, according to the Table 3, are the attributes with a highest scores. Top three attributes are: 'Convenient Location', 'Price Level', 'Service Level'. 'Convenient Location' gained 13% and 4.62, which is the highest result, where 5 is the maximum. 'Price Level' is 12% and 4 points, and the 'Service Quality' is 11% with 3.92 points, as it performed in Table 3.

Table 4. Summary of Concession Management Types

TYPE/FACTORS	PROFITABILITY		MANAGERIAL EFFICIENCY		CUSTOMER SATISFACTION	
Master Concessionaire	3.92	23%	4.46	25%	4.00	23%
Free Management	3.31	19%	3.77	22%	3.77	22%
Developer Approach	3.31	19%	3.62	21%	3.54	21%
Direct Lease	3.07	18%	2.46	14%	3.00	17%
Direct Management	3.69	21%	3.15	18%	2.85	17%

Table 4 summarizes results of each concession management type investigated and the relation of those types with profitability, managerial efficiency and customers satisfaction. ‘Master Concessionaire’ is a leading type assessing all tree factors, with 23% in profitability factor and 3.92 points; 25% of popularity in managerial efficiency with 4.46 points; and 23% evaluating customers satisfaction with 4 points in total. Minimum results assessing profitability was gained by ‘Direct Lease’ management type with 18% and 3.07 points. ‘Direct Lease’ also received the lowest rank while evaluating managerial efficiency with 2.46 points, which resulted 14%. ‘Direct Management’ type was the lowest in assessing customers satisfaction with 17% only, which was 2.85 points, where 5 is a maximum, as it performed in Table 4.

## 6 ANALYSIS & DISCUSSION

*The aim of this chapter is to provide analysis and discussion, explaining the results derived from the empirical data. Also, there is an explanation of the relation between theoretical framework and the results derived from the empirical data. Furthermore, different management concepts are discussed to see the evolution of retail sector in airports.*

### 6.1 AIRPORT OPERATIONS MANAGEMENT

Initially, airports never been a source of revenue generation for the retail sector. The only aim of airports was to provide a secure and comfortable space for passengers departing and arriving. Political, economical and social factors have totally changed the way airports operate these days. The meaning of revenue generated by airports has been divided into aeronautic and non-aeronautic categories. Airports generating profit from airline companies for serving them in their own territory, is defined as aeronautic profit (Appold & Kasarda, 2006, p. 56). However the main source of revenue comes from non-aeronautic profit, where airports need to find ways to maintain themselves as organizations through the retail services.

Airport retail management has become a major topic discussed by many scholars. There were a large number of passengers arriving and departing, being located in a certain area of airport, with an aim to spend certain amount of time, waiting for the next flight, or waiting for friends and relatives to arrive, sometimes with a delay in time (Fermie, 1995, p. 6). This 'waiting time' was creating many needs for people with a main desire to fulfill the 'waiting time' in an available and effective way. The fulfillment came in the form of restaurants, cafes, book stores, gift stores and other services offered by airport operations.

Airport passengers are mobile customers. Moving from one place to another through the airports, they started to realize the difference in goods and services offered by operations management (Wattanacharoensil et al., 2016, 319). Comparison analysis, feedbacks, high demand and all the external factors coming through the contently traveling passengers, led airports to compete with other airports when developing their strategic approach in operating airports, particularly in the retail sector. Eventually, the whole operations management strategy started being based on the demand of passengers, who were using the services offered by airports and bringing non-aeronautic profit, which has become vital for airports as organizations in recent times (Freathy & O'Connel, 1998, p. 249). To gain all passengers as a customers and to motivate them to use services offered for departing or arriving passengers it is very important to cater to their needs.

Airport operations management has been through a large evolution. Initially, services were developed for passengers with a certain strategy, they have been using and accessing. That is how airports would evaluate their success in satisfying passenger needs to generate non-aeronautic profit. However, the main and unique factor that every airport must consider is diversity and a constant renewal of passengers in the airport. It has brought operations

management to an enhanced strategy (Wattanacharoensil et al., 2016, 319). Instead of developing a strategy based on traditional assumptions and offering passengers certain services, it was decided to listen to passenger's views and to offer the experience they wanted during their 'waiting time'.

## **6.2 PROFIT MAXIMIZATION & CUSTOMER SATISFACTION**

The new approach of serving passengers in airports intended to identify, collect, analyze and implement their needs, to satisfy passenger needs and to develop long term relations with them. Regardless of the flight direction, airlines loyalty program and the convenience of the airport location for passengers, airports started to define themselves as brands (Perng et al., 2010, p. 279). Airports started developing loyal relations with their passengers, making them feel privileged and very welcomed. Loyalty programs including cafes, restaurants, pharmacy stores, grocery shops, parking spots and lounge areas for membership card holders, where passengers can eat and drink for free, take a shower or store their luggage. Being a member of an airport through these programs works towards the development of customer loyalty and customer satisfaction.

Airports started to compete with each other to motivate passengers planning trips using one specific airport. This is mostly relevant to larger airports, which are known as international hubs or major transit points for long distance trips. International airports in Indonesia have started to offer free city tours for all the passengers when their transit is longer than five hours (Fuerst et al., 2011, p. 283). Seoul International airport offers entertainment programs for all the travellers by playing music and performing national dances (Fermie, 1995, p. 6). Amsterdam international airport offers gaming at casinos for their passengers. It has become a strategic approach for airport operations to develop unique and competitive philosophies. Airports' mission statements serve passengers and encourage them to come back. The strategy is to reach the target through offering a comfortable and entertaining environment for passengers based on their diverse and unique needs (Freathy & O'Connell, 1998, p. 249). Satisfying the needs of a big and diverse group of people is a challenging and ongoing process evolving the airport retail management approach (Appold & Kasarda, 2006, p. 57). The airport retail sector is strongly linked to airport concession management. To be profitable, it is necessary to be strategic while building relations with other partners operating in the airports. This is strongly related to airport concession contracts and their management.

The attributes discussed in the empirical findings (Figure 7) play a key role in a whole concept when measuring customer satisfaction. To build an effective strategy towards airport profit maximization focusing on non-aeronautic revenues, it is important to consider what factors influence customer satisfaction and affect profit maximization, so that airport concession management can be planned and implemented accordingly (Fuerst et al., 2011, p. 283). This study evaluates and measures the attributes affecting customers satisfaction, as in earlier studies, and provides guidelines for operation managers on how to build a strategy of airport concession management that is meaningful for customers.

(Geuensa et al., 2004, p. 618). By having information about how powerful each attribute discussed in the empirical findings is, it is easier to plan strategic relations with partners through concession contracts. It is up to the airport how they estimate and decide how much responsibilities to assign to their partners; how to distribute those responsibilities among the group of partners and what to expect and demand from their partners based on the airport's concession management strategy. Concession management strategy must fulfill two main objectives (Chung et al., 2013, p. 108). Firstly, to be as profitable as possible, so that airport can perform successfully generating their non-aeronautic revenues. Secondly, to consider customers needs and satisfy them by creating a comfortable atmosphere within the airport and motivating passengers to spend more money every time they attend the airport by the development of loyalty and trust between passengers and the airport (Geuensa et al., 2004, p. 618).

### **6.3 AIRPORT CONCESSION MANAGEMENT**

According to Table 3, there are some attributes that more meaningful than the others in affecting customers satisfaction and profit maximization. It has a direct effect on airport concession management as the strategy operations management implemented with this knowledge can improve airport profit maximization.

‘Convenient Location’ is one of the most important attributes according to the empirical findings of this research. The highest purchasing ability happens when passengers have been through all the security checks and are waiting to board. People are more likely to shop an hour before their departure, referred to as ‘happy hour’ in the airport retail sector. Some passengers feel more relaxed and ready to have a meal or buy a book to pass the time (Fuerst et al., 2011, p. 283). Whilst other passengers might stress about the flight and they shop in the ‘happy hour’ to manage their stress. Many companies running businesses in airports would prefer to locate their store or café close to the gates. This ensures ‘happy hour’ revenue and the business is more profitable compared to the shops and restaurants before the security gate. Research related to ‘Convenient Location’, gives strategic guidelines to airport operations management about what kind of concession contracts offer to their partners.

‘Price Level’ is another attribute that plays a vital role in building concession management strategy. There are a number of products, such as tobacco and alcohol that are free from taxes when purchased within an airport due to legislation. There are also a number of brands and companies that provide exclusive prices for airports on products that are available for higher prices in regular stores (Kim & Shin, 2001, p. 151). This is very attractive for airport passengers and affects their buying habits in a positive way. Concessionaires that are able to offer tax free prices could have unique contracts with airports that are different to the contracts of regular pharmacy stores or cafes.

‘Service Level’ is also one of the top three attributes affecting concession management. Since airport passengers come from all over the world, it is very important to satisfy the needs of all passengers based on their ethnicity, cultural background, religious views, gender, age and mentality (Kim & Shin, 2001, p. 151). Free language communication is



one of the key aspects in serving customers at international airports. Airport partners in the retail sector have common targets with the airports, such as profit maximization. However, airports are responsible for their own reputation, whilst building long term and loyalty oriented relations. Any positive or negative incidents that passengers may face will be always associated with that particular airport. This is why it is crucial for operations management to establish strategic relations with their concessionaires and discuss all the important points associated with the 'Service Level' in the airport concession management strategy.

'Product Quality' and 'Product Newness' also affect airport concession management by affecting the airport's motivation to work with brands in a particular period of time (Kim & Shin, 2001, p. 152). According to earlier research, men on business trips are very likely to buy electronics during 'happy hour' before boarding. As an example, airports have good reason to consider companies like Apple or Samsung having stores in airports, developing concession contracts taking into consideration the policies and strategies of the electronics manufacturing companies, guarantee sales and revenues. 'Advertising & Promotion' leads airport operations management to discuss and distribute responsibilities with their partners while negotiating concession contracts. 'Brand Name & Image' attracts passengers and motivates them to shop. To determine which brands attract the largest audiences is another area of research but each brand may have their own tactics on operating in the market (Kim & Shin, 2001, p. 152). If a certain airport conducts a survey about the brands their passengers would prefer to have in the airport, then the airport can estimate, plan and implement the most suitable concession contract for their potential partners. 'Product Diversity' leads airport operations management to decide the strategy of each concession management type. There are contracts where the partner is responsible for one product only, whilst in other cases, the partner might manage a whole chain of stores and brands through one contract only. 'Store Environment' and 'Display' attributes have a direct influence on the concession management type through the distribution of responsibilities and expenses to each partner of the contract. Some brands and companies have exclusive rights and approaches related to their store environment, which is negotiated through the contract. Consequently, when considering attributes that play key roles in customers satisfaction and influencing profit maximization, there are several strategies affecting airport concession management (Kim & Shin, 2001, p. 152).

Airports applying different concession management types with their partners depend on the nature of the business and requirements that satisfy both sides. There are also rules and policies that are considered external factors that affect both sides agreeing on the type of concessionaire contract. According to Table 4, there are five popular types of concession management and three variables evaluating their performance, such as profitability, customers satisfaction and managerial efficiency.

Many international airports employ the 'Master Concessionaire' approach in managing the retail sector. Companies working under this contract type usually have a well-known reputation and image (Kim & Shin, 2001, p. 150). They provide a large number of services through one contract and take responsibilities for most activities such as marketing; promotion; strategy development etc. It is convenient to work with one partner. This

approach can be risky due to the high dependency on one partner and the possible limitations in services that that partner can offer. According to this research, 'Master Concessionaire' is an absolute leader in profitability, customers satisfaction and managerial efficiency (Kim & Shin, 2001, p. 150). 'Free Management' and 'Development Approach' are the other two types of airport concession management. They have positive results in evaluating performance through profitability, customer satisfaction and managerial efficiency. Direct Lease and Direct Management were assessed as the least successful while evaluating the performance of the three variables mentioned above.

It is very important to have all types of contacts available for partners who prefer to conduct business in airports. The main focus remains on customer needs. When customers define their needs, airport operations aim to create a comfortable environment, so that a particular brand, service or store will be present in the airport for passengers. Many external factors have an impact on type of relations that can potentially be developed between airports and their partners, according to Bamberger et al. (2009). Although the 'Master Concessionaire' approach appears to be the most attractive way to run the business, there should always be a gap for all other forms of contacts that could be beneficial for airport operations strategy and convenient for airport partners.

## **6.4 AIRPORT RETAIL MANAGEMENT EVOLUTION**

These days airports practice new criteria in their evaluation of operators tendering for concession contracts with the purpose of optimizing performance of the retail sector and operations management. Airports are increasingly interested in partners who can manifest financial validity; offer strong versatility; an international public image and high performance, according to Bamberger et al. (2009). Local operators are presenting themselves at a level ranked at regional airports or entering joint ventures with global operators. In the long term, these smaller operators will be highly exposed. Figure 6 represents the evolution of airport retail management, describing historical or traditional approaches with mid-term and long-term perspectives that lead to an increase in profit maximization and customer satisfaction through effective concession management.

These perspectives however do not warrant a monopoly for global operators in the future. Airports are increasingly looking for new business models in order to increase their revenues. International airports are targeted to stimulate the development of joint ventures between airports and global operators, according to Bamberger et al. (2009). It is an opportunity for airports and operators to cooperate efficaciously which will affect the success in realising the potential of the airport retail market.

Global and local operators optimize revenues and expenses with more influence from the airports. The purpose is to build a new vision and create new business models. This will lead to establishing modified types of concession management. One of the forms forecasted by consulting companies is joint ventures between airports and global operators, which will stimulates sharing responsibilities and risks by all the participants. This approach is to be implemented in Milan's Malpensa airports from 2020 to 2041. Another approach is the direct operation of the retail space by the airport. Airports will deal with brands and companies directly, such as Dubai, Amsterdam Schiphol and Rome Fiumicino airports. These airports, in most of the cases to have complete control over the offer and the concepts, according to Bamberger et al. (2009).

## 7 CONCLUSION

*This chapter is aimed to make conclusions about the research as well as to grant some practical and theoretical contributions. Suggestions for future research will be discussed subsequently, as well as limitations that this research experienced.*

### 7.1 GENERAL CONCLUSION

The purpose of this paper was to understand what is retail management in airport business sector. How airport operations management planning, implementing and evaluating their strategic decisions to generate revenues. The purpose of the research was focused on customers satisfaction and profit maximization approaches covering several airports. The purpose was to discover what connection exists between attributes affecting airport revenue generation and operations management approaches, applied in different cases, when building relations with concessionaires (Fodness & Murray, 2007, p. 495). The first research question was: *“What are the factors influencing successful retail operations in airports?”* Ten attributes were evaluated to understand what factors influencing customers satisfaction, their purchasing motivation and airport profit maximization consequently. The second research question was *“How to increase profit maximization and customers satisfaction through effective concession management?”*. From our study we can conclude that airport operations management do relate factors influencing revenue growth with a concession management types (Jiang & Zhang, 2016, p. 89). It affects the strategic approach in building relations with concessionaires in general and the whole retail management approach of airports in their non-aeronautic revenues generation.

Factors influencing successful retail operations in airports are purely based on customers satisfaction (Pantouvakis & Renzi, 2016, p. 93). There are ten attributes playing a meaningful role, that influencing passengers to use services and purchase goods on airports territory. Strategic analysis of the attributes is a key factors affecting passengers behavior. Critical evaluation of the attributes influencing customers satisfaction, playing a great impact on understanding of customers needs and generating profit through the fulfillment of those needs (Brida et al., 2016, p. 2010). Concession management is a tool to fulfill customers needs through the business instruments, such as contracts between airports and its partners. Effective concession management is what directly leads airport management towards success in non-aeronautic profit maximization. There is a way to increase profit maximization and customer satisfaction through the effective concession management. Operations management is constantly working on building the relations with their concessionaires in a most convenient and profitable way (Perng et al., 2010, p. 280). Effective concession management should be profitable for both sides – the airport and concessionaires operating their business in airport. It is also important to combine different types concession contracts, to satisfy requirements of concessionaires offering the variety of services available (Geuensa et al., 2004, p. 618). Effective concession management is non-aeronautic profit maximization. For that reason it is crucial to analyze and evaluate the relation of each concession management type and their connection with customer satisfaction, profit maximization, and managerial efficiency. The approach allows to keep the strategic decisions effective.

## **7.2 THEORETICAL CONTRIBUTION**

Theoretically, the study contribution in general identification and evaluation of success factors in airport retail management. This thesis contributes to (Kim & Shi, 2001) the evaluation of ten attributes and their connection on five airport concession management types. Attributes playing one of the key roles in understanding what is important for passengers, as potential customers. It creates a direct impact on airports' non-aeronautic revenue growth and contributes the theory of retail management (Wattanacharoensil et al., 2016) and operations management (Chiappa et al., 2016) with a focus on airport management (Perng et al., 2010).

More over the study contributes the knowledge about airport concession management types and their roles in strategic decisions (Kim & Shi, 2001). The study contributes understanding of relations between different concession management types and key assessment criteria, such as: profitability, managerial efficiency and customer satisfaction. The study contributes understanding of connection between customer satisfaction and profit maximization in retail sector (Geuensa et al., 2004). Theoretically, there is a great impact on strategic project management of airport operation sector (Graham, 2009) with a concentration on non-aeronautic revenue (Torresa et al., 2005). By doing so, the research brings general contribution to the fields of operations management, retail management, airport concession management, customers satisfaction and profit maximization.

## **7.3 PRACTICAL CONTRIBUTION**

The research makes a great contribution for strategic project managers, retails managers, operation managers as well as business owners who are working in partnership with airports or planning to operate their businesses in airport's territory. The main message which can be passed to strategic project managers is a wise balance between customer satisfaction and profit maximization. It is important to offer the variety of services and products to satisfy customers needs (Brida et al., 2016, p. 2010). However, it is very important to build the relations with partners, offering those services, in an effective and efficient way through the strategic airport concession management. This study gives a clear understanding of the strategy focus and the importance of passenger's voice (Kannan et al., 2012, p. 710). Each airport has its own approach in a development of relations with partners through the concession management contracts. The study offers generalized summary of each concession management type discussed and their impact on managerial efficiency, customer satisfaction and profit maximization. Applying this knowledge, management level has a powerful tool to decide what balance to keep between different concession management type, and use airport retail capacity on maximum level of non-aeronautic revenue profit maximization (Lubbe et al., 2011, p. 225). Companies operating businesses in airports has a chance to observe assessment of critical factors influencing customers satisfaction and their relation to concession management approaches. It can improve their negotiation process with airports to build mutually beneficial conditions through the agreed concession management contracts.

## 7.4 LIMITATIONS & SUGGESTIONS

This study has a number of limitations, that create a gap for further investigation of the topic and which may lead to new research topics. Firstly, there was thirty airports chosen to conduct this research. The main criteria which joined all thirty airports was the number of passengers that each airport had served in 2015. This gave an indication of those with the largest number of passengers, which could be considered as the largest number of airport customers whom prefer to shop in airport stores and buy food in airport restaurants. Only thirteen airports participated in the research, which is 43% from the expected amount of respondents. The main limitation was time constraints. Participation in the research was not a time consuming process, but the process to reach the right person within an organization was a challenge and required up to five weeks which includes all the negotiation processes. Being limited to thirty airports only was not a barrier to the research, since this number could be increased up to hundred or even several hundreds of international airports in order to get a broader picture and understanding of the topic.

The nature of the research was quantitative studies. There was only an internet based survey conducted to collect the data. However, there was a pre-investigation process to identify the most suitable person for the survey participation. The absence of qualitative studies is considered a limitation of this research. Ideally, it is strongly advised to conduct semi-structured interviews with all the survey participants along with a survey, to investigate more information and have access to a larger amount of data through their personal and unique experiences. A combination of quantitative and qualitative studies would be the best suggestion for the future research. New attributes that have never discussed before may be discovered that affect profit maximization and customer satisfaction in airport concession management strategies.

This research discusses different airport concession management types and their relationship to attributes affecting customer satisfaction and profit maximization. The importance of their diversity was discussed by one airport; the contribution of each concession management type associated with effective management, customer satisfaction and profitability. There was little investigation related to each concession type and the difference of each management type in different airports. For example, what is in common and what is different in 'direct management' in different airports, and what operations management assumes by 'direct management' when proposing contracts to their concessionaires was not discussed. There was no investigation done so far about what strategy of concessionaire contract airport operations management offers to partners and what are the factors influencing their strategic decision.

Concerning future research, it is suggested that investigation of more factors influencing retail operations in airports both positive and negative is conducted. It is also suggested a combination of qualitative and quantitative studies are pursued when conducting the research. Finally, it is recommended to investigate concession management types and factors influencing their implementation in mid-term and long-term perspectives.

## 8 REFERENCES

Adams, J., Khan, H.T.A., Raeside, R., & White, D. (2007). *Research methods for graduate business and social science students*. 1st edition. London: Sage Publications Inc.

Appold, S. & Kasarda, J. (2006). The appropriate scale of US airport retail activities. *Journal of Air Transport Management*, 21, 50–62.

Aydin, K. & Yudirim, S. (2012). The measurement of service quality with servqual for different domestic airlines firms in Turkey. *Serbian Journal of Management*, 7 (2), 219 – 230.

Bamberger, V., Bettati, A., Hoeffinger, S., Kuruvilla, T. & Wille, V. (2009). Mastering Airport Retail. Roadmap to new industry standard. [Online]. Available via: [http://www.adlittle.com/downloads/tx\\_adlreports/ADL\\_Mastering\\_Airport\\_Retail.pdf](http://www.adlittle.com/downloads/tx_adlreports/ADL_Mastering_Airport_Retail.pdf) [Retrieved 2016-11-05].

Bickman, L., & Rog, D.J. (1998). *Handbook of applied social research methods*. 1st edition. London: Sage Publications Inc.

Blaikie, N.W.H. (2009). *Designing social research*. 2nd edition. Cambridge: Polity Press.

Bottini, C. & Morphet, H. (2015). Air connectivity: Why it matters and how to support growth. [Online]. Available via: <https://www.pwc.com/gx/en/capital-projects-infrastructure/publications/assets/connectivity-growth-airport-investment.pdf> [Retrieved 2016-10-20].

Bouwer, J., Maxwell, D. & Saxon, S. (2015). Gridlock on the ground: How airlines can respond to airport congestion. [Online]. Available via: <http://www.mckinsey.com/industries/travel-transport-and-logistics/our-insights/gridlock-on-the-ground-how-airlines-can-respond-to-airport-congestion> [Retrieved 2016-10-20].

Bracaglia, V., D'Alfonso, V. & Nastasi, A. (2014). Competition between multiproduct airports. *Economics of Transportation*, 3, 270 - 281.

Brida, J., Moreno-Izquierdo, L. & Zapata-Aguirre, S. (2016). Customer perception of service quality: The role of Information and Communication Technologies (ICTs) at airport functional areas. *Tourism Management Perspective*, 20, 209–216.

Bryman, A., & Bell, E. (2011). *Business research methods* 2nd edition. Oxford university press. 69

Chiappa, G., Martin, J. & Roman, C. (2016). Service quality of airports' food and beverage retailers. A fuzzy Approach. *Journal of Air Transport Management* 53, 105-113.

Chung, Y. (2013). Factors affecting airport access mode choice for elderly air passengers.

*Transportation Research Part E*, 57, 105-112.

Chung, Y. (2015). Hedonic and utilitarian shopping values in airport shopping behavior. *Journal of Air Transport Management*, 49, 28-34.

Chung, Y., Wu, C. & Chiang, W. (2013). Air passengers' shopping motivation and information seeking behavior. *Journal of Air Transport Management*, 27, 25-28.

Clayton, E. & Saraswati, B. (2015). Airport infrastructure in Asia. Coping with the demand surge. [Online]. Available via: <https://www.pwc.com/gx/en/capital-projects-infrastructure/publications/assets/connectivity-growth-airport-investment.pdf> [Retrieved 2016-10-20].

Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed-methods approaches. Sage publications.

Cruz, O. & Marques, R. (2011). Contribution to the study of PPP arrangements in airport development, management and operation. *Transport Policy*, 18, 392-400.

Czerny, A. (2013). Public versus private airport behavior when concession revenues exist. *Economics of Transportation*, 2, 38-46.

Czerny, A. , Shi, Z. & Zhang, A. (2016). Can market power be controlled by regulation of core prices alone? An empirical analysis of airport demand and car rental price. *Transportation Research*, 91, 260-272.

Davies, G. (1995). Bringing stores to shoppers – not shoppers to stores. *International Journal of Retail & Distribution Management*, 23 (1), 18 – 23.

Fernie, J. (1995). The coming of the fourth wave: new forms of retail out-of-town development. *International Journal of Retail & Distribution Management*, 23 (1), 4 – 11.

Fodness, D. & Murray, B. (2007). Passengers' expectations of airport service quality. *Journal of Services Marketing*, 21 (7), 492 – 506.

Francis, G., Humphreys, I. & Fry, J. (2002). The benchmarking of airport performance. *Journal of Air Transport Management*, 8, 239-247.

Freathy, P. (2004). The commercialization of European airports: successful strategies in a decade of turbulence? *Journal of Air Transport Management*, 10, 191-197.

Freathy, P. & O'Connel, F. (1998). Supply chain relationships within airport retailing. *International Journal of Physical Distribution & Logistics Management*, 28 (6), 451 – 462.

Freathy, P. & O'Connell, F. (1998). The role of the buying function in airport retailing. *International Journal of Retail & Distribution Management*, 26 (6), 247 – 256.



Freathy, P. & O'Connell, F. (2000). Strategic Reactions to the Abolition of Duty Free: Examples from the European Airport Sector. *European Management Journal*, 18 (6), 638–645.

Fuerst, F., Gross, S. & Klose, U. (2011). The sky is the limit? The determinants and constraints of European airports commercial revenues. *Journal of Air Transport Management*, 17, 278–283.

Ganguli, S. & Roy, S. (2013) (2013). Conceptualization of service quality for hybrid services: a hierarchical approach. *Total Quality Management & Business Excellence*, 24 (10), 1202-1218.

Geuensa, M., Vantommeb, D. & Brengmanc, M. (2004). Developing a typology of airport shoppers. *Tourism Management* 25, 615–622.

Gilbert, D. & Wong, R. (2003). Passenger expectations and airline services: a Hong Kong based study. *Tourism Management*, 24, 519–532.

Gillen, D. & Mantin, B. (2014). The importance of concession revenues in the privatization of airports. *Transportation Research*, 68, 164–177.

Gitto, S. & Mancuso, P. (2012). Two faces of airport business: A non-parametric analysis of the Italian airport industry. *Journal of Air Transport Management*, 20, 39-42.

Graham, A. (2009). How important are commercial revenues to today's airports? *Journal of Air Transport Management*, 15, 106–111.

Hart, C. (1998). *Doing a literature review. Releasing the social science research imagination*. London: Sage Publications Inc.

Heron, J. (1996). *Co-operative Inquiry: Research into the Human Condition*. London, UK.: Sage Publication

Hsu, C. & Chao, C. (2005). Space allocation for commercial activities at international passenger terminals. *Transportation Research*, 41, 29–51.

Jiang, H. & Zhang, Y. (2016). An assessment of passenger experience at Melbourne Airport. *Journal of Air Transport Management*, 54, 88–92.

Jones, K., (2011). *The practice of quantitative method*. In: Somekh, B., & Lewin, C., red. Theory and methods in social research. 2nd edition. London: Sage Publications Limited. 201-211.

Kannan, V., Bose, S. & Kannan, B. (2012). Improving the service quality of ocean container carriers: an Indian case study. *Benchmarking: An International Journal*, 19 (6), 709 – 729.

- Ketokivi, M., & Mantere, S. (2010). Two strategies for inductive reasoning in organizational research. *Academy of management review*, 35 (2), 315-333.
- Ketokivi, M., & Mantere, S. (2013). Reasoning in organization science. *Academy of management review*, 38 (1), 70-89.
- Kim, H. & Shin, J. (2001). A contextual investigation of the operation and management of airport concessions. *Tourism Management*, 22, 149-155.
- Lin, M. (2006). Hub-airport competition: connecting time differentiation and concession consumptions. *Australian Economic Papers*, 45 (4), 299-317.
- Lin, Y. & Chen, C. (2013). Passengers' shopping motivations and commercial activities at airports - The moderating effects of time pressure and impulse buying tendency. *Tourism Management*, 36, 426-434.
- Littlechild, S. (2012). Australian airport regulation: Exploring the frontier. *Journal of Air Transport Management* 16, 279-283.
- Long, R. G., White, M. C., Friedman, W. H., & Brazeal, D. V. (2000). The 'qualitative' versus 'quantitative' research debate: A question of metaphorical assumptions? *International journal of value-based management*, 13, 189-197.
- Lubbe, B., Douglas, A. & Zambellis, J. (2011). An application of the airport service quality model in South Africa. *Journal of Air Transport Management* 17, 224-227.
- Medeiros da Rocha, P., Pinheiro de Barros, A., Barbosa da Silva, G. & Gomes Costa, H. (2016). Analysis of the operational performance of Brazilian airport terminals: A multicriteria approach with De Borda-AHP integration. *Journal of Air Transport Management*, 51, 19-26.
- Omar, O. & Kent, A. (2001). International airport influences on impulsive shopping: trait and normative approach. *International Journal of Retail & Distribution Management*, 29 (5), 226 – 235.
- Pantouvakis, A. & Renzi, M. (2016). Exploring different nationality perceptions of airport service quality. *Journal of Air Transport Management*, 52, 90-98.
- Patton, M.Q. (1980). *Qualitative evaluation methods*. 1st edition. London: Sage Publications Inc. 197-200.
- Perng, S., Chowa, C. & Liao, W. (2010). Analysis of shopping preference and satisfaction with airport retailing products. *Journal of Air Transport Management*, 16, 279-283.
- Ritchie, J., Lewis, J., McNaughton Nicholls, C., & Ormston, R., (2014). Qualitative research practices: *A guide for social science students & researchers*. 2nd edition. London:

Sage Publications Limited.

Rubin, A., & Babbie, E.R., (2014). *Research methods for social works*. 8th edition. Belmont, USA: Cole/brooks empowerment series.

Saunders, M.N., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. 5th edition. Harlow: Pearson Education.

Saunders, M.N., Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students*, Sixth edition. Harlow: Pearson Education.

Shiu, E., Hair, J., Bush, R. & Ortinau, D. (2009). *Marketing research*. 1st edition. Berkshire: McGraw- Hill Education.

Torresa, E., Domínguez, J., Valde L. & Azab, R. (2005). Passenger waiting time in an airport and expenditure carried out in the commercial area. *Journal of Air Transport Management*, 11, 363–367.

Tsai, W., Hsu, W. & Chou, W. (2011). A gap analysis model for improving airport service quality. *Total Quality Management & Business Excellence*, 22 (10), 1025-1040.

WAC (2016, October 10). These are the Top 30 busiest airports in the World for 2015. WAC. <https://www.world-airport-codes.com/world-top-30-airports.html>. [Retrieved 2016-10-10].

Wattanacharoensil, W., Schuckert, M. & Graham, A. (2016). An Airport Experience Framework from a Tourism Perspective. *Transport Reviews*, 36 (3), 318-340.

Whitehead, L. (2011). Methodological Issues in Internet-Mediated Research: A Randomized Comparison of Internet Versus Mailed Questionnaires. *Journal of Medical Internet Research*, 13 (4), 109-115.

Zhang, A., Fu, X. & Yang, H. (2010). Revenue sharing with multiple airlines and airports. *Transportation Research*, 44, 944–959.

Zhang, A. & Zhang Y. (1997). Concession revenue and optimal airport pricing. *Transportation Research*, 33 (4), 287–296.

Zhang, A. & Zhang Y. (2003). Airport charges and capacity expansion: effects of concessions and privatization. *Journal of Urban Economics*, 53, 54–75.

# APPENDIX

## SECTION 1

QUESTIONS

RESPONSES

13

**Please rank attributes of airports concession, where 5 is maximum and 1 is minimum.**

Answers aimed to determining the perceived measure of passenger satisfaction and airport profitability.

Convenient Location \*

Price Level \*

Brand Name & Image \*

Product Quality \*

Service Level \*

Product Diversity \*

Display \*

Store Environment \*

Product Newness \*

Advertising & Promotion \*

After section 1

Continue to next section

+

Tt

## Section 1 of 5



Please rank attributes of airports concession, where 5 is maximum and 1 is minimum.

Answers aimed to determining the perceived measure of passenger satisfaction and airport profitability.

Convenient Location \*

1

2

3

4

5

☐☐☐☐☐

Price Level \*

1

2

3

4

5

☐☐☐☐☐

Brand Name & Image \*

1

2

3

4

5

☐☐☐☐☐

## SECTION 2

After section 1 Continue to next section

Section 2 of 5

**Please rank management type of airport concessions, where 5 is the most popular and 1 is the less used.**

Answers aimed to determine popularity an relevance of each airport concession management type in Duty Free, F&B and Retail product categories.

Master Concessionaire \*

Free Management \*

Developer Approach \*

Direct Lease \*

Direct Management \*

After section 2 Continue to next section

## SECTION 3

After section 2 Continue to next section

Section 3 of 5

**Please rank profitability of each airport concession management type, where 5 is the most profitable and 1 is the less profitable.**

The aim is to identify the most profitable contract type among airport concession management types.

Master Concessionaire \*

Free Management \*

Developer Approach \*

Direct Lease \*

Direct Management \*

After section 3 Continue to next section

SECTION 4

After section 3 Continue to next section

Section 4 of 5

**Please rank managerial efficiency of each airport concession management type, where 5 is the most efficient and 1 is the less efficient.**

The aim is to identify the most efficient contract type among airport concession management types.

Master Concessionaire \*

Free Management \*

Developer Approach \*

Direct Lease \*

Direct Management \*

After section 4 Continue to next section

SECTION 5

After section 4 Continue to next section

Section 5 of 5

**Please rank airport concession management type affecting customers satisfaction where 5 is the highest and 1 is the smallest.**

The aim is to identify the most efficient contract type among airport concession management types.

Master Concessionaire \*

Free Management \*

Developer Approach \*

Direct Lease \*

Direct Management \*

After section 4 Continue to next section