

**Strategic innovation of CPH Airport's business model**  
**Strategisk innovation af CPH Lufthavns business model**

**How to improve CPH Airport's Business Model**

**Master Thesis**



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# 1. Abstract

This thesis uses business modelling to examine how CPH Airport can optimize its non-aeronautical business area. The main focus is to apply Alexander Osterwalder's value proposition canvas, with the aim to optimize the Fit between the offered value proposition and an identified customer segment. This has led to the following problem statement for the thesis "*How can CPH Airport optimize its business model for its non-aeronautical business?*".

To answer the question, a combination of theory within organizational innovation and strategic marketing has been included.

The chosen theories included are Alexander Osterwalder's theory regarding value proposition canvas, Dan Roam's concept of the good-luck coin and lastly, David A. Aaker and Damien McLoughlin's framework of strategic market management.

Through the findings of the customer analysis, the segment efficiency traveller is identified to be the most relevant customer segment, for optimizing the non-aeronautical business. This is because their behaviour and needs are challenging for CPH Airport's non-aeronautical business to match. The segment wants to go through Copenhagen Airport independently as well as efficiently, and does not believe that there is a proper coherence between price and quality of the offerings in the airport. However, there is at the same time a possibility to improve these existing problems, by meeting the segments' needs through strategic innovation.

This has led to three specific initiatives to improve CPH Airport's non-aeronautical business by creating a stronger Fit: digitalization, automation and branding.

Digitalization through beacons can create a more efficient shopping experience, by giving the travellers offers on the go. Automated retail solutions allow the segment to shop more independently, as they can do the shopping on their own. A focus on having well-known brands in the airport can meet the chosen segment's concerned gap between price and quality, as they know what to expect from the brand.

An important finding to be aware of is how stress among the travellers seem to ruin all desire to shop in CPH Airport. This means that the current constructions at CPH Airport can create stress for the travellers, which can limit the effect of the suggested initiatives.

## 2. Introduction

### 2.1 Background and chosen case

H.C. Andersen once stated “*To travel is to live*” (Den Store Danske, H. C. Andersen på vej mod europæisk berømmelse, 2012). This seems even more true in the 21st century, as the world bank has announced that there were 3.441 billion air transport passengers carried in 2016 (The World Bank, Air Transport, 2017). The number of air transport passengers carried has especially increased rapidly in the recent years, as it has increased with more than a billion since 2009 (see Appendix 1). This means that airports all around the globe plays an important role, as they are the hubs connecting billions of people, and create a global network bringing you almost anywhere on the planet.

The increasing number of passengers, also means that airports are becoming a lucrative business, as Airports Council International (ACI) have stated that airports are making more money than ever before (International business times, How do airports generate money?, 2013).

In the council's most recent report from 2015, they state that in 2014 the global airport industry revenue was 142.5 billion US dollars. The industry as a whole had grown by 8.2 percent from 2013 to 2014 (ACI, 2015 ACI airport economics report, 2015).

An airport generalizes its sources of profit by dividing them into two entities, aeronautical and non-aeronautical business.

The first leg of the business is the aeronautical business, which relates to airlines and air traffic. It concerns the charges airlines have to pay for using the airport's equipment, such as landing charges, parking charges, security charges and aviation fees (Athens international airport, Aeronautical charges, 2015). Aeronautical business is the the bulk of an airport's income, accounting for about 55 percent of the airport industry's revenue in 2014 (ACI, 2015 ACI airport economics report, 2015).

Aeronautical business is probably what most people imagine when they are thinking about the business of an airport. However, there are many other stakeholders to consider, which leads to the other business leg of an airport.

The other business leg of an airport is the non-aeronautical business. In 2014, it was an estimated 58 billion US dollars industry (Concessionaire Analyzer+, Non-aeronautical revenues, 2016). Areas within the non-aeronautical business are products and services such as shops, kiosks, car parking, car rental, etc. (ACI, AirportInfo, 2013). It typically accounts for about 44 percent of an airport's total operating revenue (International business times, How do airports generate money?, 2013). The business is a source that tends to

generate higher profit margins, in comparison with aeronautical activities (ACI, AirportInfo, 2013). The growing number of travellers creates a basis for the airport to sell more products and services.

In 2014, the highest revenue streams for global airport's non-aeronautical business were retail (28 percent), car parking (22 percent) and property (15 percent) (Concessionaire Analyzer+, Non-aeronautical revenues, 2016).

An airport that has experienced a positive financial development based on its non-aeronautical business is Copenhagen Airports A/S (CPH Airport). CPH Airport emphasizes in its annual report from 2015 the importance of the non-aeronautical business and a growing number of passengers, as key drivers for its current success (CPH Airport Annual Report 2015, 2016, p. 21). The income statement from 2015 supports the importance of the non-aeronautical business as it accounted for DKK 1,697.4 million of the total DKK 4,061.9 million revenue, which is approximately 41 percent. The total non-aeronautical revenue increased by 4.9 percent from 2014 to 2015, which shows the current growth in the business area (CPH Airport Annual Report 2015, 2016, p. 12).

The importance of the non-aeronautical business for CPH Airport, means that the travellers as customers play an important role for the future business of the company. This is for instance seen in a quote from the executive management:

*"...the time has come to update and develop our strategy. We will continue to pursue our goal of building an airport that is attractive and competitive in every respect, with efficient operation and extraordinary customer experiences as the key themes"* (CPH Airport Annual Report 2015, 2016, p. 19).

Furthermore, the airport has invested DKK 20 billion in expanding the airport, which is expected to bring in 40 million travellers yearly (ibid.). The large increase in travellers will consequently provide a basis for growing the non-aeronautical business. This means that the non-aeronautical business and the traveller's experience play an essential role for the company's business operations.

This thesis will focus on CPH Airport's non-aeronautical business, with the passengers seen as the customers, regarding the future development of it. The non-aeronautical part of CPH Airport will be the analytical object of the paper, and not the entire entity of CPH Airport.

## **2.2 Problem identification**

CPH Airport intends to continuously improve its business model regarding how its offerings can cater for their customers' needs. In the 2015 annual report, CEO Thomas Woldbye emphasizes this: *"Our goal is for all passengers to have an extraordinary experience as they make their way easily and comfortably through*

*the airport...ensuring continuous service improvements and the right offerings for travellers.*” (CPH Airport Annual Report 2015, 2016, p. 17).

The importance of the non-aeronautical business is a general trend found among airports (Concessionaire Analyzer+, Non-aeronautical revenues, 2016). It generates an important revenue stream, which also diversify an airport's income portfolio. Director of ACI (Airport Council International) Angela Gittens explains how the business area is an important income source: “...*non-aeronautical sources of income such as retail concessions and car parking contribute to the diversification in an airport's income portfolio and provide an additional cushion during adverse economic times*” (ibid.). Therefore, CPH Airport has to have focus on the non-aeronautical business, as it is crucially affects the airport's financial performance.

The most recent annual report from CPH Airport indicates a challenge with the non-aeronautical business. Overall, the airport's shopping centre revenue increased by 4.3 percent compared to last year. However, the revenue per traveller in the TAX FREE and stores decreased (CPH Airport Annual Report 2016, 2017, p. 15). It shows that the non-aeronautical business is a challenging business area, which requires a constant focus. Some travellers spend more money than others do, which seems to indicate that some customers have the potential to purchase more. Therefore, CPH Airport has to understand the behaviour and needs of the travellers, in order to optimize its non-aeronautical offerings.

The identified problem is interesting for this thesis, because it relates to our different academic backgrounds, in organizational innovation & entrepreneurship and marketing respectively, as it involves both business modelling and marketing.

The Swiss business theorist Alexander Osterwalder's canvas for business modelling, illustrates the problem and process of creating a Fit between the value proposition and needs of the customers (Osterwalder et al, 2014, p. 47). This is when a company strives to identify the needs that are the most relevant to its customer segments, and designs a value proposition that accordingly meets those needs (Osterwalder et al, 2014, p. 48-49).

Creating a Fit is crucial for the future of CPH Airport's non-aeronautical business, as it is important to acknowledge that products and services does not create value on their own, but only in relationship to what is perceived as valuable for a specific customer (Osterwalder et al, 2014, p. 47).

## **2.3 Problem statement**

Due to the growing importance of the non-aeronautical business for CPH Airport's revenue, and the increasing focus on the traveller's needs as consumers, the following problem statement has been made:

- **How can CPH Airport optimize its business model for its non-aeronautical business?**

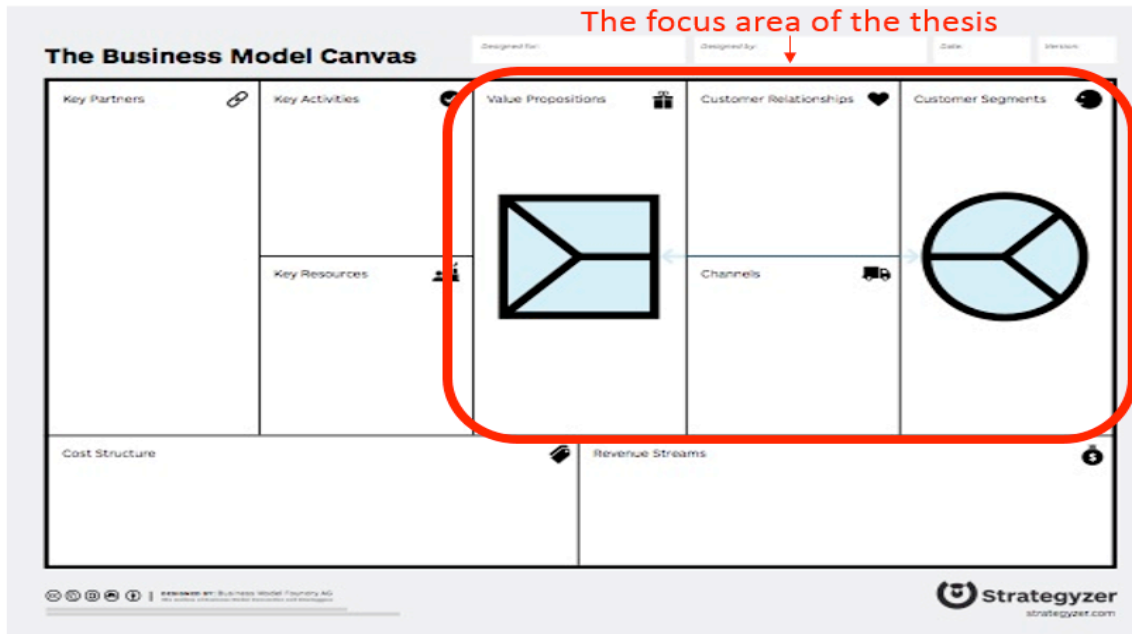
### **Research questions:**

- **How is CPH Airport's current strategic and financial performance?**
- **Which external threats and opportunities are impacting CPH Airport's optimization of its non-aeronautical business the most?**
- **Which customer segment(s) creates an opportunity to optimize the non-aeronautical business?**
- **How can CPH Airport create a better fit between its offerings and the needs of the identified customer segment(s)?**
- **Which internal strengths and weaknesses should CPH Airport be aware of in order to optimize its non-aeronautical business?**
- **Which strategic innovation initiatives should CPH Airport pursue to optimize its non-aeronautical business?**

## **2.4 The focus area**

An important aspect to be aware for this thesis is the approach to answering the problem statement. The optimization of the business model will in this thesis mainly focus on the value proposition canvas, and the right side of Alexander Osterwalder's business model canvas, as seen in figure 1 below. This means that the focus will not be on the entire business model canvas, such as the cost structure. Instead, the focus will be how to optimize the match between the offered value proposition and the needs of the travellers as customers.

A more specific definition of the value proposition canvas, and the right side of the business model canvas will be presented in the theory chapter.



**Figure 1 - Business model and value proposition canvas (Osterwalder et al, 2014, p. 52)**

Another important aspect for this thesis is which customer group that is chosen. There are a number of potential customers for the non-aeronautical business both in the B2B and the B2C segments. We chose to focus on the travellers as customers, which means that the focus is on a B2C part of CPH Airport's business.

This thesis will, based on the problem statement, look into how CPH Airport can improve its business model in regard to its non-aeronautical business, where the passengers are seen as the main customers.

## 2.5 Methodology introduction

This section will give a brief introduction and overview of the methodology in this thesis, which then will be elaborated later in the chapter about methodology.

The structure of the methodology will be based on the research 'onion', which is an approach created by Saunders, Lewis and Thornhill (2009). This clear structure breaks the research approach into six different layers. It will first start with a broader focus, as the outer layer will define the research philosophy, which relates to how knowledge is developed and the nature of that knowledge (Saunders et al., 2009, p. 108). This means that the research philosophy will create the overall framework for how we as researchers view the world, based on a definition of the ontology and epistemology.

The methodology will then move towards the middle, where the next step is a definition of the research approach. This concerns to which extent the theory is clear at the beginning of the research, and there are two overall approaches, the inductive and deductive approach (Thurén, 2008, p. 25).

The next step will be specifying the research strategy, which relates to how data specifically are collected (Saunders et al., 2009, p. 136). There are a number of different research strategies to choose from, such as experiments, surveys, case study etc. and each strategy affect how data is collected.

Afterwards the research choice will be in focus, which is about the use of qualitative and quantitative data (Saunders et al., 2009, p. 151). This will be followed by the fifth layer, where the time horizon is defined, which consists of two overall approaches. The cross-sectional time definition refers to a 'snapshot' taken at a particular time, and longitudinal refers to a series of snapshots in a given period (Saunders et al., 2009, p. 155).

This leads to the last step where the specific data collection methods are presented and explained, which the inner layer of the onion is. Using this approach ensures that we as researchers peel away the layers of the 'onion' in the right order.

## **2.6 Theory introduction**

This will be a brief mentioning of the theory used in this thesis. A longer chapter will follow later in the paper. Main theoretic topics will be entrepreneurship, strategic innovation and marketing.

Recent business models lean on the trial and error-principle (Osterwalder et al., 2014, p. 179). A company makes different tests, to try to find the right outcome. This is done to refine different aspects of the organization internally or externally. The models provide frameworks that generate an overview of a business and its stakeholders, and can show which potential problems a company can face and how it shall approach them.

Alexander Osterwalder's Business Model Canvas is one of the most used in current business academia (Harvard Business Review, What is a good Business Model?, 2015). It is a further development of Osterwalder's Value Proposition Canvas that aims to find the fit between what a company's product offers, and which pain relievers and gain creators it gives to potential customers (Osterwalder et al., 2014, p. 8-9). The Business Model Canvas incorporate those aspects within it, and creates a matrix of who and what is the important factors to have in place for a company internally and externally (Osterwalder et al., 2014 p. 200-201).

The author and consultant Dan Roam has used his experience in consultancy to write the book Unfolding the napkin (Roam, 2009). That is essentially a book that shows how a startup should be made from the beginning. He comes up with two essential models. One is the six-folded-coin that describes how an existing company should approach an incoming or current problem (Roam, 2009, p. 65-66). That relates to who

within the organization must solve the problem, and which tasks must be focused on to get the problem fixed.

In a global economy, marketing plays a crucial role for a company's business life cycle in attracting new customers and in keeping up with its competitors.

The American organizational theorists David A. Aaker and Damien McLoughlin have made a framework of how to describe the analytical process of strategic market management (Aaker & McLoughlin, 2007, p. 18). The model shows how a company's strategic opportunity is made up of internal strengths and weaknesses as well as external opportunities and threats (Aaker & McLoughlin, 2007, p. 19). A company should start conducting both an internal and an external analysis. Together they conduct a unified strategy, which can give a company a more solid platform for selecting, implementing and reviewing strategies.

For Alexander Osterwalder and other business and marketing theorists, the value proposition is the reason why customers turn to one company and not to another (Osterwalder & Pigneur, 2009 p. 22). In business model theory the value proposition along with customer segmentation, are the key concepts a company must have to make a successful business (Osterwalder & Pigneur 2009 p. 20).

## 2.7 Thesis layout

The thesis is based on the following structure:

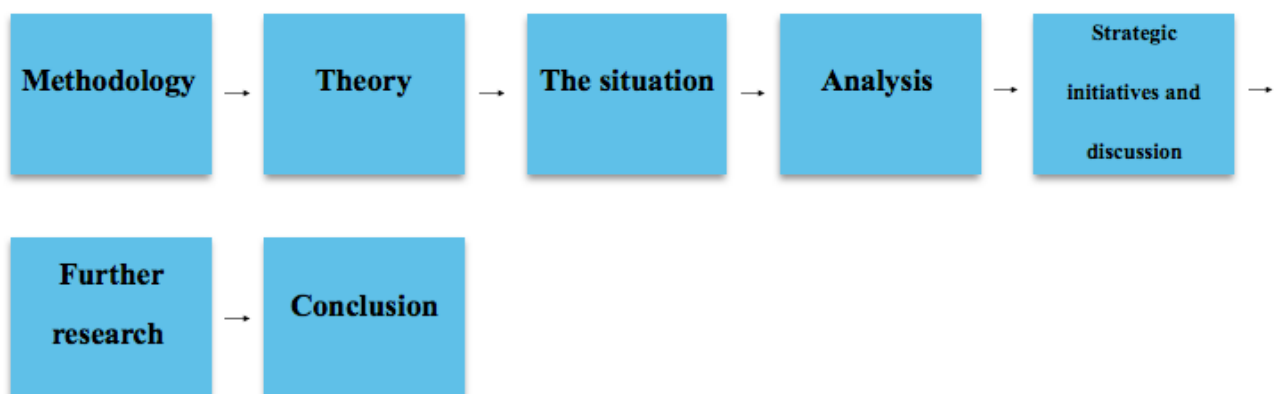
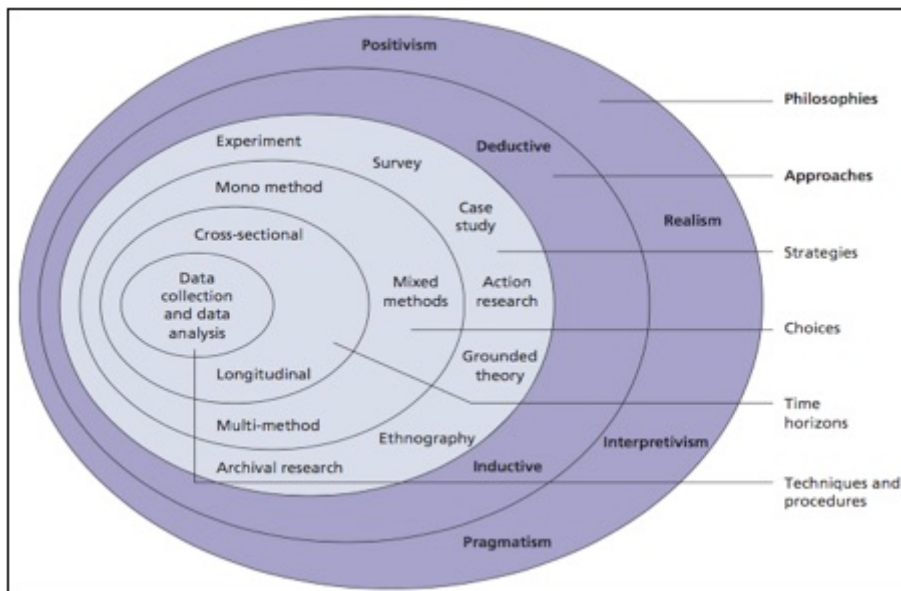


Figure 2 - Thesis layout (own construction)

## 3. Methodology

The purpose of this chapter is to explain the research process, by defining the methodology approach chosen. The structure of the methodology will be based on the research 'onion' that is shown in figure 3 below, which is an approach created by Saunders et al. (2009).

One of the main purposes for using the research ‘onion’, is to ensure that the researcher peels away the layers of the ‘onion’ in the right order, so that the broader methodology is defined first. This means that how to perceive the world is defined first, before moving closer to the specific data collection (Saunders et al., 2009).



**Figure 3 - The research ‘onion’ (Saunders et al., 2009)**

### 3.1 Research philosophy

The outer layer of the research ‘onion’ is about defining the research philosophy, which creates the overall framework for how the researcher views the world (Saunders et al., 2009, p. 108). A way to choose between these different philosophies is to look at the ontology and epistemology behind the specific philosophy (Nygaard, 2012, p. 26-27).

Ontology can be defined, as the researcher’s view of what the nature of reality is. There are two overall positions, objectivism and subjectivism (ibid.). Objectivism portrays a position that says social entities exist in reality, external to the existence of social actors (Saunders et al., 2009, p. 110). On the other hand, subjectivism states that a social phenomenon is created from the perceptions, and actions of those social actors concerned with its existence (ibid.).

CPH Airport is the overall research object, which exists independently of our thoughts and knowledge about it. Therefore, an objective ontology is believed to be most suiting for this thesis. This means that there is a reality, and it is possible to obtain an incorrect understanding of the company (Nygaard, 2012, p. 27). An example of that is seen when trying to analyze the macro environment of CPH Airport. The reality of CPH Airport’s sounding environment exists independently, and it is possible to draw a wrong conclusion

about it. This could for instance be a misinterpretation of how a law affects CPH Airport. The correct reality of the law still exists regardless of the misinterpretation.

Epistemology is what constitutes acceptable knowledge in a field of study (Saunders et al., 2009, p. 112).

There is, just as with ontology, two overall perceptions, which relate to whether the object being studied has an external reality or not (ibid.). The epistemology of this thesis is subjective, as our own understandings and values create the starting point for the research. This means that even though the research objects is believed to have an objective reality, then it will always be approached from a subjective perspective.

Based on the above examination of ontology and epistemology, the research philosophy is decided to be Critical realism, which will be elaborated in the following.

### **3.1.1 Critical realism**

The chosen philosophy is based on an objective ontology and a subjective epistemology. It therefore believes that there is a reality, but the understanding of it will always be value-based (Nygaard, 2012, p. 27). This means that the perception of reality cannot be excluded from our subjective perception (Saunders et al., 2009, p. 115).

Therefore, the experience of the world is a two-step process. First, there is the research object itself and its independent reality. Second, there is the mental processing, where the object meets our senses (ibid.).

The philosophy is seen as having a good mix of positivism on the one hand, which emphasizes there is an objective truth, and interpretivism on the other hand, which is about the subjective understanding of things. One of the main reasons for choosing this philosophy is that it seems to have a good middle ground, for examining our topics related to business and marketing. It both acknowledges that certain objective facts exist about CPH Airport, for instance the airports financial performance, but at the same that the analysis of the facts depends on our own interpretation.

The subjective understanding of things creates a risk for a wrong perception of the researched reality (Nygaard, 2012, p. 27). Dialog is an essential for trying to avoid misinterpretations, as it can shed light on how things are perceived both for the reader and oneself (Heldbjerg, 1997, p. 36). Therefore, it is important to define how different research objects are perceived. Both to create a common ground with the reader about how the reality of CPH Airport is perceived, and to argue that there are no misinterpretations.

## **3.2 Research approach**

The second layer of the research 'onion' is the research approach, which concerns to which extent the theory is clear at the beginning of the research (Saunders et al., 2009, p. 124). The deductive approach is generally

based on logic, and the inductive approach is based on empirical data (Thurén, 2008, p. 25). First the two approaches will be defined, and then reasoning for the chosen approach.

The deductive approach is about the use of theory and creation of hypotheses based on theory, which then can be tested through a research design. It is often associated with scientific research, where predefined laws based on theory present the basis of explanation, which then can be used to examine a phenomenon (Saunders et al., 2009, p. 124-125). Another characteristic of the deductive approach is the need to control the variables when testing the hypotheses, in order to find causal relationships between them. Furthermore, the researcher should be independent from what is being observed, in order to pursue the principle of scientific rigour (ibid.).

The inductive approach is when the researcher tries to get a feel of what is going on, in order to understand the nature of the research object. The collected data create the basis for formulating a theory, which means that theory follows the collected data and not vice versa (Saunders et al., 2009, p. 126).

The cause and effect link between variables has to include an understanding of humans and their social world, and the researcher has to be seen a part of the research process, which means that the approach is less concerned with generalizing the findings (ibid.).

However, the two different approaches should not be seen as incompatible, despite the differences between them, as stated in this quote *“Not only is it perfectly possible to combine deduction and induction within the same piece of research, but also in our experience it is often advantageous to do so”* (Saunders et al., 2009, p. 127). This means that the research approach for this thesis will be based on the inductive approach, but with an element from deductive approach.

The chosen research philosophy is the first reason for choosing the inductive approach, as it acknowledges that the researcher is a part of the research. An example could be when trying to understand CPH Airport's customers, where the focus first will be on the different views they express. It will not be possible to conduct an isolated objective experiment of the customers, but instead it is necessary to understand them as subjects and the context they live in.

The element of deductive approach appears, after first looking into the specific case of CPH Airport's non-aeronautical business. This happens, as the finding from the field will be related to and analyzed with existing theory. Therefore, the goal is not to formulate a new theory, but instead to put the research object in focus, and then analyze the findings afterwards by using various theories and literature.

### 3.3 Research strategy

This layer starts the process of specifying the research strategy, which relates to how data more specifically is collected (Saunders et al., 2009, p. 136).

Saunders et al. (2009) present a number of different research strategies, such as experiments, surveys, case study etc. In business research the analytical object is typically complex, where it is not really possible to separate one variable from another (Saunders et al., 2009, p. 116). This for instance means that the research strategy cannot be based on an experiment, as in the natural sciences, conducted in laboratory where variables can be isolated (Saunders et al., 2009, p. 141-142).

The research strategy of this thesis is therefore based on a case study, which can be defined as *“A strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence.”* (Saunders et al., 2009, p. 145).

This definition fits the research question and the chosen analytical object, as CPH Airport’s non-aeronautical business is the specific real life case.

Yin (2003) distinguish between case study strategies, based on the two following dimensions:

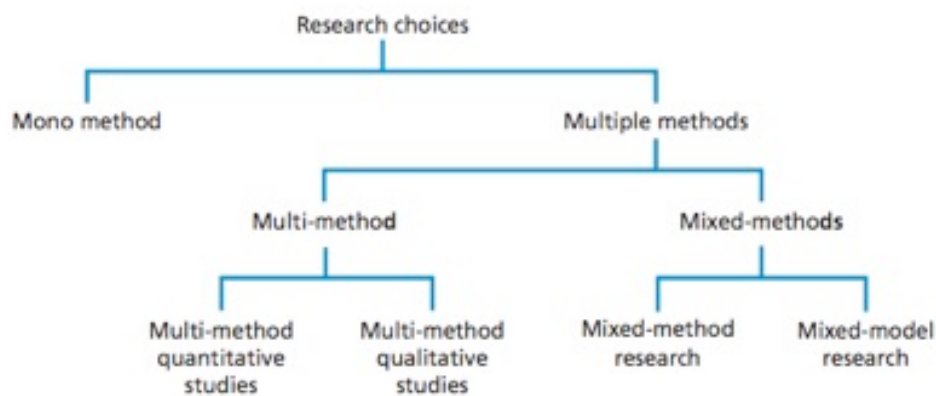
- Single case v.s. multiple case
- Holistic case v.s. embedded case

The first dimension refers to the number of cases that are in focus. A single case approach represents the situation where one unique case is in focus, where a multiple case approach use several cases, to see if the findings occur in other cases as well (Saunders et al., 2009, p. 146). The single case approach will be applied, as the thesis solely will focus on CPH Airport and its non-aeronautical business.

The second dimension refers to the number of units being analyzed. The holistic case study examines the organization as a whole, where the embedded case study wishes to examine a number of sub-units within the chosen organization (Saunders et al., 2009, p. 147). This case study will be perceived as an embedded case study, focusing on CPH Airport’s non-aeronautical business as a sub-unit.

### 3.4 Research choices

This fourth layer of the ‘research onion’ is coming closer to the actual data collection, as it concerns the use of qualitative and quantitative data (Saunders et al., 2009, p. 151). There are generally two overall approaches called mono method and multiple methods, which can help choosing the research method (ibid.). An overview of the different choices is seen in figure 4 below.



**Figure 4 - Research choices (Saunders et al., 2009, p. 152)**

The distinction between the two overall approaches is based on the data collection technique. Mono method is based on a single data collection technique, where multiple methods on the other hand use more than one data collection technique (Saunders et al., 2009, p. 152). The research choice for this thesis will be based on multiple methods, as different data collection methods will be used.

As seen in figure 4, the choice of multiple methods means that method has to be further specified, depending on whether the research will be based on a multi-method or mixed-methods.

Multi-method is when more than one data collection technique is used, but is restricted within either a quantitative or qualitative approach. The mixed-methods approach is on the other hand when more than one data collection technique through both quantitative and qualitative data collection (ibid.).

This has led to the choice of mixed-methods, as the data collection will be based on both a qualitative and quantitative approach. This means that in-depth interviews, a focus group and a questionnaire will be conducted.

It will more specifically be based on mixed method research, where the quantitative data is analyzed quantitatively, and the qualitative data is analyzed qualitatively (ibid.).

There are a number of reasons for that choice, which are related to the other layers of the 'research onion', as well as the circumstances of this thesis, and a few of the most essential ones will be presented here.

First, it fits philosophy of critical realism, as it can use both a qualitative and quantitative approach as long as it is believed to be relevant (Saunders et al., 2009, p. 119). This leads to the next reason for choosing mixed-methods, which is because the methods can be used to obtain different kinds of knowledge.

The quantitative and qualitative data collection techniques each have their own strengths and weaknesses, which mean they can supplement each other. For instance can interviews be used as an exploratory stage, in

order to get a feel for the key issues before using a questionnaire to collect descriptive or explanatory data (Saunders et al., 2009, p. 152-153).

### **3.5 Time horizon**

Defining the time horizon of the research is the last layer of the ‘research onion’, before focusing on the actual data collection method. Saunders et al. (2009) has two classifications for defining the time horizon, where cross-sectional refers to a ‘snapshot’ taken at a particular time, and longitudinal refers to a series of snapshots in a given period.

This thesis will have a cross-sectional time horizon, as the study will focus on CPH Airport non-aeronautical business as a phenomenon at a particular time. This is mainly due to the problem statement that focuses on how to improve the non-aeronautical business, which means that the current situation of the case will be in focus and how to improve it. Furthermore, the data will be conducted over a relatively short period of time, which is often seen in case studies, and that empathizes the cross-sectional time horizon (Saunders et al., 2009, p. 155).

### **3.6 The data collection**

It is now time to examine the actual data collection, as the five other layers have been defined for the case of CPH Airport’s non-aeronautical business. This will address both the use of primary and secondary data, in order to give an insight into the data collection method itself, and why it has been chosen for this thesis. However, the main focus will be on the primary data, and the pros and cons of the chosen qualitative and quantitative methods.

#### **3.6.1 Secondary data**

Before the primary data of this thesis is presented, the usage of secondary data will be briefly explained. Secondary data is used to help in justifying our choices and reasoning. The data are presented in the forms of articles, reports, financial statements etc. The information these sources bring can help explaining the importance and relevance of the subjects this thesis discusses.

#### **3.6.2 Primary data**

The collected primary data and the methodology of the collection process will now be presented. First, a list briefly mentioning the persons which statements is used, as primary data for this thesis will be listed.

#### **3.6.3 Presentation of interviewees**

**Interviewee 1:** CRM (customer relationship management) manager at CPH Airport. The CRM manager is responsible for ensuring the company maximizes the marketing opportunities it offers. We spoke with this person mainly regarding CPH Airport’s strategic innovation initiatives, amongst them CPH Advantage.

**Interviewee 2:** CPH Airport's Head of Quality and Aeronautic Architecture. Has a broad contact and with all departments of the company, and a deep understanding of those. We spoke with this person mainly regarding the company's business model, and the growth opportunities for the airport.

**Interviewee 3:** CPH Airport's Head of commercial excellence. Carries responsibility of ensuring new strategic initiatives are implemented properly. That regards both CPH Airport's business model and the commercial partners. We spoke with this person mainly regarding the development of CPH Airport's customer segments within the last couple of years.

In a focus group we conducted, there were six participants. We mainly sought after participants who travelled often from CPH Airport, and was within a specific user type we identify in this thesis. The characteristics the status of those are the following:

**Focus group member 1**

Age: 24

Occupation: Student

Yearly travel frequency from CPH Airport: 2-3 times a year

**Focus group member 2**

Age: 26

Occupation: Student

Yearly travel frequency from CPH Airport: 4-5 times a year

**Focus group member 3**

Age: 25

Occupation: Student

Yearly travel frequency from CPH Airport: 2-3 times a year

**Focus group member 4**

Age: 27

Occupation: Student

Yearly travel frequency from CPH Airport: 4-5 times a year

**Focus group member 5**

Age: 26

Occupation: Student

Yearly travel frequency from CPH Airport: 6+ times a year

**Focus group member 6**

Age: 26

Occupation: Student and self-employed

Yearly travel frequency from CPH Airport: 6+ times a year

### **3.6.4 Focus groups**

One of the primary data qualitative data collection methods chosen for this thesis is focus group discussion.

Malhotra, Birks and Wills (2012) define focus groups as follows "*A discussion conducted by a trained*

*moderator among a small group of participants in an unstructured and natural way*". The purpose of our focus groups is to understand the travellers as consumers, by examining their perceptions, feelings and thoughts, regarding CPH Airport and the non-aeronautical business. It is done to gain insights about the chosen customer segment, and to find out what is most important for them. It helps answering the sub-question regarding how CPH Airport can create a Fit, between their value proposition and the chosen customer segment.

The gain of new knowledge is one of the greatest benefits of focus groups, especially because group members can feed off each other with new perspectives and ideas (Malhotra et al., 2012, p. 225). However, the drawback from interviewing in groups are some people can feel intimidated or shy, which means they will not reveal any new information (ibid.). This means that the group composition, physical setting and the role of the moderator become important aspects for conducting a successful focus group (ibid.).

The composition of respondents will aim to get some that represent the chosen segment, which will be found in the customer analysis. This means that the participants will be pre-screened a number of questions, such as how often they travel. This will help collect respondents with similar travel habits, which belong to the chosen segment. However, people in the focus group can still differ, but that is believed to also help create more conversation, about how people perceive things differently. Six people were chosen, which is a normal size for a focus group (Malhotra et al., 2012, p. 237).

The physical setting is an important aspect for making the participants feel comfortable, when conducting the focus group (Malhotra et al., 2012, p. 226). Therefore, the focus groups will be conducted in a relaxed setting, where drinks and snacks will be served as a way to make it more informal.

The role of the moderator is important for conducting a successful focus group, as the moderator has to control the discussion (Malhotra et al., 2012, p. 235). The opening presentation is for instance very important, as it shapes the mind-set of the respondents (Malhotra et al., 2012, p. 222-223). Only the overall theme will be presented in the beginning, but not what the purpose is or any specific issues of interest. Being too direct in the beginning about the purpose etc. can narrow the scope and thought process of the participants (ibid.).

Probing is another important element for the moderator to be aware of when conducting a focus group. Probing is a motivational technique used when asking questions, as a way to engage the participants and make them elaborate their answers (Malhotra et al., 2012, p. 222-223). This means that probing will be used

to steer the discussion in the desired direction, for instance by asking questions such as “*would you explain that further*”.

### 3.6.5 Interviews

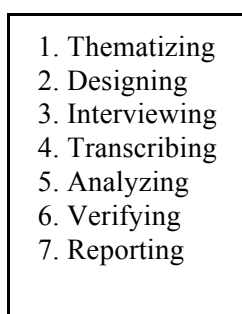
Another qualitative method that has been chosen for this thesis is in-depth interviews. It is a method where a single participant is interviewed, in order to uncover beliefs, motives, attitude etc. in relation to a specific topic (Malhotra et al., 2012, p. 255).

This means that in-depth interviews will be conducted, in order to gain knowledge from individuals that are relevant for the chosen case. For this thesis, it is employees at CPH Airport, who has knowledge about different aspects of the business.

The interviews will be based on a semi-structured approach, which means the researcher has a list of themes and questions to cover, but that the order and number of questions can vary (Saunders et al., 2009, p. 320).

The flexibility of the interview guide is for instance needed in order to ask additional questions, when something has to be elaborated (ibid.).

Steinar Kvale (2007) appears to agree with choosing a semi-structured interview approach, as states “*The very virtue of qualitative interviews is their openness*”. However, he also states that the interview process can be overwhelming and cause hardships, which has led him to create a seven-step approach (Kvale, 2007, p. 35-36). The seven steps are presented in figure 5 below, and they will be used for conducting interviews.

- 
1. Thematizing
  2. Designing
  3. Interviewing
  4. Transcribing
  5. Analyzing
  6. Verifying
  7. Reporting

**Figure 5 - Seven step approach (Kvale, 2007, p. 35-36)**

The following will describe some of the most important aspects of seven steps. The reason for not describing all of them is that some are related to parts presented later in the thesis, such as analyzing and reporting. It can also be a manual process, like transcribing, which will not be further described.

The first two steps refer to the formulation of research questions, the theme being investigated, and the structure (Kvale, 2007, p. 37-38).

First, the overall purpose of the interview is defined, which will vary depending on who is being interviewed. Generally, the interviews will tend to have an explorative purpose, in order to gain new knowledge about the

case study, which then can be used for the analysis. This could for instance be when trying to examine the value propositions of CPH Airport's non-aeronautical business, where it is necessary to understand what the company's internal focus is.

The structure is about the different techniques of interviewing used to obtain the desired knowledge (ibid.). The interviews will, as mentioned before, be based on a semi-structured approach. However, one important technique for all interviews is probing, in order to uncover a understanding of the interviewees attitudes, and get the needed answers (Malhotra et al., 2012, p. 257).

Verifying is another important aspect to be aware of, both for in-depth interviews as well as for focus groups. Validity refers to the truth and correctness of a finding, meaning are you measuring what you think you are measuring (Kvale, 2007, p. 122-123). It is about how close we are to the reality of what is being researched, when seeing it in relation to critical realism. One way to address this is to check statements with other facts, in order to see if they match and reflect the same reality.

### **3.6.6 Questionnaire**

Quantitative data is collected through a questionnaire, where respondents are asked to respond to the same set of questions (Saunders et al., 2009, p. 401). The data gives insights about opinions, behaviour etc. from a greater number of respondents. The main purpose of using a questionnaire is to get insights about a larger number of travellers, so that the analysis of a chosen segment builds on more than just findings from the focus group.

This means that the questionnaire will supplement the qualitative data, as described in the paragraph about research choices and multiple methods. This means that the focus group is exploratory, by getting in-depth insights from the respondents. The most relevant insights can then tested in the questionnaire, in order to see if it also is found among a larger group of respondents (Saunders et al., 2009, p. 153).

There are different types of design for a questionnaire, and it differs according to how much contact you have with the respondent (Saunders et al., 2009, p. 362).

This thesis will use a self-administered questionnaire, which is administered electronically through the internet (see Appendix 2). In this case the website Google Forms was used.

Mainly opinion variables were used, in order to see how respondents feel about things (Saunders et al., 2009, p. 368). This lead to the use of a 5-point Likert scale, where the respondents can express how strongly they agree or disagree with a statement. The respondents will be anonymous, meaning the responses cannot be traced back to specifically a known person. Therefore, are attribute variables also collected, in order to get an

idea of who the data is collected from (ibid.). This includes questions about age, gender, occupation and travel frequency from CPH Airport.

The age and travel frequency are especially important for sorting the respondents, when it comes to the segment that is examined to be the most relevant for the problem statement. This is because we believe younger people who are used to travelling by plane especially represent the segment. Therefore, has everyone above 40 years, and who travel less than once a year, has been sorted out, in order to try and get respondents that represent the desired segment. It led to 90 respondents in total.

### **3.6.7 Limitations for the questionnaire**

Limited resources have been available, which means that that the distribution of the questionnaire primarily was through Facebook. This can be seen as a convenience sample, as it mainly will be based on our personal network. However, it seemed to be a way to reach the desired segment. Another limitation is was the number of useful respondents. The 90 respondents might seem a lot, compared to larger professional surveys. It is still though believed to give a good indication about trends among travellers in a broader sense, and it supports the findings from the qualitative data collection.

### **3.7 Limitations for the thesis**

It has been necessary to have certain limitations for this thesis, in order to answer the problem statement. CPH Airport is too large of an entity to make a proper customer analysis for, without scaling down its business areas. The company operates both B2B and B2C, when it comes to its aeronautical and non-aeronautical businesses. This thesis will only focus on non-aeronautical businesses, with the travellers as customers.

After we had analyzed the non-aeronautical business, we saw that proposing improvements and solutions to all types of travellers in Copenhagen Airport would be too broad of a case. The focus will be to go into depth with one segment. It will for instance be too broad a scope to write about more than one segment in terms of creating a Fit between CPH Airport's services and several customer needs. Alexander Osterwalder also says that it is important not to mix several segments, and focus for on a Fit for each one segment at the time (Osterwalder et al., 2014, p. 24). The chosen customer segment was one we could see where CPH Airport had opportunities to optimize its business model.

The analysis showed that the chosen customer segment was not keen on two of the four business areas of the non-aeronautical business. We then chose not to focus on those two, parking and hotel management, as coming up with improvement suggestions for those, it seemed like it would not benefit CPH Airport getter

closer to the specific segment. The segmentation analysis and further reasoning of the choices taken in this thesis, is broaden upon in the upcoming chapters.

Another important limitation to mention is the focus on the value proposition canvas, and the right side of Alexander Osterwalder's business model canvas. This means that the optimization of CPH Airport's non-aeronautical business will not look into all areas of business model canvas.

It would first of all be very comprehensive to work with all areas of the business model canvas, and it has not been possible to obtain information about all areas. It was for instance not possible to obtain specific information about the cost structure and revenue stream. This means that it has not been possible to address the specific cost and revenue of the suggested initiatives to optimize the non-aeronautical business. However, it will be addressed whether it is realistic to implement the initiatives.

## **4. Theory**

The following chapters will broader explain the theories presented in the theory introduction chapter. First, an explanation of the development in business theory the chosen theorists for this thesis comes from theoretical. This will also act as the thesis' literature review, as main inspirations for the theorists are mentioned. Next, Alexander Osterwalder's business model canvas will be presented. After that, Dan Roam's good-luck coin will be presented. Last, David A. Aaker and Damien McLoughlin's marketing theories will be further examined.

### **4.1 Theory history**

This thesis aims to use Alexander Osterwalder, Dan Roam and David A. Aaker & Damien McLoughlin's business and marketing theories. Their theoretical standpoint comes from the theoretic movement in business theory that has happened within the past decades, where business now operates more in a positioning view rather than a resource based view. The market and the customers are now seen as the ones with the knowledge. A company does not have the knowledge, and cannot make a business plan before having contacted the potential market (Osterwalder et al, 2014, p. 179). It continuously needs to seek information customers, users, partners and competitors, to stay relevant and attractive.

The following section will briefly mention the business theoretic movements that have happened in the last decades. The review will start with the entrepreneur theories made by the Austrian economist Joseph Schumpeter (1883-1950), as those are seen as essential in forming the business theory of today. His realm of business theories is within the innovation processes this thesis examines. Schumpeter's theories came some decades after Adam Smith and Karl Marx's revolutionary theories of economic growth and production. Schumpeter believes that what drives growth in capitalism is the goods and new methods of production that

are created (Schumpeter, 1942, p. 84). He took the capitalistic economic thoughts further, and examined what actions a company's management has to take when a production or market change happened.

Joseph Schumpeter's definition of the entrepreneur is inspired by the definitions from Carl Menger and Frank Knight (E. M. Korsager, Presentation at Copenhagen Business School, 03-09-2015). Menger saw the entrepreneur as an agent of change, and Knight believed that the entrepreneur operated with true uncertainty, True uncertainty in the sense that the entrepreneur operates with risks and effecting factors that cannot be foreshadowed (MIT, Knightian uncertainty, 2010).

Schumpeter sees the inventor and the entrepreneur as two different persons. He sees the inventor as the one who comes up with an idea, where the entrepreneur is the person that implements the idea in reality "gets things done" (Schumpeter, 1947, p. 152). Some of the implementations the entrepreneur can bring to a market is introducing new goods, methods of production, sub-markets, sources of supply and organization forms. The entrepreneur can start with being an innovator if he or she comes up with an idea, but the person will always transform into an entrepreneurial manager when the project comes to fruition (Andersen & Drejer, 2009, p. 4). The capitalist in this case, is the one who funds the processes the entrepreneur creates.

Schumpeter's other relevant theory is his response theory. The theory describes how a company can adapt to a structural change, in three different ways (Schumpeter, 1947, p. 150). Those being adaptive response, creative response and creative destruction. Each have their own degree of how radical a company has to change its structure, to meet the emerging situation.

Adaptive response is the most conservative approach, where the change or innovation is adapted to the company's existing business model (ibid.). No organizational patterns are broken in that situation. It is what most often happens in organization. Patterns are broken in creative response. Now the company changes its structure and practices to be able to comprehend the change (ibid.). The responsibility of making sure that the company can handle the change over a long time is with the entrepreneur.

The third and more a radical way a company can use, is creative destruction. This happens when a company completely changes its structure and business model. The company discards previous practices and produce new products or enter new markets, and sometimes both. Companies that have used creative destruction have often been first movers and taken large market shares, but it comes with a high uncertainty and a lot of risk for the company when entering new untouched areas (Schumpeter, 1942, p. 83). The profitability of the changes is also hard to calculate, as Schumpeter emphasize that it takes a long time to calculate the economic benefits of a creative destruction process (ibid.). The focus in analyzing creative destruction is on the system

as a whole, instead of the individual actor. Schumpeter's overall economic focus is on the nation, as he was a national economist.

One who took clues from Schumpeter's analysis of how knowledge and intellectual property are valuable to a company was the British economist Edith Penrose (1914-1996). Her essential theories is her interpretations of resource-based view of strategic management and the firm (Rugman & Verbeke, 2002, p 769). She looks into the resources a firm has within it. Resources can be both material, such as minerals, and immaterial assets, such as know-how.

Penrose's focus is mainly within a company's internal growth. Resource-based view of the firm is an analysis of the managerial and entrepreneurial processes a company possesses, and how it utilizes them (Garnsey, 2002, p. 103). Its opposite is external growth, where a company expand and growth by pulling in external sources through the firm. Mergers and acquisitions are examples of that strategy.

Penrose believes that a company develop unique techniques and know-how over time (Garnsey, 2002, p. 101). A product of that is pools of unused productive services, which a company can use to expand. A company success in the market will depend on how good it is to put these unused pools into production. The company's inherited resources decide the different pathways it can go. A limitation for this practice is if the company only possesses the know-how, but does not have the material resources to get the knowledge into production (Garnsey, 2002, p. 114).

The entrepreneur comes into play in this framework, as the one who has to make sure that the internal resources are being utilized so the business can expand. Penrose believes that entrepreneurial doings can be found on all levels of a firm, such as within the management, workforce and production. Those people possessing it can see how the company can gain new resources for new services.

In the last couple of decades, the views of the firm and the entrepreneur have been to look outside the organization to find the answers.

The American academic Michael Porter (born in 1947) is one of the most known representatives of the positioning school (Harvard Business Review, Strategy is about both resources and positioning, 2015). A competitive advantage is now the keyword, where a company has to positioning itself in an industry. It needs to see how it correlates with different industry actors, such as competitors, suppliers, substitutes and buyers. A competitive advantage is no longer found by accumulating competitive resources, as it is done in the resource-based view of the firm (ibid.). However, resource-based view acknowledges that the world an industry is in is not stable and forever changing. Positioning view works best if markets structures are stable, which none is (ibid.). It can be argued that in today's business world, both strategies are relevant. A company

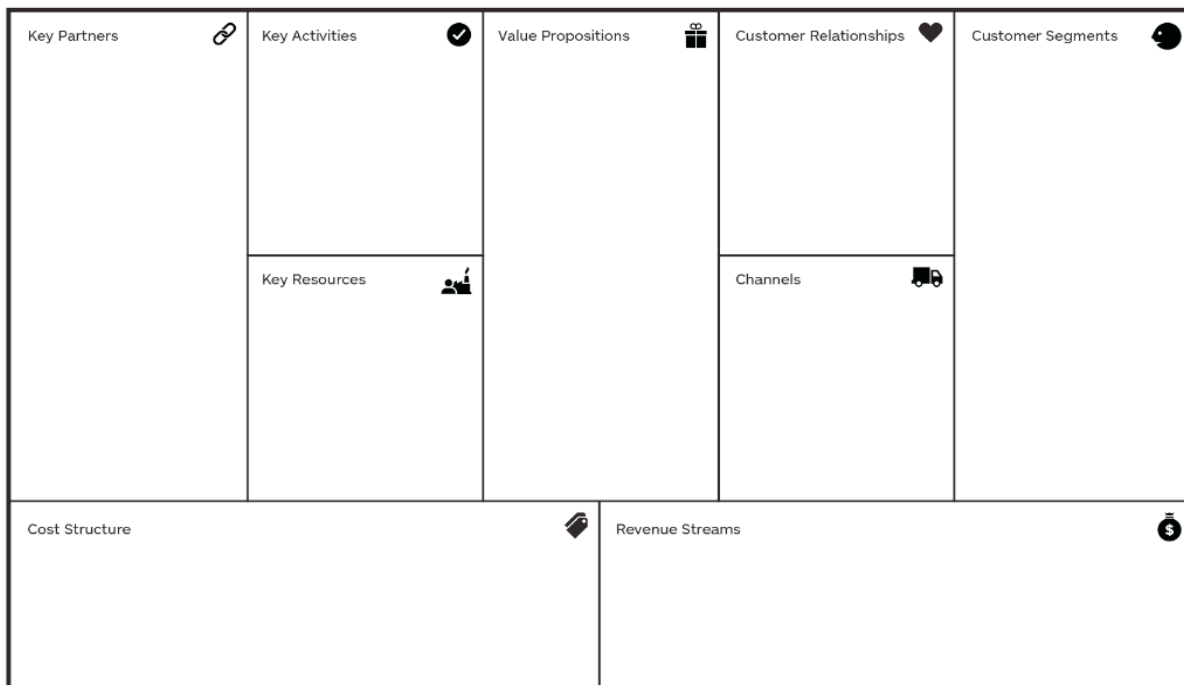
needs to see its external position, but needs to know its internal strengths to be able to act in the market (ibid.).

The global competition makes innovation and marketing crucial for a company to be able to compete properly. David A. Aaker & Damien McLoughlin argues in their book *Strategic market management* (2010) the necessity of analyzing organizations external and internal factors, to see its potential to growth and use its resources. Therefore, a company needs to understand both its internal strengths and weaknesses, as well as its external opportunities and threats, in order to create the optimal business strategy (Harvard Business Review, *Strategy is about both resources and positioning*, 2015). The Swiss business theorist Alexander Osterwalder also emphasize the importance of a company knowing its market and its product, in his book *Value Proposition Design* (2014). These theorists' viewpoints come from the aforementioned changes in the history of business theory. Along with a theory of the business consultant Dan Roam, will the theorists' respective theory be presented in the following sections.

## **4.2 Alexander Osterwalder**

The Swiss business theorist, author and consultant Alexander Osterwalder, is especially known for the development of the value proposition- and the business model canvas. He describes his business model canvas as a model that describes the rationale of how an organization creates, delivers and captures, value (Osterwalder & Pigneur, 2009, p. 14). He further explains that the model must be simple, relevant and intuitively understandable, while not oversimplifying the complexities of how companies function (Osterwalder & Pigneur, 2009, p. 15).

A business model canvas can be used to both describe and analyze a start-up company and an implementation to an existing company. It can also be used by a company to analyze the business models of its competitors on the market (ibid.). Osterwalder's business model canvas consist of nine bricks. Together they cover four business essentials: customers, offers, infrastructure and financial viability. These essentials all concerns how a company strives to make money (ibid.).



**Figure 6 - Business model canvas (Osterwalder et al., 2014, p. 195)**

The focus is, as mentioned earlier, on the right side of the business model canvas. This means that the following will describe Customer segments, Value proposition, Relationships, Channels and the Fit.

#### 4.2.1 Customer Segments

One of the key elements of any business model is customer segments. Without customers, a company will quickly lose its basis of existence. In order to better suit their customers a company can split them into different segments with common needs, behaviour and attributes (Osterwalder & Pigneur, 2009, p. 20).

There are three central categories that can explain the needs of a customer, and help create a customer profile (Osterwalder et al., 2014, p. 8-9).

- Customer gains, which describe the outcomes the customer wants to achieve and the benefits they seek. Some customer gains are more relevant than others, and it is important to find the ones that are the most important (Osterwalder et al., 2014, p. 16). This can be done by make the customer gain concrete, which can be done through interaction with the customers. For instance, ask what specifically they want and expect (ibid.).

- Customer jobs: These are what customers are trying to do in their lives, in their own words. It is important to see it from the customer's perspective, since they are the ones who actually know what relevant pain is for them (Osterwalder et al., 2014, p. 12). It is also important to be aware of the job context, as it can influence

the behaviour of the customer. An example could be that going to the movies with children creates different jobs, than when you go there with a date (ibid.).

- Customer pains: Describes all the bad outcomes, risks and obstacles related to a customer jobs. It is important to determine the pain severity, in order to find the most relevant customer pains (Osterwalder et al., 2014, p. 14). Another important element is to make the customer pain concrete, so that it is clear what the problem is more specifically. This can for instance be done by asking the customers directly (ibid.).

The categories help understand the customers, and get a better understanding of how to approach them (Osterwalder & Pigneur 2009 p. 21). The specific customer segmentation will be described in the section about the customer analysis.

#### **4.2.2 Value proposition**

The value proposition along with customer segmentations, are the two most important bricks in a business model canvas. A value proposition describes the products and services that creates value for a specific customer segment (Osterwalder & Pigneur, 2009, p. 22). It is the reason why a customer segment chooses one company over another. A value proposition solves customers' problems and satisfies their needs (ibid.). In essence, the value proposition is the benefits that a company offers customers. A value proposition can be described with three different parts:

**Gain creators:** Is about how the offered products/services create customer gains. It is about identifying the most relevant gain(s) for the customer, and then try to address it. This will often be about finding out what the customers specifically are looking for (Osterwalder et al., 2014, p. 33).

**Pain relievers:** Describe how the products/services offered to alleviate customer pains. Relevance is again the key word, meaning that focus should be on the most important pain(s). This could for instance be putting an end to difficulties and challenges that the customers experience (Osterwalder et al., 2014, p. 31).

**Products and services:** This concerns the products and services the value proposition is built around (Osterwalder et al., 2014, p. 29). This is a list of the things a company offers, or in other words what the customer can see. Therefore, it is the basis for creating pain relievers and gain creators for the customers (ibid.).

Every value proposition consists of a selected bundle of products and/or services that cater for a specific customer segment (Osterwalder & Pigneur, 2009, p. 22).

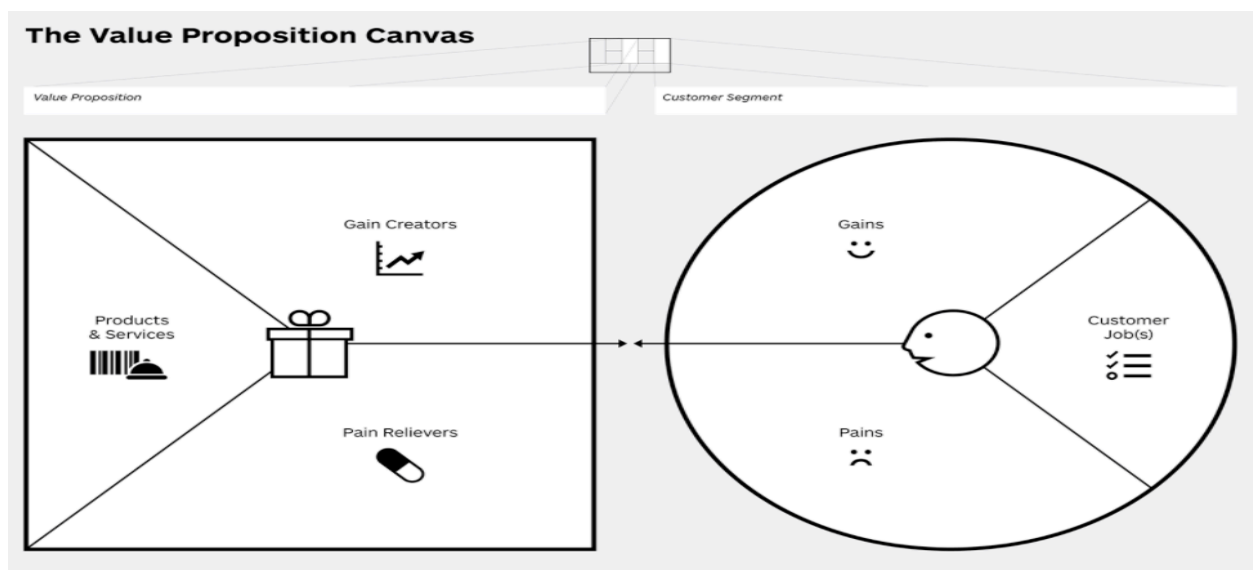
The degree of innovation within a value proposition can differ. There is no strict rule when it comes to that. It can be innovations and disruptive offers, or just added new features and attributes to existing market offers (ibid.). Different elements exist that can create customer value creation for a value proposition. Some of them are improved performance, cost reduction, accessibility, convenience and customization (Osterwalder & Pigneur, 2009, p. 23-25).

### 4.2.3 The Fit

As explained earlier in this chapter, the value proposition and customer segments bricks of the business model canvas are the most essential.

Osterwalder describes that they need to match each other for a company's product to create value for the customer (Osterwalder et al., 2014, p. 8-9). They need to achieve what Osterwalder defines as a Fit.

A Fit is achieved when the three parts of value proposition match the three parts of a customer segment, which is illustrated below in figure 7.



**Figure 7 - Value proposition canvas (Osterwalder et al., 2014, p. 42).**

More specifically, a Fit is achieved when a company's products and services create pain relievers and gain creators, which in turn match at least one of the customer's pain, gains and jobs. Striving for a Fit is the essence in designing a value proposition (Osterwalder et al., 2014, p. 42).

Some business models contain multiple Fits (Osterwalder et al., 2014, p. 52-53). Within those business models, there is more than one value proposition and customer segment (ibid.). Examples of those business models are companies that have a diverse portfolio of products and offerings. An example is a business model that needs another stakeholder, other than the buyer and seller, for it to work. That can be renting-

platform business that requires both a proprietor and a renter outside of the company, for its business model to be able to create customer value and be scalable (ibid.).

The Fit is an essential part of business modelling. Without a Fit a company's profitability and scalability is in danger of failing, and there is a greater risk of the business shutting down (Osterwalder et al., 2014, p. 49).

#### **4.2.4 Customer Relationships**

The customer relationships brick of the business model canvas describes the relationship between a company and a specific customer segment (Osterwalder & Pigneur, 2009, p. 28). As our thesis deals with the customer's experience of CPH Airport's non-aeronautical business, a deeper explanation of the customer relationship part of the business model canvas is given.

It is important for a company to make sure it knows which kind of relationship it wants to have with its customers. That can range from an intimate relationship to a more automated one. The relationship that is chosen deeply affects the overall customer experience.

There can be different reasons for why to choose a specific customer relationship (ibid.). One reason can be that a company wants to acquire customers to a new product. Another reason can be that a company wants to boost sales in one of its business segments. The rationale of choosing a customer relationship is affected by how long the company is in the implementation phase of a product. Some of the most desired services customers seek from a company are personal assistance, self-service, automated services and the possibility for co-creation (Osterwalder & Pigneur, 2009, p. 29).

#### **4.2.5 Channels**

The channels brick of the business model canvas relates to how a company reaches and communicates with its customer segments to deliver its value propositions (Osterwalder & Pigneur, 2009, p. 26). This thesis examines how CPH Airport tries to achieve this.

Channels describe how a company builds its user interface. It is a huge influence of the overall customer experience (ibid.). Channels have functions such as raising awareness of a company's product and services, allowing access to a specific product, providing customer support and giving the customers possibilities to evaluate the value proposition (ibid.).

Channels to reach a customer can be either direct or through an intermediary (Osterwalder & Pigneur, 2009, p. 27). Some companies use only one of the possibilities, and others both. A company's own stores and sales force are direct channels, where partner stores and wholesalers are intermediary channels (ibid.). CPH Airport is highly dependent on its intermediaries to be able to provide the value their customers seek. Using

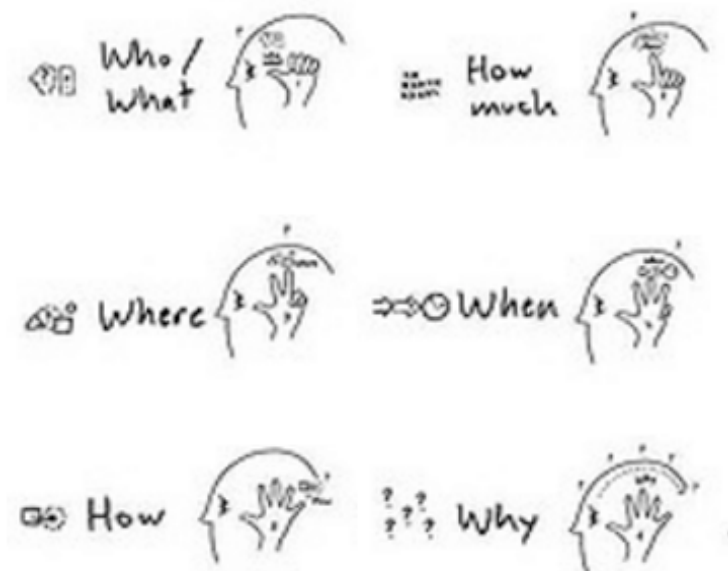
intermediaries to reach the customers comes with the threat of a company not being visible enough for its customers, and partner conflicts can arise. However, it can be too high of a cost for a company to operate on its own, and it might not have the resources and expertise to deliver their value propositions.

### 4.3 Dan Roam

Dan Roam is an author and consultant that is one of the key speakers for visual thinking (Dan Roam, About Dan, 2011). Through his management-consulting firm Digital Roam Inc., he teaches big corporations in how to use visual thinking to solve complex problems. In his book *Unfolding the napkin* (Roam, 2009) he comes up with different models to visualize complex problems in an understandable way, and comes up with simple solutions patterns for them. Roam's model the good-luck coin will be used to examine the implementation of the suggested initiatives to optimize CPH Airport's non-aeronautical business.

#### 4.3.1 The good-luck coin

The six-sided coin, also known as the good-luck coin, expresses a way for a company to not panic if problems occurs (Roam, 2009, p. 65). The "coin" shows the six types of overall problems that Roam states a company can face. If those can be identified, a company would be in position to solve them.



**Figure 8 - The six problem types a company can experience (Roam, 2009, p. 230)**

Roam acknowledges that there are infinite different kind of problems and infinite solutions types a company can cope with and choose (Roam, 2009, p. 65). His model is used to segment the many threats and complex problems a company can face, into an underlying framework comprised of six simple pieces. The six problem types presented are (Roam, 2009, p. 65-66):

### **Who and what-problems**

Concerns the persons involved in the problem and in the solving of it. It is about recognizing, identifying and classifying among a company's staff to see which actors must be brought into play to solve the urgent problem (Roam, 2009, p. 77).

After the responsible staff is chosen, the actual object of the problem must be identified. It is up to the actors to find out exactly what needs to be changed in the company for a problem to go away. This problem type is a good place to start in problem solving, as it is a phase where you only visualize who the important actors are and what the object is.

### **How much-problems**

Is the measuring aspect of a problem. A company must make sure that it has enough capital, assets or derivatives for example, to make sure that it has enough resources to overcome a problem. It is also to measure if a company can move resources from one department to another, without it hurting the business too much.

### **When-problems**

Is the challenges that scheduling conflicts make. A company must prioritize in a time of conflict. It must choose which aspects of a problem are important to solve first. Timing is of the essence, and the company needs to differentiate in its solving tasks to get everything done in time.

### **Where-problems**

Is the challenge of getting components to fit together. When each component of a problem solving strategy is categorized and prioritized, they must put into the right place of the bigger puzzle that is the overall challenge. It is to see if the company is headed in the right direction. If the puzzle does not fit, the company must change or adjust its strategy.

### **How-problems**

Relates mainly to "how much" and "when". How-problems concern challenges that relate to how actions influence one another. Here, a company can start to build models relating to exactly to how the specific urgent problem can be solved (Roam, 2009, p. 84). Within the solution suggestion must be a risk analysis regarding what outcomes could happen if the situation is altered.

### **Why-problems**

Is focusing on the overall picture of a company. In which direction is it going, and is it the right one?

All six problem types can be seen as a case of their own, or they can also work as a guideline for businesses to cope with a sudden incoming problem, where all aspects are taken into consideration (Roam, 2009, p. 104-105).

To broaden the analysis Dan Roam's other model S.Q.V.I.D. model can be used, showing how to approach a problem either with a simple or elaborate view (Roam, 2009, p. 184-191).

#### **4.4 David A. Aaker & Damien McLoughlin**

In their book Strategic market management the two organizational theorists David A. Aaker and Damien McLoughlin explain how the management of a company can use strategic marketing tools to drive the growth of their business (Aaker & McLoughlin, 2007). They suggest that a company needs to be aware of both internal and external factors when working with dealing with strategic marketing (Aaker & McLoughlin, 2007, p. 18).

This indicates that Aaker & McLoughlin acknowledge that marketing strategy concern both a company's resources and its positioning, which represent two different camps of the business literature: the "positioning school" (TPS) and the "resource-based view of the firm" (RBV).

Others also support the combination of both views. For instance Roger L. Martin who says "*Positioning and resources aren't opposites so much as two sides of the same coin... It is unarguable that you need both*" (Harvard Business Review, Strategy is about both resources and positioning, 2015).

However, Aaker & McLoughlin puts greatest emphasis on the positioning part, as they have dedicated four chapters to the external analysis, and one to the internal analysis (Aaker & McLoughlin, 2010, p. v-vi).

The outputs of the internal and external analysis in this thesis will be combined to make a strategy identification, that suggests which selections and implementations a company should choose.

##### **4.4.1 External analysis**

The external analysis will be conducted at three levels for CPH Airport's non-aeronautical business. It will consist of; i) environmental analysis ii) an industry analysis and iii) a customer analysis an. This approach is used in order to make a purposeful and focused identification of opportunities and threats (Aaker & McLoughlin, 2010, p. 12).

###### **4.4.1.1 Customer analysis**

The customer analysis will follow Aaker & McLoughlin's three-step approach. Those consist of; i) customer segmentation ii) analysis of customer motivations and iii) analysis of unmet needs (Aaker & McLoughlin, 2010, p. 26).

###### **Segmentation**

Segmentation can be defined as identifying customer groups that respond differently to competitive offerings (Aaker & McLoughlin, 2010, p. 26-27). Segmentation can be based on many different variables. There is not a specific set of variables that have to be used in segmentation. Instead, their relevance is based on their

ability to identify segments that respond differently to market offerings (ibid.). However, Aaker & McLoughlin introduce two overall categories for segmentation variables (ibid.).

**Customer characteristics** relate to both demographics and geographic. They and describe segments in general terms, unrelated to the product or service involved. These variables can be useful for defining segments, as they can influence the customer's behaviour (Aaker & McLoughlin, 2010, p. 28).

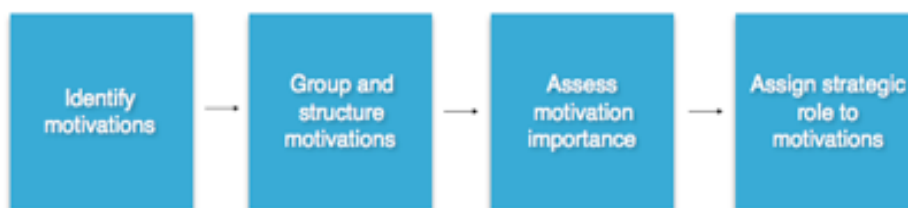
**Product-related characteristics** are the variables that are specifically related to the product. They identify different segments based on the customer's usage and thoughts about the product/service (ibid.). The variables are important to understand, as they deal with the match between the company's offerings and the customer's perceptions.

Benefits sought is an example of a variable that deals with what the different customers find relevant, and it can determine a total business strategy (ibid.).

The selection of the final segmentation variables will be presented in the analysis, and will include an elaboration of the choices.

### **Customer motivations**

The next step is about examining the customer motivations of the chosen segment(s). This means trying to understand what lies behind their behaviour and purchase decisions (Aaker & McLoughlin, 2010, p. 31). This is crucial for improving and designing the right market offerings, as it has to fulfill the motivations of the chosen customer segment(s). In order to analyze their motivation, Aaker & McLoughlin (2010) suggest a four-step approach, which is seen below.



**Figure 9 - Approach for examining customer motives (Aaker & McLoughlin, 2010, p. 32)**

The first step is the identification of motivations, which means that customer insights are needed. As described in the methodology about primary qualitative data collection, conducting focus group interviews is a useful way to access customer insights (Aaker & McLoughlin, 2010, p. 32-33.). This can lead to many different insights, which lead to the next step regarding clustering the motivations together.

The grouping can be done exclusively by the researchers, or the customers can be included in order to see how they group the variables (ibid.). This is followed by an evaluation of the most important motivations. As

the step before, this can be done either exclusively by the research team, or the customers can be by included (ibid.).

Last the motivations have to be evaluated in relation to the current offerings and strategy, in order to see how well they fit and if changes are needed (Aaker & McLoughlin, 2010, p. 34).

### **Unmet needs**

The last step is to identify unmet needs. It is important as it can lead to potential opportunities or threats. For instance it can lead to new ways a company can enhance its existing relationship to its customers, increase market share, or even break into new markets (Aaker & McLoughlin, 2010, p. 35-36).

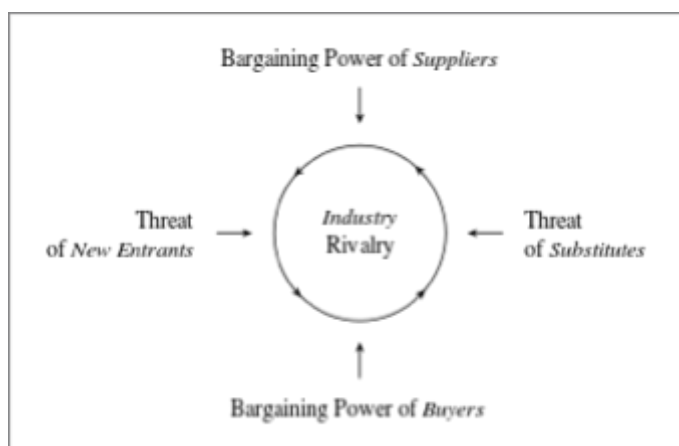
The identification of unmet needs is done by focusing on the customers. They are the prime source of what their unmet needs are (ibid.).

Focus group interviews are one way to obtain knowledge about unmet needs. The questions asked in those can be; What product-use problems have emerged?, what is frustrating you? etc. (ibid.). These questions will help uncover where improvements can be made, and if there are any clear unmet needs. However, it is important to recognize that customers are not always aware of their unmet needs, where a typical example is how they could have imagined a car before the technology made it possible (ibid.).

#### **4.4.1.2 Industry analysis**

In order to analyze the industry the framework, Porter's five forces will be applied. The framework is created by the professor Michael Porter, and can be used to analyze the profitability of an industry and its level of competition/rivalry (Aaker & McLoughlin, 2010, p. 68). The overall idea is that five factors influence the profitability, and thereby the level of competition, as a more profitable industry will create more competition. These five factors are seen in figure 10 below, and will be elaborated in the following.

Porter's framework can be applied to any industry, but can also be applied to more specific submarket within an industry (ibid.).



**Figure 10 - Porter's five forces (own creation)**

**Threat of new entrants**

This addresses the entry barriers of the industry, which is important to understand when analyzing the level of competition (Aaker & McLoughlin, 2010, p. 69). The less resources it takes to enter the industry the more competitive and less profitable does an industry become, as it allows more to enter the industry.

An example of a typical entry barrier could be a big fixed cost for entering an industry, e.g. a need for expensive machinery in order to start up.

**Threat from substitute products**

Substituting products can influence the profitability of an industry, as those products can be used in place of a company's market offering (Aaker & McLoughlin, 2010, p. 69). This means that the more substitutes that are available to a customer, the more competitive and less profitable does an industry become, since the market offering can be replaced.

**Bargaining power of suppliers**

This is about the power that suppliers when negotiating with the industry. The suppliers gain power by selling to a variety of customers in diverse markets, as well as when the switching cost are high (Aaker & McLoughlin, 2010, p. 70). The more bargaining power the suppliers hold, the more competitive will the industry become. For instance if they can demand higher prices, or be less dependent on selling to the specific industry.

**Bargaining power of buyers**

This is about the power that the buyers have in relation to the industry. Customers can for instance gain power by conducting large purchases, and by having more options (ibid.). The more power the buyer possesses, the more competitive does the industry become and profitability will decrease.

**Industry rivalry**

This factor is affected by all the other factors, as seen in the figure above, and as described in each part about how these can influence the competition within an industry.

The industry rivalry is furthermore affected by a number of other factors, such as the number of existing competitors (Aaker & McLoughlin, 2010, p. 69). Another relevant factor is the existence of exit barriers, such as long-term contracts or specialized assets. These possibilities also intensify the competition, as it makes it harder to stop a company (ibid.).

**4.4.1.3 Environmental analysis**

All businesses are affected by the macro-environment that surrounds them, which makes it an important analytical object to examine. It can lead to the identification of important opportunities and threats, which can have a serious impact on the company's future performance and strategy (Aaker & McLoughlin, 2010, p. 79-80).

In order to analyze the surrounding macro-environment, a PEST analysis will be conducted. PEST is an acronym for the four macro-environmental dimensions that the framework examines; political, economic, social and technological (ibid.). Together these dimensions represent four overall areas on macro level, which are relevant to analyze.

It is important to make sure that the analysis does not become an endless list of factors without analyzing the relevance (ibid.). Instead, it is important to try and narrow down the analysis, so that each part of the PEST analysis concentrates on the most essential aspects of the macro-environment, in order to find the greatest threats and opportunities.

It can be argued that the PEST analysis should be extended to PESTLE analysis, so that it also includes legal (L) and environmental factors (E). However, in this thesis the PEST analysis is used because the legal and environmental factors are already found within the political and social factors respectively within the examined environment (Henry, 2011, p. 48-49).

### **Political**

This first dimension addresses the consequences of political regulations and how it affects the chosen business environment. The addition or removal of legislation and regulations can create great threats and opportunities for a business (Aaker & McLoughlin, 2010, p. 90).

An example of that could be a new tax- or a new safety regulation that makes the business operations more expensive for the company. These threats are important for a company to identify, in order to act accordingly and make the right strategic choices.

### **Economic**

A business strategy will always be affected by the general economic climate. Thereby, two different approaches will be needed, depending on whether the economy is doing well or not (Aaker & McLoughlin, 2010, p. 89).

There are a number of economic aspects that can be analyzed, such as economic growth, inflation, economic stability etc. This data is most often obtained from broad-based information systems, which give an insight into leading indicators (ibid.).

### **Social**

This dimension is about how different trends and social factors among the consumers can create threats and opportunities for a company (Aaker & McLoughlin, 2010, p. 83-84).

The socio-economic environment consists of many aspects, such as the overall development in demographics, lifestyle trends and consumer trends.

An example of an impactful social trend could be the increasing concern for the environment (Aaker & McLoughlin, 2010, p. 85). Consumers have become aware of the global ecosystem, and may not want to

purchase products that harm the environment (ibid.). For some firms this creates either a threat or an opportunity, which is important to identify in order to make the right strategic choices.

### **Technology**

This dimension concerns the technological development in the macro-environment, which may potentially affect the company (Aaker & McLoughlin, 2010, p. 81).

An example of a change in technology that have impacted an industry could be the introduction of online streaming, which have been fatal for a company like Blockbuster, but at the same time created a company like Netflix.

The impact from technological changes may differ a lot, and one way to examine this is by distinguishing between incremental innovations and transformation innovation. These differ in terms of how new they are, and how much wealth they represent for the business (ibid.).

### **4.4.2 Internal analysis**

The first step in an internal analysis is to analyze the company's performance (Aaker & McLoughlin, 2007, p. 24). A performance analysis consists of two sides, a financial and a non-financial. Within a financial performance analysis, a company can look at key figures in their annual reports. Return on assets, return on equity, solidity, growth rate etc. are financials measurements that can give an understanding of the company's status. Sales and market shares are sensitive measurements of how customers regard a product or service (Aaker & McLoughlin, 2007, p. 112-113). If the customer value for a company's offerings changes, sales and market shares will be affected. Profitability is a good measurement to measure the financial survival rate of a company (ibid.). Ratios such as margins, profits and costs, are used to reflect profitability.

The non-financial are also interesting. Non-financial performance measures can provide efficient measurements of a company's strategic performance and long-term survival rate (Aaker & McLoughlin, 2007, p. 24). Amongst those performance measures are for instance:

- The customer's satisfaction and brand loyalty for the company.
- The level of customer value the company's product or service provided.
- The activity rate of creating new product with new improvements to satisfy the customer.
- The management and organizations capability to support the chosen strategy.

Aaker & McLoughlin emphasizes that in order for everyone in the company's organization to understand the chosen strategic path, there needs to be a clear vision for the business (Aaker & McLoughlin, 2007, p. 26). A vision can inspire the members of the organization, and give them a purpose that is more than just maximizing shareholder value. The vision can also help the company in choosing the strategy. By knowing where it wants to go, it can differentiate amongst strategies to find the ones most suitable for reaching the

vision (ibid.). Furthermore, a vision helps the company in finding its core competences. If those are known, a company can focus on keeping them and not letting them go to waste by being unutilized.

The last aspect of the internal analysis is how a company use of a competence or resource to create a competitive advantage.

A competitive advantage can be described as an internal resource or competence, which gives an edge over rivals and thereby generates a strength for the company (The Economist, Competitive advantage, 2008). An example of a competitive advantage could if a company can produce its market offering cheaper than all competitors. This creates an advantage for the company, as it can charge lower prices than competitors.

The **VRIN** tool can be used to assess whether a resource or competence creates the foundation for a competitive advantage (Johnson, Whittington & Scholes, 2011, Ch. 3). The VRIN tool is created by Jay Barney, and consists of four different criteria. The more criteria a resource or competence fulfills the stronger competitive advantage does it create (ibid.). The four criteria are the following:

**V (valuable):** The competence or resource has to provide a basis for a competitive advantage. This means that the competence or resource creates value for the customers, as well as for the company. Value for the company means that the competence or resource addresses the opportunities and threats, and does it in a profitable way (ibid.).

**R (rarity):** A rare resource or competence is unique for a company, or only held by a few companies (ibid.). If a resource or competence is valuable, but also held by all companies, then it is not providing a competitive advantage.

**I (inimitability):** The level of inimitability refers to how difficult it is for competitors to imitate a resource or competence (ibid.). The harder it is for others to imitate a resource or competence, the stronger is the basis for a competitive advantage.

**N (non-substitutability):** This refers to how big the risk is for a resource or competence to be substituted by another resource or competence. The harder it is to substitute a resource or competence, the stronger is the basis for a competitive advantage (ibid.).

## 5. The situation

The following will give a better understanding of CPH Airport as a company and its performance. The chapter looks into the company's history, current situation, management structure and financial position.

## **5.1 The history of Copenhagen Airport**

Copenhagen Airport was founded in 1925, and placed in the suburb of Copenhagen called Kastrup (CPH Airport, Historie, 2017). Its development was finished in 1939. World War II put an immediate delay on the airport's development (ibid.). The development continued after the war was over. Since then the number of take-offs and landings has increased rapidly, going from 6000 in 1932 to be in six figure numbers per year in the 2000s (ibid.). The airport became intercontinental in 1946, with flights to the US (CPH Airport, Interkontinental, 2017). In 1986 one of the old terminals was renovated, to make the airport able to meet the then current expected standards (CPH Airport, Knudepunkt, 2017). Passengers now expected to be met with comfort and great customer service at an airport. CPH Airport tried to meet those expectations by creating one of the first airport shopping centers, with several different stores and a comfortable atmosphere (ibid.).

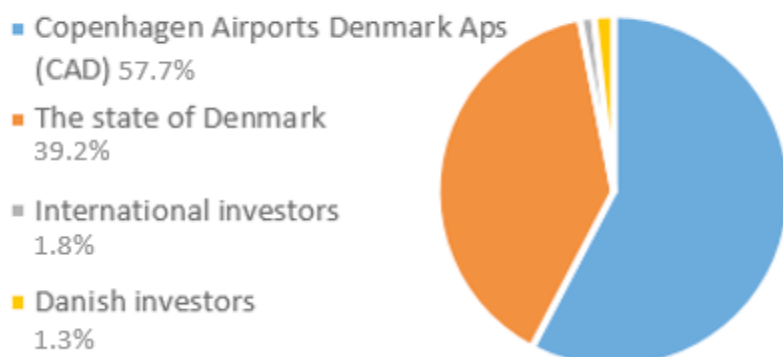
### **Copenhagen Airport's recent history**

From the year 2000 until now, CPH Airport has been focusing on improving the infrastructure and customer experience at Copenhagen Airport (CPH Airport, I dag, 2017). In 2000, highway and train connections between Sweden and the airport opened. The largest groups of passengers then became Danes and Swedes. The Copenhagen Metro expanded with a station at Copenhagen Airport in 2007. Now passengers could travel from downtown Copenhagen to the airport in 14 minutes (ibid.). Throughout the recent years, the airport has been expanding their terminals; to create better facilities and travel flows for the passengers and airlines. The terminal 3 at the airport has become a junction, where up to 36.000 passengers goes through every day (ibid.).

In the spring of 2001, the building of the airport's 382 rooms five star hotel was complete (ibid.). Larger facilities with more diversification in the offers to the passenger have been a focus area in CPH Airport's strategy since the beginning of the millennium (ibid.). The Airports shopping center is being developed constantly. New shops and tenants enter, where others leave.

One of the biggest changes in CPH Airport's recent history is that it went from a state owned company to public company. The transformation happened because the Danish government wanted to run the entity more as a business (CPH Airport, Fra stat til privat, 2017). In 1990, the company CPH Airport was established with the Danish state as the sole owner. Since 1994, where the company went on the Danish stock exchange, the state has reduced its shares (ibid.). Right now, the state of Denmark has a 39.2 percent holding in the company (CPH Airport, Aktieinformation, 2017). The list of shareholders in CPH Airport and their stake of ownership are as follows:

## Copenhagen Airport's ownership structure



**Figure 11 - Ownership structure of CPH Airport (own creation)**

The majority owner CAD is a joint venture between the two private companies Ontario Teachers' Pension Plan and Macquarie European Infrastructure Fund III (ibid.). They are the ones who elects the board and approves their strategy plans.

### 5.2 CPH Airport's board and management

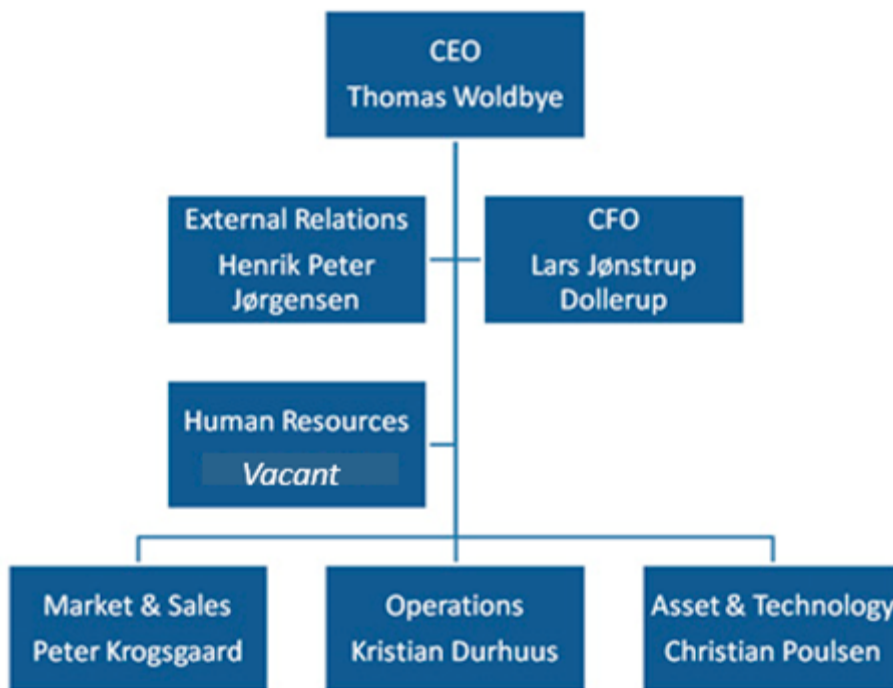
CPH Airport's board of directors consists of nine members, where three of those are employee representatives and six are independent (CPH Airport Annual Report 2016, 2017, p. 64-65). The chairman of the board is Lars Nørby Johansen. He is one of the most powerful business executives in Denmark (Foreningen for elite- og magtstudier, Udforsk Elitenetværket, 2016). He is also the chairs eight other large Danish companies. The majority owners of CPH Airport are represented on three of the board seats.

At the top of the company's executive management is their CEO Thomas Woldbye. He came to the company in 2011. Before that, he worked for 20 years in the shipping A. P. Møller-Mærsk.

Woldbye is in charge of the day-today operation of the company (CPH Airport, Executive management, 2017). He follows the overall directions developed by the board of directors, and reports about daily operations and the financial situation back to them. Furthermore, Woldbye makes recommendations to the board regarding plans, investments, strategies, resources and insurance (ibid.).

Right below Woldbye are the CFO Lars Jønstrup Dollerup and CCO (chief communication officer) Henrik Peter Jørgensen (CPH Airport, Management team, 2017). Dollerup is a certified accountant who has been with the company for six years, and Jørgensen has been with the company for ten years. Below them, at the next management level are the head of human resources. This position is currently vacant but a new HR manager joins the company June 1. (CPH Airport, Ny HR-direktør i CPH, 2017) . Until then, CEO Woldbye also operates the HR aspects of the company (CPH Airport, Thomas Kolber forlader Københavns Lufthavn,

2016). At the bottom of the management hierarchy is the rest of the management teams. Those are CPH Airport's CCO (chief commercial officer), COO and CTO (CPH Airport, Management team, 2017).



**Figure 12 - Management structure at CPH Airport (CPH Airport, Management Team, 2017)**

### 5.3 CPH Airport's main activity

Before the financial statements from CPH Airport's most recent annual report can be interpreted, to measure its financial performance, it is important to understand the company's main activities.

CPH Airport's main activity is that it owns, operates and develops two airports, Copenhagen Airport and Roskilde Airport (CPH Airport Annual Report 2016, 2017, p. 19). The company tries to make sure that Copenhagen Airport is the best part of the traveller's journey (CPH Airport Annual Report 2016, 2017, p. 20).

The core business is everything under the aeronautical and non-aeronautical business (ibid.). The main areas within the aeronautical business are baggage, check-in, security, cargo, transfer and take-off. For the non-aeronautical business, the main areas are hotel, parking, real estate, shopping and restaurants. CPH Airport generally operates with four different customer groups, which both covers the B2B and B2C aspect of the airport (CPH Airport Annual Report 2016, 2017, p. 20):

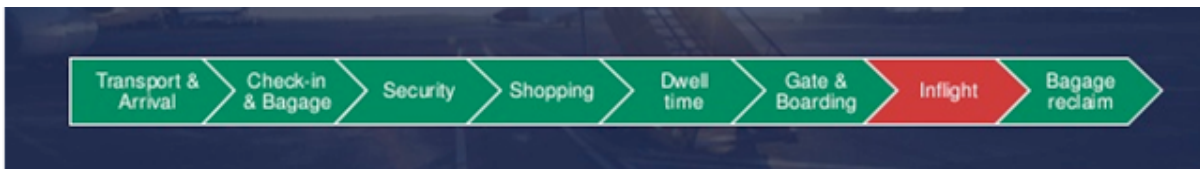
- Airlines
- Passengers

- Concessionaires in the shopping center
- Tenants

CPH Airport has to operate its four segments at the same time (ibid.). This means that the company has to operate as one entity. There are not two management teams responsible for the aeronautical and non-aeronautical businesses respectively. The two areas have to relate to each other and thrive together, for growth and development to happen (CPH Airport Annual Report 2016, 2017, p. 20). There are many stakeholders within those two business areas that the company needs to satisfy. Therefore, it is a complicated chain of communication the management needs to apply for CPH Airport's operation and supply chain.

CPH Airport has developed what they called The Travel Chain, which is relevant when focusing on the B2C part of the airport (SlideShare, Customer Experiences: Experiences that fly, 2016).

It is illustrated in figure 13 below, and show the overall steps a traveller go through when travelling through CPH Airport. This means the chain combines the aeronautical and non-aeronautical aspects in a traveller's journey, from start to finish through the airport. The chain shows the complexity of the airport's operations for handling the travellers, with more than 700 companies being a part of The Travel Value Chain (CPH Airport Annual Report 2016, 2017, p. 20).



**Figure 13 - The Travel Value Chain (SlideShare, Customer Experiences: Experiences that fly, 2016)**

CPH Airport has further developed The Travel Value chain to become The *New* Travel Value Chain, to meet the current market trend of digitalization amongst an airports products and services. (SlideShare, Customer Experiences: Experiences that fly, 2016).



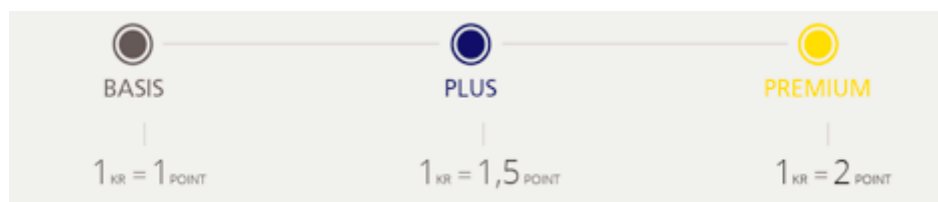
**Figure 14 – The New Travel Value Chain (SlideShare, Customer Experiences: Experiences that fly, 2016)**

Compared to the traditional travel value chain, the new model incorporates e-commerce and steps a passenger takes before entering the airport, for instance booking. CPH Airport states in its latest annual report: *“Exponential digitalisation, fresh expectations from travellers and rapid changes in passenger behaviour are increasing the need for digitalisation as a key element of optimising operations and improving customer experience throughout the travel value chain.”* (CPH Airport Annual Report 2016, 2017, p. 24). Digitalization is a high priority for the company, and believed to be a condition for its business strategy to succeed.

One way CPH Airport also has tried to improve its travel value chain themselves, is with the customer loyalty program CPH Advantage. That program was implemented in 2011, as a way to target the individual passenger (CPH Airport, New Benefit Programme, 2011). VP of marketing and sales Carsten Nørland said: *“CPH Advantage is an example of how we expand our business by offering new, targeted products...”* (ibid.).

CPH Advantage is based on travellers signing up for a free membership, which then opens up for different “advantages” (CPH Airport, CPH Advantage, 2017). The entire loyalty program is build into the CPH app, where the user can manage his or hers account.

One of the main features of the program is its earn and burn concept. This means that the traveller earn points when shopping in CPH Airport, which then can be used for future purchases (ibid.). The traveller can then earn a different membership status, based on the amount of money spend as seen below. Plus is achieved after spending DKK 500, and Premium after spending DKK 2.500. The value of points is as follow: points = DKK 15 (ibid.).



**Figure 15 - CPH Advantage point concept (CPH Airport, CPH Advantage, 2017)**

The program also has other benefits for the members, such as discounts on certain types of parking, getting an upgrade of coffee bought at Lagkagehuset (ibid.).

However, Interviewee 1 tells that the program is facing some current challenges. She says: *“Right now the biggest challenge is related to the concept behind CPH Advantage”*, and she continues *“we can see that only a proportion of CPH Advantage members are attracted by what the program offers today”* (Interviewee 1, 2017, min. 07:01). This illustrates the challenges with digitizing the non-aeronautical business, and the importance understanding the behaviour and needs of the customers.

Digitalization is generally a high priority for the company’s non-aeronautical business strategy. It should be easy for the passenger to go through the airport and all of its offerings. At a conference in 2016, the company’s digital business development manager Morten Dam-Andersen presented the digitalization that they are going through (SlideShare, Customer Experiences: Experiences that fly, 2016). Their digital vision is to meet the passengers’ business goals by *“enhancing physical airport experience through a seamless user journey across systems and devices”* (ibid.). Dam-Andersen explains that the passenger and the airport should meet each other’s expectation, as soon as the passenger arrives at the airport.

Overall, CPH Airport’s business model strives to be the best run, efficient and attractive as possible for its customers (ibid.). Further, the airport is trying to create the best possible value for both the owners and society, and also for their employees and business partners. Due to both EU- and national legislation, CPH Airport is committed to make its business model suit the needs of necessary flight capacity for national and international transportation, which the national travellers have (CPH Airport Annual Report 2016, 2017, p. 20).

## 5.4 Annual reports analysis

The most recent financial statement CPH Airport has published is the one for 2016 (CPH Airport Annual Report 2016, 2017). Analyzing the financial statement can give a clear picture of the company's current financial status. The many numbers given in an annual report can be analyzed, by calculating different key figures (Steensen, 2001, p. 22). Below, CPH Airport's business areas and the company's different key figures and ratios will be analyzed, concerning profitability, liquidity and solidity. The company's 2016 annual report will be used as the main source. Statements from CPH Airport's interim financial report from 2016 will also be used (CPH Airport interim financial report 2016, 2016, p. 4).

According to the annual report for 2016 released on March 1. 2017, CPH Airport has experienced an overall increase in its business areas (CPH Airport Annual Report 2016, 2017, p. 20).

### 5.4.1 Key figures and development

In 2016 CPH Airport saw an increase in the total number of passengers and total revenue, which is seen in figure 16 below (CPH Airport Annual Report 2016, 2017, p. 12).

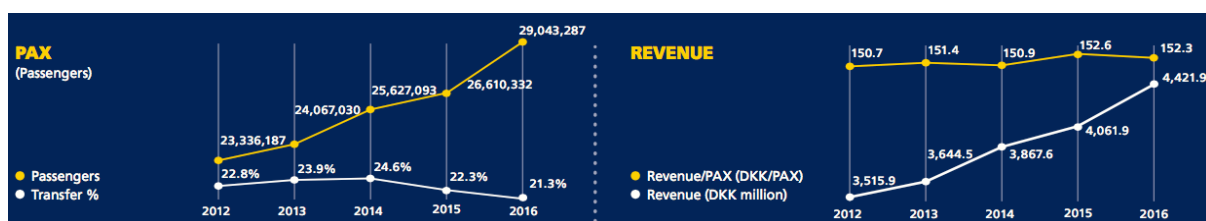


Figure 16 - Nr. of passengers and revenue (CPH Airport Annual Report 2016, 2017, p. 12)

The total number of passengers using CPH Airport grew by 9.1 percent compared to 2015 (CPH Airport Annual Report 2016, 2017, p. 9). Around 29 million passengers went through the airport in 2016. That is a new record. Each of the six past years have created new passenger records.

It is stated in the annual report for 2016, that an increase in international passengers travelling from the airport is a main reason for the reported higher revenue (CPH Airport Annual Report 2016, 2017 p. 36). Especially the 9.4 percent growth in international departing passengers had a positive effect on the revenue. The revenue for the year 2016 was 4,422 million Danish kroner, which is an increase by 8.9 percent from a year before (CPH Airport Annual Report 2016, 2017, p. 13). The year's net profit was 1,259 million Danish kroner, a 16.0 percent increase. The increases in passengers and revenue are within the same amount of increase.

However, there has been a small decline in revenue per passenger, which CPH Airport believes is due to a higher number of younger travellers with a lower average spending (CPH Airport Annual Report 2016, 2017 p. 15).

In 2016, the aeronautical revenue increased 10.0 percent to 2,600.2 million Danish kroner, and the non-aeronautical revenue increased 7.3 percent to 1,821.7 million Danish kroner (CPH Airport Annual Report 2016, 2017, p. 82). It is stated, that higher earnings in parking are one of the main reason for the increase in the non-aeronautical revenue (CPH Airport Annual Report 2016, 2017, p. 15).

CPH Airport's concessionaires and TAX FREE area still brings in the highest non-aeronautical earnings in total for the company, but they have not increased as much as the other non-aeronautical business segments recently (CPH Airport Annual Report 2016, 2017, p. 37).

The income from the shops at the airport increased 4.3 percent, and the TAX FREE area's income level has remained the same as the year before (ibid.). That increase is especially affected by the increase in international departing passengers. The overall passenger increase of course also contributed to the development.

The big change for the non-aeronautical business came with higher revenues in parking and other income sources. The company have changed the price structure for their parking service, and they believe the change has made it more attractive for the passengers to park at the airport. The parking income increased with 11.4 percent (CPH Airport Annual Report 2016, 2017, p. 37). The company has been focusing on improving the marketing part of their parking business. The marketing campaign has been international, and not just made for the national passengers. The increase in the overall passenger growth, also affects the parking business positively.

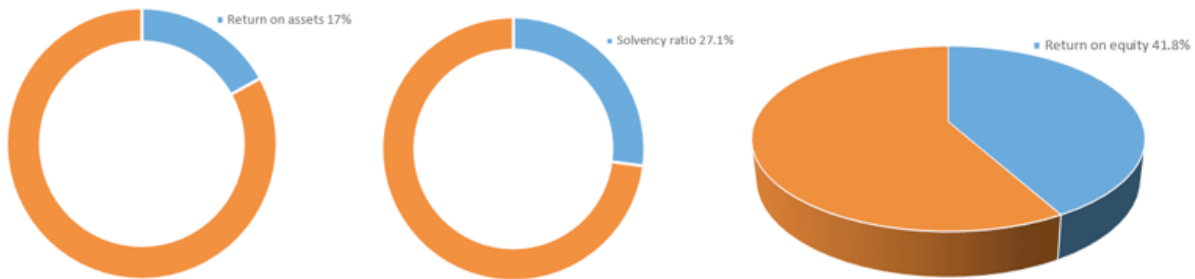
CPH Airport's ownership of the local airport hotel is amongst the other non-aeronautical income sources (ibid.). The hotel revenue increased with 6.9 percent. They state that the increase is due to more travellers are using the hotel, and that it has fewer rooms empty through the year. Car rental and a deal with an advertising agency has further help increase the non-aeronautical income.

CPH Airport mentions in the interim financial report for 2016, the strategy they have used to make a better shopping experience for the passengers (CPH Airport interim financial report 2016, 2016, p. 12).

Despite their focus on streamlining, they have tried to get new tenants with diversified products to their shopping area, as the passengers is believed to seek diversity. An example is getting the brand JD sports to the airport. JD sports sells sports apparel, which is a type of shop that never before has been present there. New brands have also entered the convenience segment at the airport. The restaurant segment at the airport has also been broadened with brands such as O'Learys and 7-Eleven.

### 5.4.2 Key ratios

Three key ratios have been selected to analyze CPH Airport's financial performance.



**Figure 17 - Key ratios for CPH Airport (own creation)**

CPH Airport's return on assets tells how good they as a company have been to utilize its assets (Steensen, 2001, p. 22-23). The company's return on assets has increased to 17.0 percent from 15.7 percent the year before (CPH Airport Annual Report 2016, 2017, p. 13) (see Appendix 3 for the calculation method). That is a very high return on asset, which usually lies between 5-7 percent for big corporations (Steensen, 2001, p. 22-23). Going back through the last couple of years, CPH Airport have maintained a high percentage of their assets returns (ibid.). They have gotten an interest rate on 17.0 percent from their invested capital. It shows that the company has been good to maximize the profit out of its assets, and been able to keep different related costs down.

CPH Airport's solvency ratio was 27.1 percent in 2016 (CPH Airport Annual Report 2016, 2017, p. 13). That is within the respectable area for a solvency ratio, which should be between 15-30 percent (Steensen, 2001, p. 26). The solvency ratio shows how many of the company's assets have been financed by the owners. In CPH Airport's case, the owner is the shareholders. Alternative outside investors and loans should not finance too many of a company's assets. A way a company can finance its assets is by saving some of its revenue to investments in own assets (ibid.).

It is not a good sign for an established company if their solvency ratio is below 15 percent, as it will have hard to meet its debt and obligations (Steensen, 2001, p. 26). CPH Airport's solvency ratio of 27.1 percent is a bit below the company's past ratios, but it is still very fine. The solvency ratio for the company has been stable between 27.5-28 percent for the past years (CPH Airport Annual Report 2016, 2017, p. 13). Therefore, have they for some time been on the higher end of the respectable solvency ratio scale of 15-30 percent.

With a good solvency ratio, it is possible to calculate return on equity. If a company does not have a high amount of equity, even a little revenue will highly affect the return on equity percentage (Steensen, 2001, p. 23). That will not give a proper picture of the company's current financial situation. Return on equity shows the amount of profit a company has gained from investor's money (ibid.). It should be at least 8 percent.

CPH Airport's return on equity is very high at 41.8 percent (CPH Airport Annual Report 2016, 2017, p. 13). It is an increase from 37.2 percent in Q2 2015.

The positive development in CPH Airport's key figures and ratios shows that they have been great at utilizing their assets and proper invest the capital gained from the shareholders. Almost all key figures from 2016 have increased since the year before. It shows that the company is in growth, and have a good amount of equity saved to invest with.

## **5.5 CPH Airport's general competition**

Copenhagen Airport is the biggest airport in Denmark. They do not have any main competitors nationally, but they compete against other international airports. The competition mainly concerns getting market shares in the lucrative transfer passenger market.

In an interview with Berlingske Business in 2016, the airport analyst Jacob Pedersen tells who he sees as CPH Airport's main competitors (Berlingske Business, Københavns Lufthavn, 2016). Right now, the biggest competitors are within the Scandinavian area. Stockholm Airport, Oslo Airport and Helsinki Airport are within that area. Copenhagen Airport currently does better than those airports, and has the biggest market share amongst those. Pedersen states that a global company such as CPH Airport cannot just stand still, but has to invest continuously in new products and infrastructure, to satisfy the travellers (ibid.).

Pedersen emphasize that an airport has to keep two different customer segments happy, the airlines and the passengers (ibid.). The biggest operating airline at the airport is the Scandinavian airline SAS. For many years, the airline had a high amount of the air routes from the airport. SAS still has that, but bad financial years for them and a higher competition amongst the airlines, have led to other airlines to have a bigger presence. The Norwegian airline Norwegian have invested more in CPH Airport in the recent years. The same has low-cost airlines such as EasyJet and Ryanair.

Pedersen believes that a potential big competitor for CPH Airport is Berlin Airport (ibid.). For now, he sees Berlin Airport as an unknown factor. Even though the airport is not an optimal airport, he believes that if they improve they will become the biggest competitor to CPH Airport. Berlin Airport have the capacity to host many international passengers, and it is geographically close to Copenhagen.

## **5.6 Conclusion of the situation**

CPH Airport strategic performance is first of all influence by both dealing with B2B and B2C, as the management has to manage both the aeronautical and non-aeronautical businesses. This increases the complexity of the airport's operations, and more than 700 companies are a part of The Travel Value Chain.

CPH Airport has seen a continuous increase in its performance in 2016, as the number of passenger increased with 9.1 percent, and the total revenue increased with 8.9 percent compared to the year before. However, the revenue per traveller decreased a little bit, the revenue from the shopping center saw the lowest increase (4.3 percent) in the non-aeronautical business area in 2016.

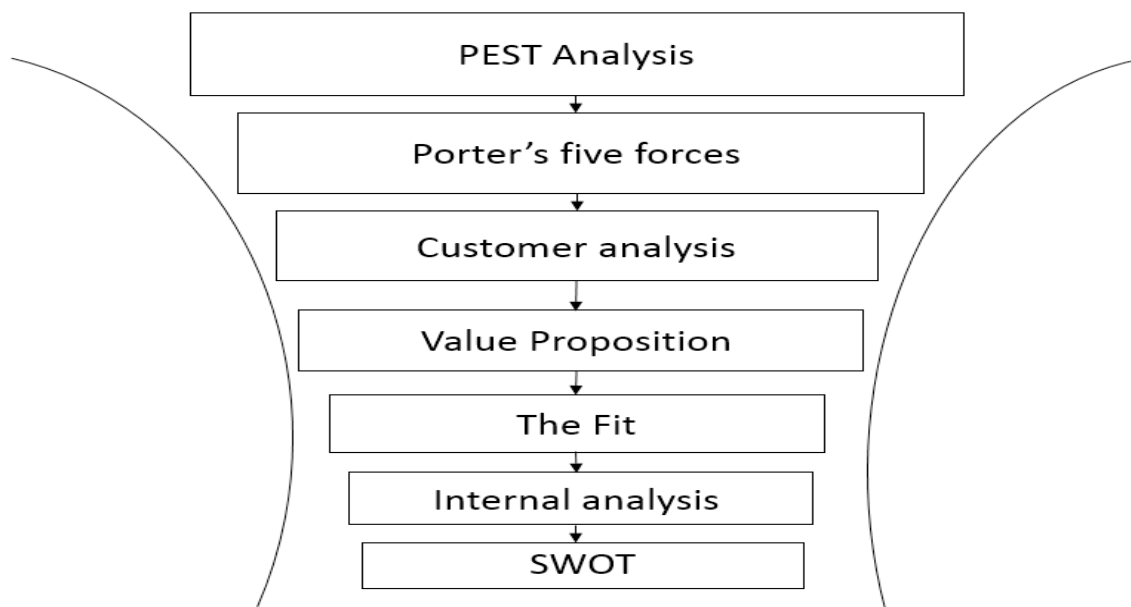
CPH Airport has a strong financial performance, with a very high return on assets (17.0 percent) as well as return on equity (41.8 percent). Overall, this is believed to give the company a good amount of equity, which it can invest in future initiatives.

## 6. Analysis

CPH Airport's current situation has been examined, which leads to an analysis of CPH Airport's external opportunities and threats as well as the internal strengths and weaknesses. The structure of this chapter is illustrated in the figure seen below.

The framework of the analysis will start with the broad outside factors affecting the airport. Each paragraph of the analysis will then get closer into CPH Airport's internal organization.

The structure of the analysis will be the following:



**Figure 18 - Structure of the analysis (own creation)**

### 6.1 PEST analysis

The following will examine the four following factors: political, economic, social and technological, as they are external aspects that can affect CPH Airport and its operation.

#### Political factors

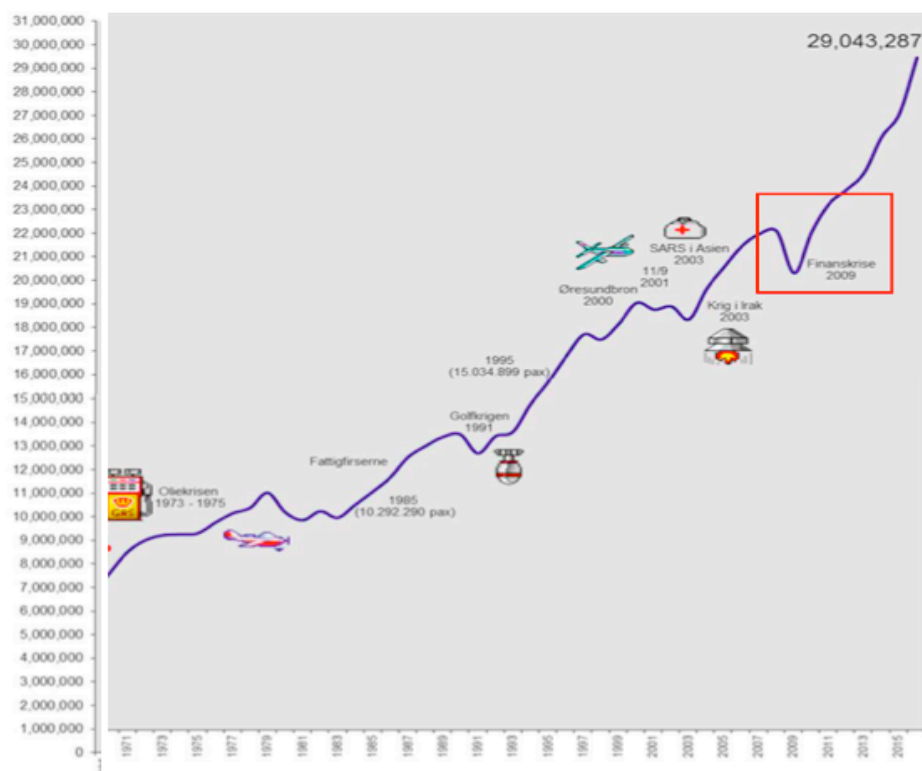
As being important transportation hubs in a national society and economy, many airports around the world are fully or partly owned by their respective States. The government of the respective country can then have a more direct influence of the airport's strategy and development. The airport's management will typically have to report to the transportation department of the government. By being partly state-owned and incorporated in Denmark, CPH Airport has to follow Danish legislation. The state of Denmark owns 39.2 percent of CPH Airport at the moment (CPH Airport, Aktieinformation, 2017). Still, the Danish government's ownership stake commits CPH Airport to report to the government's transport department, and keep them updated on their development. The Danish government does not intend to completely privatize CPH Airport and sell all of their shares, as it is a centrepiece in Danish infrastructure (Transportministeriet, Styrelsens tilsyn med Københavns Lufthavn, 2016). One of the ways, the transport department of the Danish government is more directly intervening with CPH Airport is that they monitor their quality and service. The state department states: *"The government's current work with an aviation policy strategy carried out a service check of the capacity supervision of Copenhagen Airport to ensure that it works as intended"* (Transportministeriet, Styrelsens tilsyn med Københavns Lufthavn, 2016). They want to be sure that they can vouch for the strategy the company is executing.

There has over the years been a trend where airports in the EU attracts private shareholders (ACI, World report December 2016, 2016). The President of ACI EUROPE says; *"Whether we like it or not, governments in Europe are neither interested nor able to invest in large airport ... They expect us to do the job ourselves, or leverage private investment to do so"* (ibid.). This has lead to nearly half of the airports in the EU now have private shareholders, which was just 23 percent back in 2010 (ibid.). This means that it is important for airports to attract private investments in order to grow, as the public funding is limited. This can be a threat for airports if they can not find private investors.

Denmark is a member of the European Union. Due to that, CPH Airport has to follow the EU transportation legislation (CPH Airport Annual Report 2016, 2017, p. 20). That is the same case for all airports at EU member countries. The companies are committed to make their business model suit the needs of necessary flight capacity for national and international transportation, the national travellers have. The airports' long-term investment plan has to comply with the legislation, and be based on regulatory models for charges and capacity (ibid.).

### **Economic factors**

The economic development in society seems to clearly impact people's travel frequency, as it influence how much money people spend on travelling. That is for instance seen when looking at the number of travellers CPH Airport (CPH Airport Pax Profile, 2016, p. 2). Figure 19 shows a massive drop in number of travellers, which decreased with a few millions from 2007 to 2009, and CPH Airport labels it "the financial crises".



**Figure 19 - The impact from the economy (CPH Airport Pax Profile, 2016, p. 2)**

This means that people generally seem to cut down on travels, e.g. holidays to other countries, when the economy is struggling. It is important at the same time to mention how the number of travellers has increased after 2011, as the economy has started to improve. This is an important aspect to be aware of, as it can both be a threat and an opportunity for airports, depending on how well the economy is performing.

Another threat for an airport is its vulnerability to inflation- and exchange rates. Hub airports such as CPH Airport collaborate with companies with different nationalities. That makes its profitability depend on how strong their own national currency is compared to others, and the exchange rates to the countries their collaborators are incorporated in.

### **Social factors**

An important trend to be aware of is that people travel more often by plane. There was about 3.441 billion air transport passengers carried in 2016, and it has increased with more than a billion just since 2009 (The World Bank, Air Transport, 2017). This growth is especially expected to continue in Europe, as the International Air Transport Association (IATA) anticipates a 50 percent rise in passenger numbers by 2034. (CPH Airport Annual Report 2016, 2017, p. 21). This can be explained by the lower prices of air transport, and 2016 was for instance reported to be the cheapest year to fly out of Denmark (Berlingske Business, Du fløj rekordbilligt i 2016, 2017). Overseas travels from CPH Airport have for instance never been cheaper,

and the plane ticket prices are expected to decrease with 5-10 percent in 2017, according to the general manager of travelmarket.dk (ibid.).

Security at an airport is high, and airports do a lot to make the passengers feel safe. A recent survey conducted by the international air transport association (IATA), showed that security in itself is not a main concern for the passengers (IATA, Global passenger service, 2016). They rather worry about missing their plane and getting comfortable at the airport. Their pain towards the security aspect is to get faster and more optimal through the security check. One of the main notifications passengers seek before arriving at an airport is the expected waiting time at the security check line (ibid.).

According to the world tourism organization (UNWTO), the demographic change the world is going through is highly affecting the tourism sector (UNWTO, Demographic change in tourism, 2010). A high percentage of an airport's passengers are pleasure and tourism travellers. The major demographic changes on a global level, which challenges the tourism sector according to UNWTO, is a rising population, increased life expectancy, urbanization, migration and changing family structures (ibid.). The world's population is expected to be 8.3 billion people, compared to 7.5 today. The rise in population will affect different kinds of tourism groups to rise. The profiles and preferences of the passengers at the airports will become more fragmented (ibid.). Airports, airlines and travel agencies must be able to manage an ageing and multi-ethnic tourist mass. UNWTO emphasizes that there are opportunities in the presented tasks (ibid.). Due to the increase and development in many tourist segments, there is profit and surplus to collect in many of them.

The airport industry is tied up to an aviation industry that affects the environment. The modern day society has a higher prioritization of how the environment is impacted. Some of the damaging effects the industry produces are noise, pollution, resource use and climate change (EUROCONTROL, The environmental issues for aviation, 2017). There is the threat of stakeholders in CPH Airport, can force the company to conduct business in a more environmentally sustainable way that can affect the revenue stream negatively. If the standards the shareholders set are not met, a threat of conflict will be present (ibid.). However, the intergovernmental organization European organization for the safety of air navigation (shortened EUROCONTROL), says that society must accept the environmental cost of aviation if the companies should be able to keep up with the demand (ibid.).

### **Technological factors**

The overall technological mantra for companies in almost any industry today is to use digitalization as a way to optimize their business. It is a way for an airport to guide the passengers digitally through their entire customer journey, from arrival to departure (YouTube, Frankfurt Airport Omnichannel, 2017). To ease the

customer journey, many airports are expanding to the e-commerce market (ibid.). The passenger can then shop online before entering the airport, and have the purchased goods ready on arrival.

A digitized shopping experience can also work at the airport, where the passengers spend a lot of their waiting time in airports on shopping (AOE, Digitalization of the airport industry, 2016). Then a digital shopping platform can help the passengers to find buy the products they seek at the airport.

The many stakeholders and companies operating, makes communication between the parties a high priority for an airport. They need to have a proper IT-infrastructure for being able to make the communication process work.

The hardware, software and network of an airport needs to be able to deliver those IT-services its employees needs. Several hundred businesses typically work within a medium to large airport. With all those partners, an airport needs to have a smooth running of all its elements, so the passenger can go from step to step in the airport's desired travel value chain without meeting obstacles. That functional operation is also crucial for airports if they wish to expand (CPH Airport Annual Report 2016, 2017, p. 20). The IT-systems and partnering businesses need to be capable to follow the new developments, and have the capacity for them.

A technology that can digitize the shopping experience is the beacon technology. This is a technology that based on Bluetooth can detect where a customer are, and then send messages that are relevant for that location (Forbes, Beacon Technology, 2015). This allows airports to engage with customers in a more personalized way, which is also effortless for the customers (ibid.). Therefore, it creates an opportunity for airports, as they for instance can use it to promote products in completely new way.

Automation is an important factor for airports infrastructure. Mainly in the aeronautical business. Different technical procedures needs to be done at the same time to be able for a plane to take off, and machines do a large part of the baggage transfer.

Automation is a tool airports can also use to reduce cost (Mercator, Airlines can improve business efficiency, 2015). For each process that is being automated, a manual task is being removed. Therefore, there is a possibility that one to more employees are no longer needed. It brings a possibility for reducing cost, possibly without an airport has to lower its quality or sell of its assets.

With the reduced direct operational involvement automation can bring, the staff can be better focused on their core tasks and competences, and less bureaucracy can occur within the organization.

Automation creates faster reporting systems than manual systems (ibid.). Computers can quickly collect and calculate data, and then produce outputs that are useful for the receiving personnel. That information, contributes to Big Data collection of being able to analyze the passengers' behaviour when it comes

shopping and other doings at the airport (ibid.). It is a possibility for an airport to get a clearer customer profile of its different customer segments.

A digital trend that is affecting airports worldwide is the personalized journey. A high priority for passengers is information (Future travel experience, Top 10 trends that will change air travel forever, 2013). They want the information that is needed for them to travel safely and efficiently. Passengers long after personal information from the airport to themselves, without having to do anything. That can be the airport sending information through push-notifications, as seen with for instance the beacon technology. It can also be the airport meeting the passengers where they are digitally active. An example of that could be social media (ibid.). The airports now have the possibility through computers and smartphones to be connected to the passenger, before he or she enters the airport.

When the airport company is being directly in contact with the customer, there is a more feasible way of collecting Big Data (Milanamos, Big Data, 2016). Then the airport has a possibility to collect and analyze the customer's behaviour and needs, by there not being intermediaries interfering with the interaction. Passenger pattern are presented, and the management can base their strategy upon it. The passengers seeks more self-service, where the airports cater for their specific information needs. That puts pressure on the airports IT-systems and information sharing, where they must be capable store and share the gathered information properly (ibid.).

This PEST analysis has shown which important external factors that currently affects airports. The following will continue with a Porter's five forces analysis, which more specifically will examine the industry.

## **6.2 Porter's five forces**

### **Definition of the industry**

A definition of the industry will first be carried out, before conducting the Porter's five forces analysis.

An industry can be defined as a classification that refers to a group of companies that are related based on their primary business activities (Investopedia, Industry, 2017). Based on that definition, the industry for CPH Airport can be defined as the airport industry, which group together all companies that are operating an airport. This means that primary business activities in common for the airport industry, is the operations of both the aeronautical and non-aeronautical business.

The industry definition can be further supported by the professor emeritus Derek F. Abell's matrix, who defines the scope of a business based on three dimensions (Cleverism, Abell's Framework for Strategic Planning, 2015). By defining the scope of a business, it becomes clear which other businesses are similar and are in the same industry.

The first dimension of the business is its customer group, who is being served by the business (ibid.). For CPH Airport its customers come from both the aeronautical part, such as airlines, and from the non-aeronautical business such as the travellers (CPH Airport Annual Report 2016, 2017, p. 19). The next dimension is about customer needs, which is about what are the customer needs that are met. For CPH Airport it varies a lot, as the customers can have very different needs, but the company sums it up in the following way “*The aeronautical business area comprises airfield functions...The non aeronautical business area comprises other hub activities*” (ibid.). This means that it is about both enabling airlines etc. to have all the airfield functions needed to operate, as well as the function as a hub for the travellers, which fulfill their needs when travelling, such as e.g. parking and shopping.

The last dimension is about the competences and technology used to meet the needs of the customers. It can be hard to specify all the competencies and technology needed, but an important aspect is the physical facility needed. To serve all the customers, e.g. airlines and travellers, many facilities are needed, such as gate facilities for the airplane and check-in area for the travellers.

To sum up the airport industry consists of businesses that serve both the aeronautical and non-aeronautical customers, in a way that fulfill both types of customers needs to function in the airport, such as the airline being able to fly to and from the airport.

However, the focus of this thesis is specifically the non-aeronautical business, which means the analysis will focus on the non-aeronautical part in the industry. It is important to specify specifically the scope of the industry, as the five forces will be different for the aeronautical and non-aeronautical business.

This can be illustrated with an example, about the different customer groups found in the industry. The analysis of the customers bargaining power can both be in regard to the travellers who are relate to the non-aeronautical business, or the big airlines that are relate to the aeronautical business. These are two very different customer groups, which is the reason for specifying what part of the industry that is in focus for the Porter’s five forces analysis.

### **Threat from new entrants**

The airport industry requires many resources for starting up, and is a highly politically regulated industry, as described in the PEST analysis. This means that the threat from new entrants is perceived as low. The high entry barrier generally lowers the level of competition in the industry, as it limits the opening of new airports that can steal travellers from the existing airports.

It requires a lot of expenses to facilities in order to start up an airport, such as establishing runways, terminals, security, shops etc. The fixed cost for establishing a new airport is billions of kroners, which makes it a big investment that makes it very hard to start up in the industry. However, it is still difficult to

start up in the airport industry, even with the right investment, due to the regulations of the industry. Airports have to fulfill a lot of strict requirements from the government in country it operates in, and can be subject to political interference. This is for instance seen in the PEST analysis.

Even though there is a limit to how many airports that can operate in one country, then it is necessary to think of new entrants in broader terms, and look across national borders. Airports compete with airports across other nations, to become the preferred hub in a specific geographic area (Berlingske Business, Københavns Lufthavn, 2016). This means that the establishment of a new airport in one country threatens the airports in the surrounding countries, as it potentially can steal some current travellers from another airport.

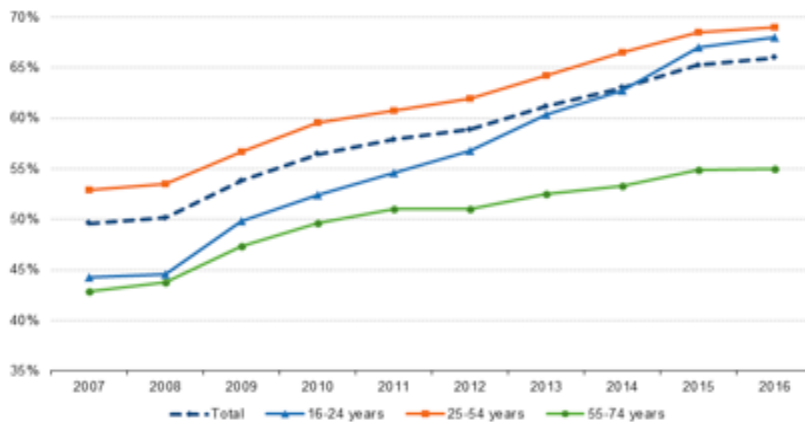
However, an example that illustrates the difficulty of founding a new airport, both when it comes to financing it and fulfilling government requirements, is the establishment of the Brandenburg airport in Berlin. It was scheduled to open in 2011 and the entire project had a budget of 21. billion Danish kroner (Check-In, Ny tvivl om åbning af Berlin-lufthavn, 2016). However, the airport has still not opened, because the airport could not fulfill the different requirements, such as the regulations for fire safety. The price of the project has at the same time increased massively, and is expected to cost an estimated DKK 52 billion once it opens. The German state have for instance been allowed by EU to spend DKK 8.2 billion, and would like to offer another DKK 8.2 billion if needed, in order to finish the project (ibid.). This shows the great challenge of starting up in the airport industry, both how financially demanding it is, as well as how the regulations make it difficult.

### **Threat from substituting products**

The specific focus on non-aeronautical part of airports is relevant when analyzing the threat from substituting products. Because the substituting products for the aeronautical business would for instance be other forms of transportation, which is not what is focus when look at the non-aeronautical business. Instead the focus will be on shops, parking and other areas related to that part of the airport.

The treat from substituting products is perceived as high, due to the development of technology and alternative offerings that the travellers now can chose instead.

One of the main threats to the non-aeronautical business, is how online shopping can substitute shops in airports is online shopping. There has been a considerable increase in the number of Internet users, who ordered goods or services for private use over the Internet. That is illustrated in figure 20 below made by Eurostat, on behalf of all 28 EU countries (Eurostat, E-commerce statistics for individuals, 2016).



**Figure 20 - Internet sales in EU (Eurostat, E-commerce statistics for individuals, 2016)**

The graph shows that all age groups over the years have started shop more online, and especially the younger users are buying more things online. This is a substitute to physical stores in airports that threaten them, as more people do their shopping online, where they also have other convenient options such as finding more offers, compare price online etc. However, there is for instance one product category that online stores cannot really substitute, and that is the food and beverages sold in airports. It has to be consumed physically within a relative short period of time, and that lowers the threat from online shopping.

Another threat to the non-aeronautical business is how public transport substituted the need for parking at airports. Parking is an important revenue sources for a lot of airports, and has for instance been reported to make about 22 percent of the non-aeronautical revenue for airports (Concessionaire Analyzer+, Non-aeronautical revenues, 2016). Therefore, parking will not be necessary, if people use public transport as a substitute to using a car to the airports, which of course is a threat for the airport.

However, public transport it is a double-edged sword for airports, because it connectivity is important for making it an attractive airport for travellers. So very well functioning public transport might lower the parking revenue, but it can also cause more people to travel from a specific airport, which is good for the other parts of the non-aeronautical business.

### **Bargaining power of suppliers**

There are many different suppliers for the operation of an airports non-aeronautical business, such as the stores, cafes, cleaning, etc. An example of that could be CPH Airport, which purchased goods, and services for more than 3000 suppliers and have 700 companies operating at the airport, where some these are related to the non-aeronautical business (CPH Airport Annual Report 2015, 2016, p. 24 & p. 43). It is difficult to find general information about all the suppliers bargaining power, such as how dependent the suppliers are on the airport industry. The following will look into some of the suppliers for non-aeronautical business, and based on that is the bargaining power of the suppliers summed up to be low to moderate.

Almost all airports offer a set of stores, restaurants and cafes, where the bigger the airport, the more offers would naturally also have. Most often will large brands be represented in the airport, as travel retail is becoming a bigger part of many brands' strategies (The Economist, Airport shopping, 2014). An example of that is how the French drinks company Pernod Ricard, as well as the cosmetics and perfume company L'Oréal, have said to consider airports to be their "sixth continent" (ibid.). This indicates a great interest from a lot of suppliers in the shopping environment in airports, which is supported by the sales figures for retailers in airports. In 2013 travel retailers sold around \$60 billion of goods, and sales at airports alone is predicted to grow by 73 percent from 2013 to 2019 (ibid.).

This means that airports generally is believed to have a stronger position when negotiating with the retailers, as they have a lucrative selling area to offer, that a lot of retailers will be very interested in getting, and presumable fight for it by e.g. making a better offer to the airport. However, it is important to remember that not all airports are equally attractive for retailers, e.g. if it is a smaller airport with less travellers.

The switching cost related to replacing a supplier is another aspect that influences the suppliers bargaining power. This seems to vary depending on what kind of supplier it is for the non-aeronautical business. Some are examined to be relatively easy to replace, such as the supplier of seating for waiting areas. It is a standardized product, that is believed to last for a while, and a quick search on B2B portal for airports shows nine different suppliers (Airport-suppliers.com, Seating-furniture, 2017). Some suppliers are believed to be harder to replace, due to a higher switching cost. An example is believed to be the cleaning company responsible for the airport. It operates in the airport daily, and acquires more specialized knowledge over time about all the processes. This gives the cleaning company a stronger bargaining power, as the specialization makes it harder to quickly replace all the operations as efficiently, and the cleaning can't stop being carried out at any point. Therefore, some suppliers are believed to have more bargaining power, because they are harder to replace.

### **Bargaining power of customers**

The Travel Value Chain, which was presented in figure 13, is relevant to include when examining the bargaining power of the travellers. It shows a unique characteristic of the airport industry, which influence the bargaining power of the travellers. This is because the journey through the airport generally can be divided into two overall stages, which is before and after the security check. This creates two different situations for the traveller, where traveller has a different bargaining power in each of the two situations. Based on that the bargaining power of the travellers is summed up to be moderate.

The first stage before the security check is when the traveller has the most bargaining power in the airport, because they have more options. They are not restricted to a specific area as such, and can shop, eat and drink where they want before coming to the security check.

This changes after the security check as they become restricted to stay at a specific area of the airport before take-off, and are for instance not allowed bringing any beverages that is more than 100 ml (Europe.eu, Air safety, 2017). This weakens the travellers bargaining power, as they now have fewer options and the airport is in control what offers that are available for the customer. The customer can now only shop in the airport before take-off, so if the traveller for instance needs something to drink, then it has to be purchased in the airport. This means the airport is in control, by deciding what should be offered, what price level should be available etc.

However, it is important to mention that the travellers can improve their bargaining power, for instance by bringing their own food and an empty bottle they can fill after security. This makes the traveller less dependent on the food/ beverage offerings in the airport, and therefore less subject to the airports control after the security check.

An aspect that weakens the travellers bargaining power in general, is the size of the purchase they make. They all make a lot of individual purchases such as food/ beverages, duty-free products etc. These are smaller purchases with a higher frequency, which is weakening the bargaining power, as customers gain power by conducting large purchases (Aaker & McLoughlin, 2010, p. 70). A comparison could for example be the airlines as customers for the aeronautical business, as they are big clients that place large orders e.g. paying for gates to their planes. This gives them more bargaining power, as each of their purchases has a bigger influence on an airports financial performance.

### **Industry rivalry and profitability**

The examination of the above four forces above helps understanding the competitiveness and profitability of the airport industry, with a specific focus on the non-aeronautical business. Overall, the intensity of the industry's competition is believed to be low to moderate, and has some favourable conditions that create the basis for profitability. However, there are also threats to the industry, which create challenges for the industry's profitability.

It is first of all due to high entry barriers for starting up an airport, both financially and because of regulations. This means that there are a more stable number of airports competing, and it limits the number of competitors. A lot of retailers are very interested in being located in the airport, which gives an important supplier less bargaining power, and that is believed to increase the profitability for airports. Furthermore, the customers are "trapped" after entering the security check, as all shopping after that point has to be done in the airport. That weakens their bargaining power, and increases the profitability for the industry, as a higher price that can be charged.

However, it is important to mention the aspects that challenge the industry and its profitability. The biggest threat for the non-aeronautical business is examined to come from online shopping, as it can substitute the need for shopping in airports. More people, and especially the younger people, are shopping more online, which is a challenge for the physical stores at the airport.

Furthermore, are some suppliers also believed to be harder to replace, as they play a more crucial role for the daily operation of the non-aeronautical business. They are for instance believed to have gained valuable experiences with the different process in the airport, and that increases their bargaining power.

Together with the PEST analysis, Porter's five forces have shown the external factors affecting CPH Airport. The next paragraph will be a customer analysis for CPH Airport, and will examine which customer group(s) that is the most relevant in order to optimize the non-aeronautical business.

## **6.3 Customer analysis**

The following customer analysis will follow Aaker & McLoughlin's three-step approach.

i) customer segmentation ii) analysis of customer motivations and iii) analysis of unmet needs.

### **6.3.1 Customer segmentation**

This section will first present and argue for the chosen segmentation variables, and it will be based solely on product-related characteristics. Customer characteristics have been excluded from the segmentation, due to different reasons.

The focus will be on the behaviour of the travellers, and not about what specific demographic of the travellers, such as their age or nationality. This means that it is about segmenting based on the behaviour of the travellers in the airport, regardless of what their demographics are. A reason for this is how customer characteristics can create very fixed boxes. A person can for instance be cut out of a segment, because he or she becomes one year older, if there is a fixed age group.

Furthermore, it also narrows down the number of segmentation variables, which makes it more simple to understand the segment.

The variables will then be analyzed in order to find the segment that is the most relevant for optimizing CPH Airport's non-aeronautical business, and the segment will be summarized at the end of the customer analysis.

The segmentation will take five criteria by Kotler et al. (2012) into consideration, in order to identify what they define as a useful market segment. The criteria are the following; measurable, substantial, accessible, differentiable, actionable. These criteria help to ensure that the segment is relevant to focus on, for instance that the segment is behaving different than others (ibid.).

### The segmentation variables

The product-related characteristics will first of all be based on the two variables, which CPH Airport already uses to identify different segments (CPH Airport, 2014, p. 10). These are the benefits sought by the customer, and the user type that the customer can be identified as. Aaker & McLoughlin (2010) say that these two variables generally are important to examine, as they concern what market offerings the different customers find important, and how they use them.

Another product-related characteristic is the spending habits of the travellers. This will look into if there are any trends that has an important influence on the non-aeronautical business.

To summarize, the following three variables will be used to conduct the segmentation.

- Benefits sought
- User type
- Amount of money spend

### Benefits sought and user types

CPH Airport bases its segmentation of the travellers on a behavioural segmentation, which is about the benefits sought from its different user types (Interviewee 3, 2017, min. 05:45). Based on the segmentation CPH Airport has identified four types of travellers, who seek different benefits from the airport and the non-aeronautical business. The four types are illustrated in figure 21 below.



**Figure 21 - Types of travellers in CPH Airport (CPH Airport, 2014, p. 10)**

This creates the basis for the segmentation, and it complies with the approach that CPH Airport uses.

Furthermore, it is important to remember that the approach has been developed by professionals, who have

access to a lot of exclusive customer data that has not been available to us. The following will present and analyze the different user types and the benefits they seek.

It is important to remember that the percentages for each type are from 2014, and the development in the number of each type will be touch upon in the following.

The first type is called **attention**. This type is characterized by wanting assistance with the travel and simplicity (CPH Airport, 2014, p. 10). They are not familiar with CPH Airport. The lack of familiarity and need for simplicity mean the attention type is believed to be a light user of the airport. They are furthermore believed to have a limited use of the non-aeronautical business offers, such as shopping center, as they are concerned with just getting to the gate in time, and therefore will try to avoid distractions. According to figure 21 the user type makes up about 11 percent of the travellers in 2014. That is the lowest percentage of the four groups (ibid.).

The percentage is believed to have decreased since then, because travelling by plane has become more widespread and affordable (Fortune, There Will Be a Record Number of People Flying This Spring, 2016). This will make more people used to travel and to navigate in airports, and there will therefore be less travellers acting like the attention type.

The next user type is the **experience** traveller, who is concerned with getting an experience out of being in the airport, as well as getting personal assistance (CPH Airport, 2014, p. 10).

The benefits sought by this type, is characterized by wanting a variety of different offerings, such as different shops to visit, because they see the airport as an enjoyable part of the travel (ibid.). They are believed to spend more time in the airport, as it is likely that they devote extra time to experience the airport's offerings. Personal service then becomes more relevant, for instance getting shopping assistance.

This type usage level of CPH Airport is believed to be either low or medium, because being in the airport is an experience for them.

Experience travellers know how to navigate in the airport, but they probably don't visit as often, since it is an exciting part of the journey. A more frequent flyer is for instance believed to find it less exciting and spend minimum time on shopping, due to being at the airport frequently. However, due to the large size of the segment, some experience traveller could also be someone who flies more often. An example could be someone who only seeks experiences in the airport, such as shopping, when traveling on holiday, but not when it is a business trip.

The *experience* traveller is a well-represented user type in CPH Airport, as it makes up 44 percent in 2014 (ibid.). It is believed to still be one of the biggest user types in CPH Airport, but it might have gotten smaller, because people are traveling more often by plane (CPH Airport, Europas mest effektive lufthavn ligger i

København, 2016). This makes being at the airport a less extraordinary experience, which makes it a more common experience for more people.

The third user type is the **efficiency** traveller, who looks for efficiency, short waiting time and prefer automation (CPH Airport, 2014, p. 10).

This type seeks benefits from the airport that can complete their travel quicker, as they do not see the airport as an experience of the journey, but rather a necessity for completing the travel. It does not mean that they do not spend any money in the airport, but they do not devote a lot of time for shopping. This makes efficiency important for the user type, and the non-aeronautical offerings should not complicate the way to the gate. The efficiency travellers are believed to be a medium or heavy users of CPH Airport. This is due to their focus on getting through the airport quickly, without any real assistance. For them, it is just a necessity for completing the travel that they are used to.

This mentioned user type is said to be 25 percent of the travellers in CPH Airport in 2014 (ibid.). This percentage is believed to have increased since then, due to several factors. CPH Airport is focusing a lot on the automation of its services, which has made the travellers in CPH Airport some of the most self-serving in the world (CPH Airport, Europas mest effektive lufthavn ligger i København, 2016). Automated solutions has becomes something that more people get used to, and seems to be something that will be more in demand. The operations manager in CPH Airport also says it increases the satisfaction of the traveller (ibid.). Furthermore, people travel more often by plane, which is also seen by the travel frequency in CPH Airport (CPH Airport Annual Report 2015, 2016, p. 21). Therefore, it is believed that travelling by plane is less extraordinary, than it e.g. were 30 years ago. More people is believed to see the airport as necessary part of the journey, instead of a new exciting experience.

The last user type is the **selection** traveller, who is seeking benefits that give them convenience, a calm surrounding, let them be independent and have freedom to choose (CPH Airport, 2014, p. 10).

They see the airport as a central part of the entire travel, which means they are believed to devote time to spend at the airport (ibid.). They concentrate on market offerings that generally make their stay more convenient and undisturbed. An example of that could be a lounge area where they can work or relax before the flight, without disturbance.

The selection travellers are believed to mainly be medium or heavy users of CPH Airport. The medium user could for instance be an elderly person, who might not travel as often, and wants a comfortable environment before the travel. The heavy user could be a businessperson, who needs convenience and to be undisturbed to get work done.

The selection travellers make up 20 percent of the travellers in CPH Airport in 2014 (ibid.). It is believed to be around the same today. On the one hand, does the automation of the airport enable people to be independent, and make the travel more convenient. That is exactly what the selection travellers are looking for (CPH Airport, Europas mest effektive lufthavn ligger i København, 2016).

On the other hand, the automation also enables the travellers to go through CPH Airport quicker, which allow people to spend less time in the airport, which is against the selection user type. The user type is therefore believed to have the same size of around 20 percent of the travellers in CPH Airport.

### **Amount of money travellers spend in the CPH Airport**

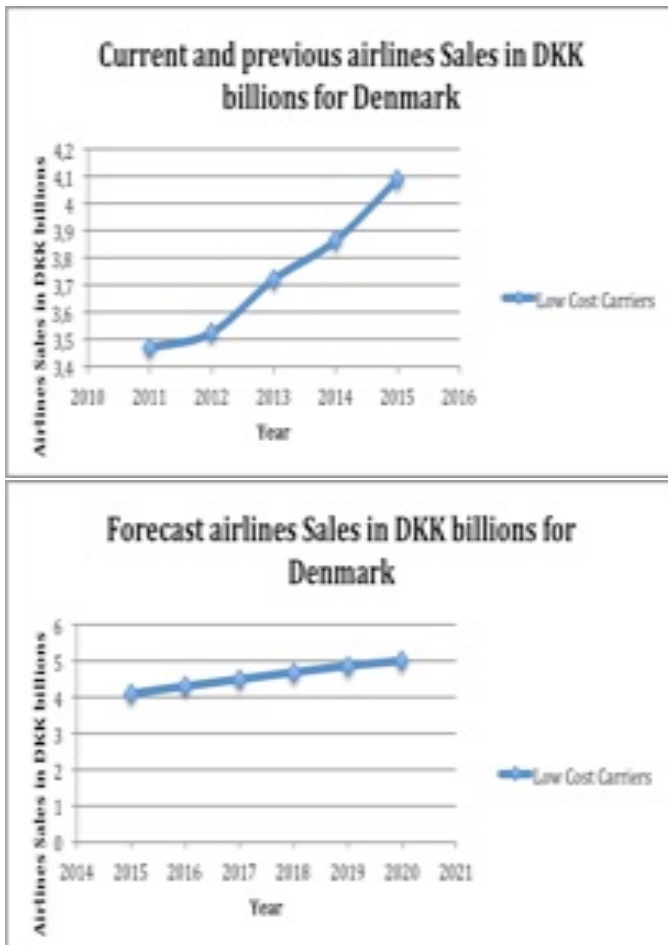
This will be based on the data available, and it has for instance not been possible to gain information about the travellers CLV (customer lifetime value) or their specific amounts spent in the non-aeronautical business. However, it has been possible to find other relevant data that indicate different spending habits and trends, which is interesting in relation to the travellers and the non-aeronautical business.

In 2016 CPH Airport experienced a drop in revenue per traveller in the TAX FREE and specialty shops. One of the reasons CPH Airport highlights for this decrease is a larger number of younger travellers, who generally have a lower average spend in the airport (CPH Airport Annual Report 2015, 2016, p. 15).

One natural explanation could be the different income level found amongst the age groups, since in Denmark a 35-39 year old earns more than twice as much, as the 20-24 year old (Danmarks statistik, Indkomst i alt, 2012).

However, another explanation is that a lot of younger travellers are believed to be efficiency travellers. They are used to digital solutions and use smartphones more often compared to the older generations (TV2, Danske unge føler sig for afhængig af mobile, 2015). It makes it easier for them to use automated services, and go through the airport quicker and on their own. Furthermore, Interviewee 3 states that the young travellers mainly focus on grab and go food, which also indicate a focus on efficiency and going through quickly (Interviewee 3, 2017, min. 04:25).

Another interesting trend related to the travellers spending habits, is the previous and expected sales figures for different types of airlines in Denmark, which is seen in figure 22 below.



**Figure 22 - Low cost airlines sales in Denmark (Euromonitor, Airlines in Denmark, 2016)**

The figure shows increasing sales for low cost carriers in Denmark, which it predicted to continue growing (Euromonitor, Airlines in Denmark, 2016). From 2011 to 2015 the sales for low cost carriers increased with 619 millions, and is predicted to increase with 898 million in 2020 (ibid.).

This is the type of airlines that concentrates on having the lowest prices possible, and examples could be Ryanair or Easyjet (Businessdictionary, Budget airline, 2017). It was in 2015 the fastest growing airline category both in number of passengers and value sales (Euromonitor, Airlines in Denmark, 2016). This can reflect a trend among travellers where they spend less on the journey itself, which also seem to mean spending less in CPH Airport. This can be supported by the mentioned drop in revenue per. traveller in the TAX FREE and specialty shops in 2016 (CPH Airport Annual Report 2015, 2016, p. 15). An example to illustrate could be people going on a weekend trip to another European city, which financially has become more obtainable for more people due to low cost carriers (ibid.). These travellers often only have to fly for a few hours, and have lower expectations for the low cost flight (Los Angeles Times, Low expectations for low-cost airlines..., 2014). Therefore, these travellers seem likely to keep the cost down on the travel to the destination, i.e. which also influence their spending in the airport.

## Identification of the segment

The analysis has led to the identification of the customer segment that is believed to be the most ideal to focus on, in order to optimize CPH Airport's non-aeronautical business.

The chosen segment consists of the efficiency traveller, who is believed to be relative price sensitive, and is especially found among the younger travellers.

It is important to remember the scope of this thesis, in order to understand the reasons for choosing this segment. It is about how CPH Airport can optimize its business model for the non-aeronautical business, and that is why the efficiency segment is chosen.

The efficiency traveller is first of all one of the biggest user types in the CPH Airport. It is believed to grow in the future, due to more automation in airports, and people getting used to travel more. It has not been possible to get recent numbers about the user type today, but it was 25 percent of all travellers in 2014. The best estimate of the segment's size today is between 25 and 35 percent of all travellers, due to the expected growth of the segment since 2014. This is equivalent to between 7,250,000 and 10,150,000 travellers. The expected increase in the number of efficiency travellers makes it an important user type to focus on, as they will have a bigger impact on the sales in the non-aeronautical business.

The behaviour of the efficiency travellers is another aspect, which makes it relevant for the optimization of the non-aeronautical business.

They don't see the airport as a unique experience of the journey, but rather a necessity for completing the travel. However, it doesn't mean that they don't spend any money in the airport, but they don't devote a lot of time for shopping, as e.g. the experience type does.

The specific behaviour by the efficiency traveller makes the segment differentiable from other user types. The behaviour also makes the segment actionable because they seek other benefits and have different motivations, which will be examined in the next paragraph.

The segment is not the biggest spenders in the airport on average, which of course is a challenge for the non-aeronautical business. However, the segment is believed to be accessible, as they still spend some money in the airport, which means it is about finding out what causes them to make purchases.

Interviewee 2 supports this by giving the following example *"Flying with a low cost carrier does not mean that the traveller won't spend money with us - They will if the market offers are right for them"* (Interviewee 2, 2017, min. 42:01).

Before moving on to examining the chosen segment, it is important to mention that there are also other segments. These are also important for CPH Airport's non-aeronautical business, but will not be elaborated in the following analysis.

This is first of all because it will be difficult to optimize, when focusing on several different segments. The four user types that CPH Airport uses act very differently, and would require different initiatives for optimizing. The risk is therefore try to fix too much at once, without being able to go in depth, and find what is creating a stronger Fit between CPH Airport and a specific customer segment.

It is now important to further understand of the chosen efficiency segment, such as what is valuable and important for them as customers in CPH Airport? This is need to order to improving the Fit between the segment and the value proposition, which is crucial for the non-aeronautical business.

### **6.3.2 Customer motivations, gains, and jobs.**

The following will examine the chosen segment, in order to get a deeper understanding of their motivations, gains, and jobs. This means that the customer analysis both take in aspects from Aaker & McLoughlin, as well as from Osterwalder.

The following will show how the identified motivations are grouped together, assess their importance, and see how it reflects different customer gains and jobs. The assignment of a strategic choice, based on the customer analysis, will be presented later.

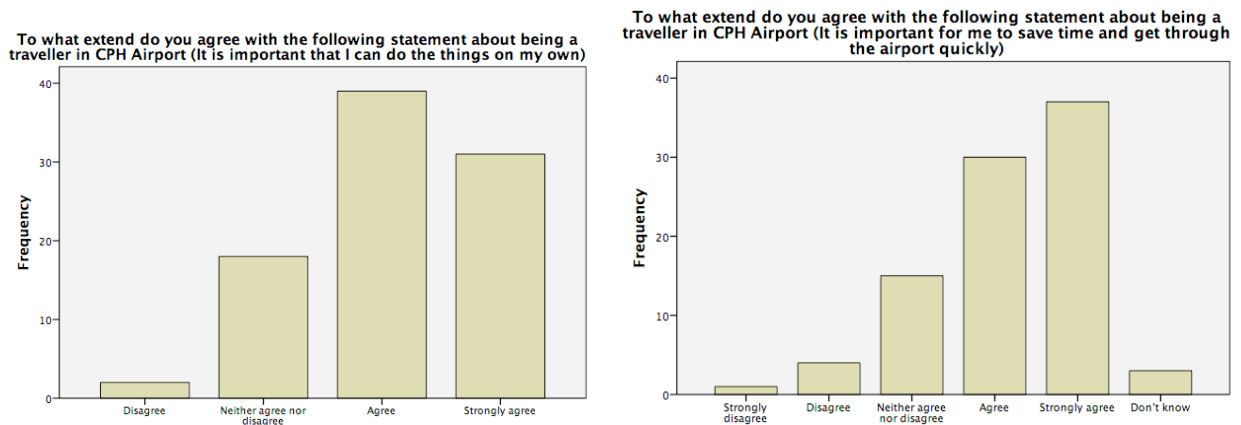
#### **Independency and efficiency**

One of the main things that the respondents in the focus group stressed was the impotency of being able to do things on their own in the airport. That is both related to check-in, baggage drop, and find their way around. One of the respondents said “...for me the automated solutions are a 1000 times more effective...I feel if I do the things myself, then everything will go a lot faster, and I don't have to wait in a queue” (Focus group, 2017, min. 28:04). A lot of the others agreed with this, and especially how it makes their travel though CPH Airport more efficient.

When asking the focus group what is the most important for them in CPH Airport, four of the six respondents chose: “It is important for me to be able to do the things on my own, and not depend on assistance” (see Appendix 4). This therefore leads to the grouping of independency and efficiency, as they seem to compliment each other, where they believe independency makes it possible to be efficient in the airport.

The two variables seem to be two of the most important motivations for segment. This is for instance

supported by the result from questionnaire, where the two charts below illustrates the importance of independency and efficiency.



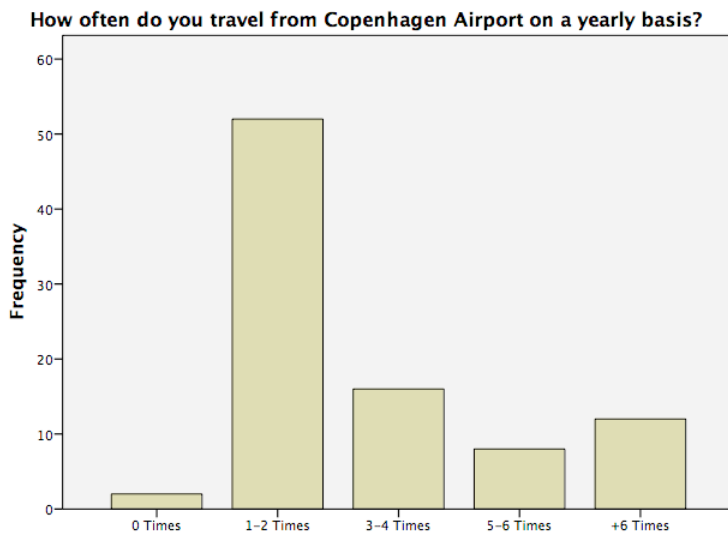
**Figure 23 - being independent and efficient (Questionnaire results)**

Figure 23 shows that about 77 percent of the respondents either agrees or strongly agrees with the statement *“it is important that I can do the things on my own”*. This is also supported by the mean for variable, which is 4.1 on scale 1-5 and where 5 indicate strongly agree. At the same time, figure 23 also shows that 73 percent either agrees or strongly agrees with *“it is important for me to save time and get through the airport quickly”*. This variable also has a high mean of 4.2, which supports its importance as well.

The importance of both Independency and efficiency can be explained by the user type, which most people in the segment seem to identify with.

A majority of the respondents (59 percent) characterize themselves as the efficiency traveller, when shown figure 21 of the four user types. This first of all supports the finding regarding the segment mainly being that user type, as state in the segmentation. Furthermore, it also explains the importance of the two variables, as they are key characteristics of the efficiency traveller (CPH Airport, 2014, p. 10).

Another relevant explanation for the importance of independency and efficiency, relates to the travel frequency for the segment.



**Figure 24 – Travel frequency (Questionnaire results)**

Figure 24 shows that almost all the respondents in the segment travels from CPH Airport every year, and they do it quite often. The majority (57.8 percent) comes once or twice a year, while a remaining 40 percent comes at least three to four times or more. This is perceived as a relatively high travel frequency, which gives good familiarity with traveling from CPH Airport. Therefore, independency and efficient would become important, as traveling from CPH Airport becomes a process that is carried out more regularly.

The desire for independence and efficiency can also be analyzed by how it relates to customer jobs and gains for the travellers. It shows that one of the main jobs for the segment to get done, when travelling in CPH Airport, is to get through efficiently and being able to do it on their own. This can be related to what seems like one of the main overall customer jobs when travelling in general, which is making it to the airplane on time. All respondents in the focus group agreed that it is about being on time, and not having to stress (Focus group, 2017, min. 17:45).

Therefore, the importance of independency and efficiency can be explained by the customer gain it gives the segment. It is believed to help the travellers with solving the task of getting through the airport in time, make them feel more efficient, and feel less stressed.

Another interesting aspect that explains why it is customer gain, is the segments relative high travel frequency, as described above. This means that travelling becomes a job that they are used to carrying out, and it is therefore a gain when the process can be carried out independently. Furthermore, it is a gain, as it makes them feel more efficient, as one respondent for instance said: *“For me the automated solutions are a 1000 times more effective”* (Focus group, 2017, min. 28:04).

### **Feeling relaxed and having something to do**

The next grouping of motivations for the segment is interesting, as it can seem contradicting with the efficiency travellers. There should not be a need for having something to do, if they are just focusing on going straight to the gate.

However, the analysis of the results from both the focus group and the questionnaire shows that reality is different. One of the main ways to avoid stress is setting aside extra time for the airport. One respondent in the focus described it the following way: *"...it is about not having to stress, and that means having extra time in airport...but if I had a private jet waiting for me, then I wouldn't be there an hour before"* (Focus group, 2017, min. 17:45). Another respondent called it a *"time buffer"*, in case something for instance happened on the way to the airport (ibid.).

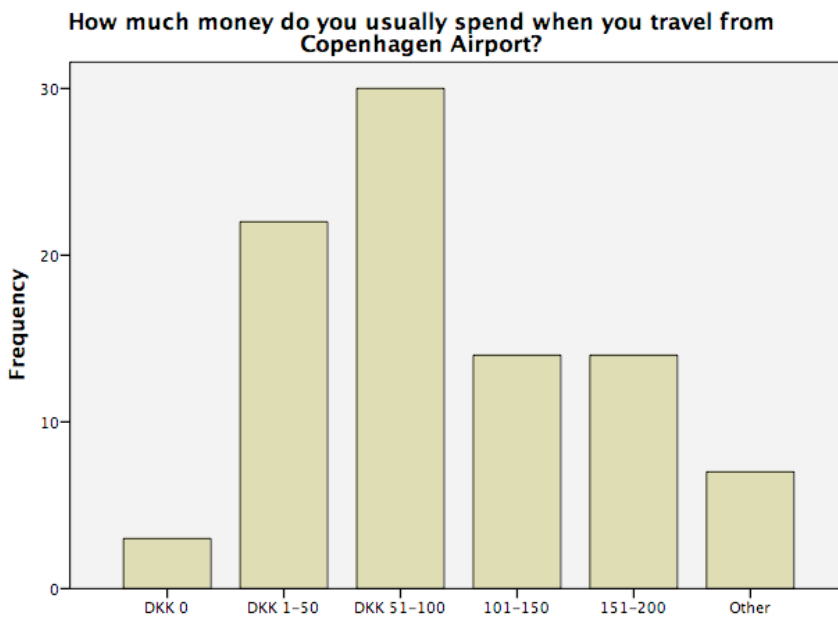
The finding about not having to stress can be supported by the questionnaire. It shows that 74.4 percent either agrees (51.1 percent) or strongly agrees (23.3 percent) with the statement: *"It is important that I can feel relaxed before departure"* (see Appendix 5). It is therefore, based on the questionnaire, important for the segment to avoid stress, since being relaxed is a counterpart to being stressed. Based on that it seems very likely that most people in the segment operates with some buffer time, in order to avoid stressful situations in CPH Airport.

The time buffer leads to the need for something to do with that extra time, which is why those two motives have been grouped together. This means that even though the segment strives for independence and efficiency, then they will have some time to spend in the airport before departure.

What is especially interesting about that is the need it seems to create for having something to do in that time. That is illustrated with a quote from the focus group said, which they all agreed with *"There has to be something to do, so that you don't just sit on a chair and are bored"* (Focus group, 2017, min. 29:50). The importance of having something to do is further supported by the quantitative data. It shows that 55.6 percent either agree (38.9 percent) or strongly agree (16.7 percent) with statement *"It is important for me that there is a wide selection of stores and places serving food"* (see Appendix 6).

Furthermore, CPH Airport says that 7 out of 10 travellers generally say that shopping and dining are essential elements for a good travel experience (CPH Airport, To byggerier til 1,2 milliarder kr. skal skabe mere plads til passagerer og fly, 2017).

The desire for a wide selection of stores is interesting, as it indicates some will to spend money. That is for instance seen when asking how much money they typically spend when visiting CPH Airport.



**Figure 25 - Average amount of money spent in CPH Airport (Questionnaire results)**

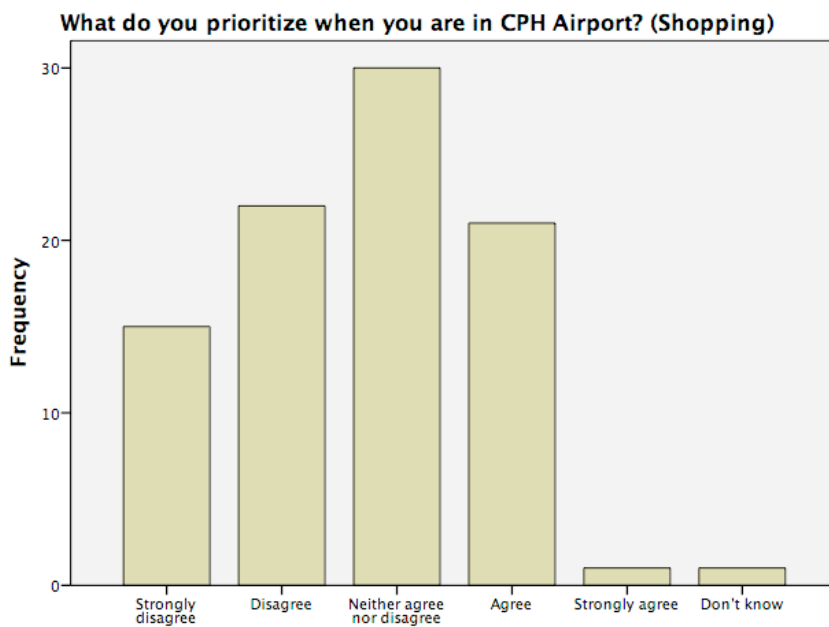
Figure 25 shows that about 33 percent of the respondents spend DKK 51-100 spend on average, and 31.2 percent spend between DKK 101 and 200.

This is not perceived as a very high spending, but it shows that they do spend some money in CPH Airport when travelling.

One explanation for the will to spend money, refers right back to the traveller feeling relaxed. Interviewee 2 says the following *“a relaxed passenger who is not stressing is also more likely to purchase something...A stressed passenger rushes straight to stare at an information monitor and nothing else”* (Interviewee 2, 2017, min. 14:50). Therefore, the feeling of being relaxed and in control of the travel is crucial, for getting the travellers to purchase anything in CPH Airport.

What is even more interesting is to understand what they desire to purchase, as it is not all kinds of purchases the segment seems to be interested in.

Figure 26 shows that a big part of the segment is not interested in shopping, as 16.7 percent strongly disagree, and 24.4 percent disagree with the statement *“I prioritize to shop in the CPH Airport”*.



**Figure 26 - prioritizing shopping (Questionnaire results)**

This indicates that they do not seem interested in shopping specific product categories before departure, and insights from the respondents in the focus group can help explain this.

First of all, it seems to be a lot about convenience, as one respondent explains it *“I might walk into Georg Jensen just to look, but I would never purchase dinner plates or something heavy to carry around”* (Focus group, 2017, min. 14:45). This makes good sense for the efficiency traveller, who does not dedicate extra time for shopping (CPH Airport, 2014, p. 10). Doing more traditional shopping before such as buying clothes, house accessories etc. is too inconvenient and time consuming. It makes the travel more complicated, and can also seem more stressful. Therefore, the segment seems to focus on quick purchases that are more convenient when travelling.

The mind-set of the segment is another aspect that can help explain why the motive for shopping is restricted. One respondent said: *“I might look into one of those stores (Georg Jensen) but I would never purchase anything...I don't feel that is my purpose of being in the airport”* (Focus group, 2017, min. 15:20). This helps explaining why shopping of e.g. clothes, house accessories etc. is not highly prioritized, as the segment does not seem to have their mind-set for that in the airport.

The characteristics of the efficiency travellers means that instant gratification is one thing, which seems important for the segment, in order to make them spend money. The gain is that they have something to do with their time buffer, such as getting something to eat, but in a way that does not complicate or make the travel more stressful.

Interviewee 3 supports this the importance of convenience, relevance and instant gratification by saying: *“There is a greater focus on food and beverages, especially when you think what can’t they purchase online in the airport... grab and go food and more affordable offers are popular among younger travellers”* (Interviewee 3, 2017, min. 03:01). The mention of more affordable offers, leads to the last part about of the customer analysis.

### **6.3.3 Unmet needs and customer pains**

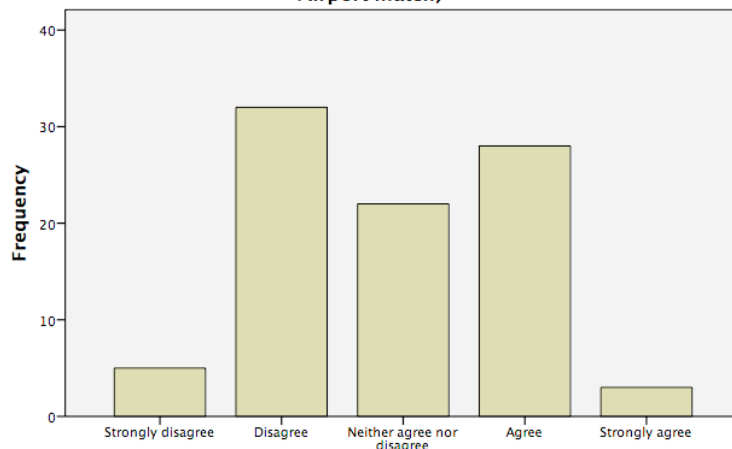
The last part of the customer analysis is about unmet needs as well as customer pains. The two terms from Aaker & McLoughlin and Osterwalder respectively, are believed to represent the same thing, since an unmet need would also be a customer pain.

Based on the primary data one specific customer pain has been identified for the segment, which concerns the price level in CPH Airport. The price level in CPH Airport is generally perceived to be too high is perceived to high, and a big part of the respondents feel there is some imbalance between price and quality in the airport.

First a look at price level in CPH Airport being too high, which 47.8 percent agree with, and 23.3 percent strongly agree with (see Appendix 7). This clearly indicates that the majority of the respondents representing the segment believe the prices are too high. Only 7.8 percent either disagree or strongly disagree with the same fact (see Appendix 7). Experiences from the focus group further support this finding, where one respondent says *“...there is one real breakfast place open, when you leave very early in the morning, and it is crazy how expensive it is”* (Focus group, 2017, min 20:40). The other respondents recognized the scenario, which supports the customer pain about the prices being too high.

What especially seems critical about the price level being too high is that big part of the segment seems to feel there is an imbalance between prices they pay, and the quality they receive. That is first of all indicated by figure 27 below. It shows that 35.6 percent disagree and 5.6 percent strongly disagree, when asked if price and quality matches on what is offered in CPH Airport. It is not to say that everyone experiences it that way, but it is a large group, and a lot also say neither agree nor disagree.

To what extent do you agree with the following statement about being a traveller in CPH Airport (Price and quality of the offerings in Copenhagen Airport match)



**Figure 27 - Match between price and quality (Questionnaire results)**

This is a critical unmet need for the segment, as it seems like it can limit their will to spend money. If they have a bad experience where the price does not match the quality, then it seems to have very negative impact on chance of repurchase.

The respondent from before, who experienced what she called a crazy expensive breakfast place, says she is never coming back again *“it was too expensive, and the quality was not matching at all”* (Focus group, 2017, min. 23:05). The same respondent said that she is now only buying food and beverages from brands she knows, such as Starbucks and Joe & The Juice. The other respondents could recognize the situation, and one of them said: *“For me it’s important when I am buying something that I don’t become disappointed, especially if I buy some food”* (Focus group, 2017, min. 20:40).

This means that it is important for them with some sort of predictability about what they purchase, as they don’t want to spend what seems like a lot of money, on something that might not be worth it. The well known brands seem to help with that predictability, as people know what to expect, and therefore be less unsure of what they will receive from the money spend.

One respondent said she was happy to pay around DKK 120 for two pieces of *smørrebrød* at Aamanns in CPH Airport, because she felt it was worth the money (Focus group, 2017, min. 22:10). It was a place she knew from outside the airport, and it indicates an increased will to purchase, as well as repurchasing, when the quality is believed to match the price.

Therefore, the higher price and imbalance between price and quality is a customer pain, which has negative consequences for sales in CPH Airport’s non-aeronautical business. It seems to limit the segment customer job, about having something to do in the airport with their buffer time, and can create dissatisfaction.

### 6.3.4 Partial conclusion

The customer analysis led to the identification of a specific segment, which is relevant when trying to optimize CPH Airport's non-aeronautical business. They are identified as the user type efficiency traveller, whose behaviour generally is characterized by wanting to get through efficiently, use to digital solution, and don't devote a lot of time for shopping. The efficiency traveller is believed to especially be found among the younger travellers, but can also be found among other age groups. The segment is furthermore believed to be relatively price sensitive.

Four different variables stand out, when examining the different motives, customer gains and job. The variables can be grouped together two and two, so that the most important motivations are:

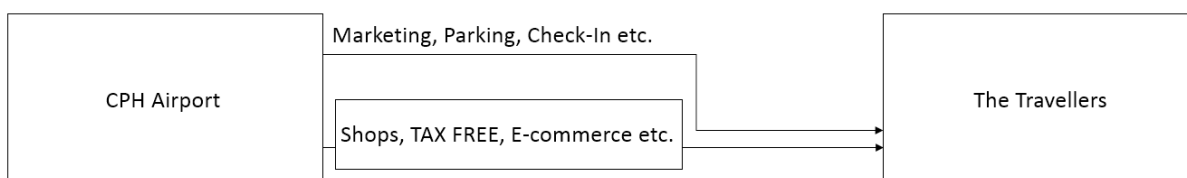
i) Independency and efficiency ii) Feeling relaxed and having something do

The most essential customer pain identified for the segment concerns the balance between price level and received quality in CPH Airport. The price level in CPH Airport is generally perceived as too high, and a big part of the respondents feel there is some imbalance between price and quality in the airport. This hurts the segments will to spend money, which they otherwise seem willing to base on the motivations, and especially to fill out the buffer time in the airport.

With a customer segment chosen, the following paragraph will examine which products and services CPH Airport's non-aeronautical business offers to create value for the travellers.

### 6.4 Value proposition

CPH Airport has, as seen in the customer analysis, several different types of travellers, who has different behaviours and needs. Therefore, CPH Airport has to focus on creating value for these different types, when it comes to the non-aeronautical business area. This has to be done through different types of channels, of which some CPH Airport controls, and others by third party intermediaries. The model below illustrates CPH Airport's way to the traveller as a customer.



**Figure 28 - CPH Airport's way to the traveller as a customer (own creation)**

CPH Airport operates with four overall areas within its non-aeronautical business (CPH Airport Annual Report 2016, 2017, p. 37). This means that the following analysis of the value proposition will look into each of the four business areas, which consist of parking, hotel, TAX FREE and shops.

**Parking** and public transport can be seen as each other's substitutes. Some customer segments will/or can only consider one of the options. Examples can be a traveller bringing too much luggage to handle in public transportation, or a price sensitive traveller who does not own a car nor will pay for a taxi ride. The products and services CPH Airport parking offers are accessible parking close to and at the airport, in a simple and manageable system. Furthermore, they are trying to come up with offers in their CPH Advantage loyalty program, which can improve the parking experience.

The customer gain the parking possibility gives is a way to find out where travellers can park their car, and helps in creating a good infrastructure for the travellers and the airport themselves. The parking service alleviate the customer pain of not being able to find a proper place to park one's car.

CPH Airport are aware of the fact that parking at the airport is increasing, and is expanding their parking capacity. In 2016, CPH Airport invested in establishing a new car park for budget cars, called P19 (CPH Airport Annual Report 2016, 2017, p. 34). It will offer 1000 new parking spaces at the airport, increasing the total number of parking spaces with approximately 10 percent.

According to CPH Airport, the high increase in parking revenue by 11.4 percent in 2016 is mainly due to two factors (CPH Airport Annual Report 2016, 2017, p. 37). One being a strong international online presence, in for instance Sweden, and two an amended price structure that helped to increase the average transaction value. People who mainly live in southern Sweden, which is closest to the airport, now has an easier way to get to the airport by car, and are not forced take the train. It gives CPH Airport a possibility to reach out to an international customer segment, with their parking business.

CPH Airport's **Hotel** offers a hotel near Copenhagen Airport, which is in partnership with it. The hotel makes easier accommodation, for travellers that wish to stay near the airport. Being close to the airport can be a pain reliever, for instance for transfer passengers who have to wait for the next day for their plane. Due to the hotel's location, travellers can be close to the airport and downtown Copenhagen at the same time. The hotel is per se not a low-cost hotel, and cannot be a substitute for cheaper alternatives to stay in and nearby Copenhagen, for price sensitive customers.

The revenue from the hotel operation grew by 6.9 percent in 2016, which was mainly due to an increase in travellers travelling to Copenhagen Airport (CPH Airport Annual Report 2016, 2017, p. 37). That increase means that more people are staying at the airport hotel, which gives higher room rental revenue.

For a long time Hilton Hotels were managing the airport hotel. Since April 1 2017, Nordic Choice Hotels holds the management rights (CPH Airport Annual Report 2016, 2017, p. 109). CPH Airport's full

ownership of the property is reduced to 60 percent, where the new partner owns 40 percent. Nordic Choice Hotels will transform the hotel to a high-end Clarion hotel, and expand the building (ibid.). Thereby, the products and services have the possibility to change, as the Clarion brand can perhaps suit another customer segment better than the one using Hilton Hotels. The hotel can be more exclusive to a certain income class, as it is suited for the high-end segment. It can lead to creating a gain for the traveller who seeks exclusivity and luxury.

The increase and revenue in the **TAX FREE** area of Copenhagen Airport, is at a stable level right now (CPH Airport Annual Report 2016, 2017, p. 37). Revenue results from 2016 were in line with those from 2015. The increase in young travellers with low average spending per traveller affects the revenue of the TAX FREE area (CPH Airport Annual Report 2016, 2017, p. 15). However, the executive management is satisfied with the development of the TAX FREE area, with the current situation taken into consideration.

The TAX FREE area offers a mix of products to the travellers, mainly within consumer goods, alcohol, tobacco and cosmetics, to a cheaper price than elsewhere within the national border. The products are duty free. Different offers are given to customers from EU- or non-EU member countries. A personal shopping experience is offered, where assistants can guide the traveller through the shops. That can alleviate the customer pain of travellers being in doubt of what to buy, and not knowing which person they can seek information from. Furthermore, the traveller can shop online before entering the airport, and collect the purchased goods at one place, centralizing the shopping.

The TAX FREE area is the cheapest compared to CPH Airport's main competitors in Scandinavia (CPH Airport, CPH's TAX FREE er Skandinaviens billigste, 2011). The TAX FREE area focus' on consumer goods caters for the travellers who have to make last minute purchases before the travel. Cheap prices at the area can relieve the pain price sensitive people can have towards shopping, and make them more willing to spend and gain satisfaction. The consumer goods at the TAX FREE area are generally products that different customer segments can be interested in purchase. There is also more specific offerings for men and women respectively, where the area has a special focus on liquors for men and cosmetics for women.

The other **Shops** at the airport's shopping centre offers a variety of products for different customer segment. It has a mixture of products and brands from cafeteria coffee to more expensive coffee at Starbucks, and casual to high-end clothing. The executive management at CPH Airport has a focus on diversification in the stores, to be able to satisfy as many travellers as the company tries to create a smooth transaction of brands entering and leaving the airport. For the customers, the shopping center offers some of the same products and services as the TAX FREE area.

Last minute purchases and online shopping can be done there, where the offers cater for several consumer types. There are offers for the young fast pacing traveller, as well as the luxury shopper seeking luxurious brands only. CPH Airport has designed the shopping center after their principle of making everything at the airport seem close and connected (CPH Airport, I dag, 2017). Thereby, there will be less tendency to stress while being and shopping at the airport. It should be part of the experience of being on a journey for the travellers, where they should be excited and not stressed about shopping at the airport. The mentioned aspects of the shopping center should be able to alleviate some of the customer's pains of being in a large environment while having specific needs. The diversification in shops and offers will make customer gains, in the way that customers can access and buy what they need.

Where CPH Airport shopping center's revenue increase by 4.3 percent in 2016, one segment stood out (CPH Airport Annual Report 2016, 2017, p. 15).

The revenue coming from the food and beverage offerings increased by 12.1 percent, and was awarded the "Airport food & beverage offer of the year" by the respected internet media The Moodie Report. It emphasizes that the executive management of CPH Airport is improving their shopping center, and maintaining a high quality. However, the overall revenue increase was lower than desired (ibid.).

**Overall**, the four units of CPH Airport's non-aeronautical business is cooperating in trying to centralize the customer needs connected to travelling. In a closed environment, the travellers should feel comfortable and stress free to move from one place to another, and to find the products and services they are looking for. They are placed to ease the pains that can be on a journey before entering the airport (parking) and after leaving it (buying necessary products to make the journey comfortable).

Some of the non-aeronautical business parts cater for specific customer segments. The cosmetics and liquor departments of the TAX FREE area cater more for women and men travellers respectively. In addition, the airport hotel and some of the shops on the shopping center both caters for the luxury shopper. The hotel will go forward focusing more on the high-end customer, where some of the shop tenants only sell exclusive luxury brands.

The non-aeronautical business areas are within the transportation & arrival, shopping and dwell time segments of The Travel Value Chain, as seen in figure 13. Parking is under transport & arrival, where TAX FREE and the shops are under shopping and dwell time. The non-aeronautical business is per se not a part of the other segments of the travel value chain. However, there are food & beverage stands at the airport before check-in. Currently, CPH Airport is trying to get shopping to be a part of the online booking, travellers can

do before entering the airport. Then the non-aeronautical business can become a part of the new digital additions The New Travel Value Chain brings, as seen in figure 14.

CPH Airport tries to optimize the experience for their segments by using the travel value chain (CPH Airport Annual Report 2016, 2017, p. 20). The management of CPH Airport states: “...*CPH’s business model focuses on making the airport as well run, efficient and attractive as possible for customers, thereby creating the greatest possible value for society, business partners, employees and owners.*” (ibid.). That is the way they are trying to execute their business model, in coherence with the travel value chain. The focus in this thesis is on the passengers/travellers as a customer group for CPH Airport. Within that customer group, the focus of trying to find a Fit will be on the identified customer segment amongst travellers we have identified.

The next paragraph will examine how CPH Airport’s value proposition and the identified customer segment’s desires can match each other, and achieve what Alexander Osterwalder calls a Fit.

## **6.5 The Fit**

The identified problem we see in this analysis is that the company has a potential to optimize its Fit towards a specific customer segment. It is not to say that CPH Airport are good or bad at finding a Fit between their offerings and their customers’ needs, but that we see a potential to approach a specific customer segment better.

### **CPH Airport’s Fit to the relevant customer segment**

Some of the non-aeronautical business parts of CPH Airport do not focus on the efficiency traveller’s needs. There are non-aeronautical business parts that cater more to other customer segments, while some satisfy their needs to either full extent or to some degree.

Hotel and parking are parts of the non-aeronautical business that are not believed to be the most relevant areas, when looking at the needs of the chosen segment. The new hotel management of the airport hotel are moving towards a more high-end customer segment, which is less price sensitive than the relevant customer segment. We believe that the chosen segment will maximum have to use the parking facilities for a short time, to pick up travellers coming to the airport. Therefore, hotel and parking will not be main focuses for the optimizable Fit between the relevant segment’s needs and CPH Airport’s products/services, as we believe that they are areas the segment does not seek improvements in. The following will examine what we believe is important about the current situation for the Fit, based on the analysis of the customers and the value proposition.

### **The traveller's independence**

CPH Airport has a focus on being a digitized airport. The digitalization of the airport and its automation processes creates a Fit between the company's products/services and the independence and automation that the relevant segment seeks. With many of the services being digitized, the segment gets a possibility to feel more in control of the travel situation. They feel more independent by not having to ask any staff members for directions and do not have to do things manually. However, the Fit is perhaps more clear in the aeronautical business than in the non-aeronautical business.

The aeronautical business of CPH Airport is highly digitalized, where every aeronautical part of the travel chain is executed through digital platforms. Luggage handling service is almost fully automated, and the aeronautical supply chain, from even before the traveller entering the airport to take-off is nearly completely digitalized. The same is not the scenario for the non-aeronautical business. There are still parts of the shopping experience that have to be done manually, for instance product delivery and selection. CPH Airport are trying to move in the digital shopping direction, with initiatives such as CPH Advantage and its e-commerce offerings. Better differentiation and customization in the approach to the relevant segment, can be a way to achieve a Fit to the digitized and more automated shopping experience the segment are longing for.

### **The traveller's perception of quality**

The relevant customer segment experiences a miss match between price and quality in the shopping area of Copenhagen Airport. They seem to go after the brands and products they know, as they find safety and comfort in them. Purchasing from big brands is a way to better ensure what quality to expect, which is relevant when fearing a lack between price and quality. For instance the no-name breakfast buffet seems not to be a desired place for the segment to eat, due to the experienced lack between price and quality. The segment does not want to stress about wondering what they are buying, but are instead looking for something they know. An influence of that decision strategy can be their travel pattern, where the travel many times a year and not necessarily experience the airport as a part of the journey.

### **The travellers time "buffer"**

Even though the relevant customer segment prioritizes getting quickly to the gate, they still find it beneficial to have some time on their hands while at the airport. They do not want to stress through it, and seek to have a time "buffer". With sufficient time, it can become a less stressful experience of going through place. Especially within accessibility and infrastructure, is CPH Airport creating gains and relievers for the relevant segment's pain of feeling stressed while being at the airport.

CPH Airport has centralized most of the offerings that an airport is expected to have. Due to its size and focus on interior design, it is easy to navigate through the airport, so the traveller does not feel stressed. There are easily accessible information stands throughout the airport, and good signage of navigation. The customer segment does not need a high degree of help to navigate through the airport and the services it offers.

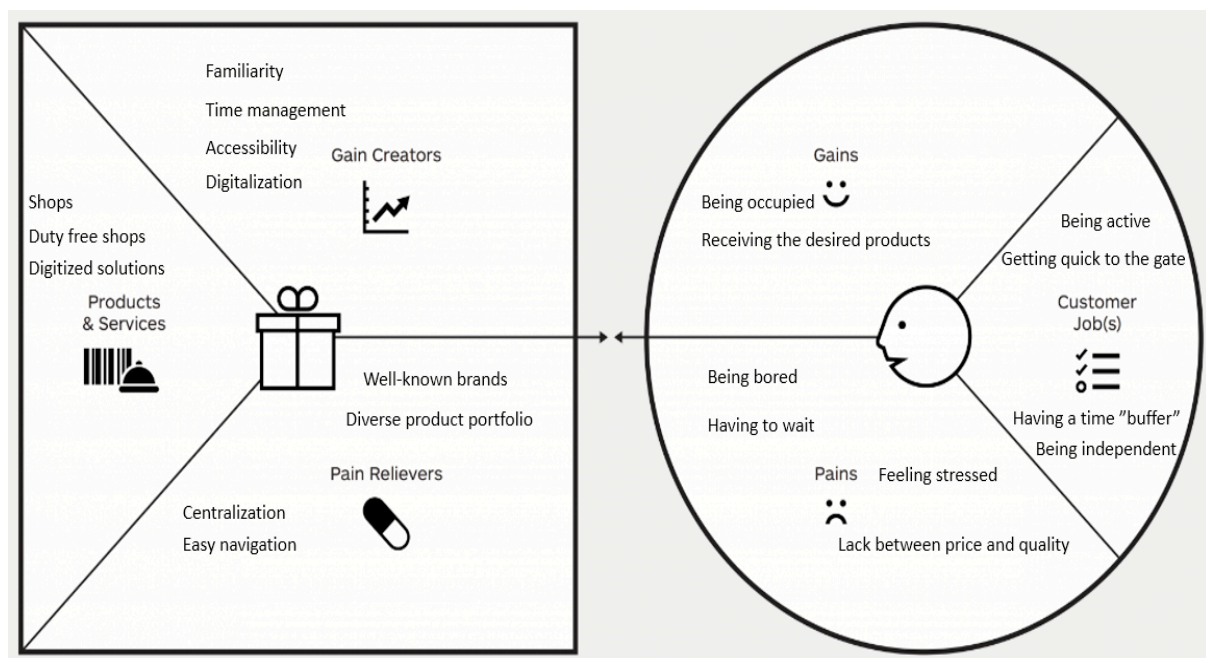
The possibility for the single traveller to identify his or her own lifestyle through the mix of brands at the airport creates a possibility for the relevant customer to see something recognizable. Then focus can be taken away from the stress factors associated with the airport. The less stressed the travellers are, the more willing will they be to go around and shop in the airport.

### The active traveller

The relevant customer segment wants to be active while at the airport. Even if they do not see the airport as a part of the journey, they still want to have something to do during their time “buffer”. It is a job the relevant segment wants to be done. They see it as a pain if they have to wait.

CPH Airport can alleviate the pain with different kinds of “entertainment”. The traveller can go shopping at the shopping center, or grab a cup of coffee and some quick service food at one of its cafes. Those services can keep the traveller occupied, and not feel uncomfortable in just waiting for the time to pass. It is a gain for the relevant segment to having something to do in their desired time buffer. The gains are that they achieve is having the time to go to the shops and cafes they want to go to, and get the products they want.

The restaurant brands operating at CPH Airport, such as the steakhouse MASH, are targeting the mid to high-level spender. They do not cater for the relevant segment’s needs as much as the more affordable shops and cafes do. Being at an expensive restaurant at the airport is a way to show status, and that you having the luxury of having time to wait for a cooked meal. The restaurants brands are seeking the same type of traveller that buys high-end clothing and jewellery at the airport. For the relevant customer segment, their price sensitivity makes those brands unattractive for them.



**Figure 29 - The Fit between the customer segment and the non-aeronautical business (own creation)**

The next paragraph will turn the focus to which internal strengths and weaknesses CPH Airport has to meet the relevant customer segment. After that, a conclusion of the analysis will be presented in a SWOT matrix.

## 6.6 Internal analysis

The internal analysis will analyze the company's performance, as well as its strengths and weaknesses. The analysis of CPH Airport's financial performance is included in the paragraph about the situation, and will therefore not be included in this paragraph as well.

First a look at what CPH Airport defines as its vision, in order to understand the overall goal for the company. The vision is stated as the following: *"The Gateway of Northern Europe, where you come to move on and we make you want to stay"* (CPH Airport Annual Report 2015, 2016, p. 24). This shows a desire to be the main hub in northern Europe, which CPH Airport currently seems to be as the biggest airport in northern Europe (Check-in, De 20 største lufthavne i Norden, 2017). It also seems important that the travellers prefer CPH Airport rather than other airports, and to make them spend more time in the airport.

CPH Airport has furthermore made a set of four values, which seem to be made to support the vision, in order to, achieve it. These are internally essential because they guide and inspire the company to deliver a strong performance (Aaker & McLoughlin, 2007, p. 107). They are briefly introduced below, based on how CPH Airport introduces them (CPH Airport, Values and standards, 2017).

Welcoming: CPH Airport always tries to notice and understanding the desires and needs of its different customers. This is done in order to take care of our customers and business partners (ibid.).

Partnership: The basis of CPH Airport's business is said to be joint value creation, in order to grow the business in partnership with our customers. There is a focus on co-operating efficiently across the organization, and to share knowledge (ibid.).

Respect: This is about building the relations to different partners on trust, so that they can accommodate each other's differences. CPH Airport strives to listen to and recognize other's points of view (ibid.).

Passion: CPH Airport says it has a passion for creating world-class airport experiences. It strives to be ambitious about what we do, and will always try to improve by learning from successes and mistakes (ibid.)

The value regarding partnership seems especially interesting, when trying to identify the strengths and weaknesses of CPH Airport. It can be perceived as a strength for CPH Airport when the company can make joint value creation, where the airport can benefit from a partnership. An example of that is how CPH Airport gets more travellers, if an airline opens up a new route from the airport, or makes it their hub as SAS does (SAS hubs, Copenhagen, Oslo and Stockholm airports, 2008).

However, it is believed to be more of a weakness. It can quickly complicate the work and interests of CPH Airport, as the airport often depend on its partners. That is for instance seen with newest expansion plans for CPH Airport, which is a DKK 20. billion investment, so that the airport can handle 40 million passengers yearly (TV2, Københavns Lufthavn giver sig, 2017). The expansion plan meant that CPH Airport wanted to close one runway called *tværbane*, but SAS opposed that and criticized it heavily in the media (ibid.). This lead to a struggle between the two parts, which for now has ended with CPH Airport investing an extra DKK 300 million, in order extend the lifetime of the runway.

This illustrates how CPH Airport's focus on partnerships can be weakness, as it can prevent their own interests and create extra costs. CPH Airport said the extra investment is something they are willing to do for their partners, which goes well with the respect value mentioned above. However, Interviewee 2 tells that CPH Airport felt very pressured by the media coverage that SAS created, and that it was clear negotiation tactic by SAS (Interviewee 2, 2017, min. 20:25). The partnerships can therefore seem a lot less idyllic than how CPH Airport describes it, and that creates a weakness for the airport, where unpleasant compromises often seems necessary.

### **6.6.1 Non-financial measurements**

Several other performance measurements, other than the financial measurements, are relevant for analyzing a company's internal situation.

#### **Customer satisfaction**

One of those is customer satisfaction, which gives a diagnostic value about how the relationship is between the company and its customers (Aaker & McLoughlin 2007 p. 104). The overall customer satisfaction for CPH Airport is high, as the passenger satisfaction in 2016 was 87.7 out of 100 (CPH Airport Annual Report 2015, 2016, p. 29).

This is of course it is a strength for CPH Airport in itself to have a satisfied customer base. However, the true internal strength seems to be the management behind it, as the airport scores a high customer satisfaction in many different areas, such as check-in, security checks, shopping offers etc. (CPH Airport Annual Report 2015, 2016, p. 29).

Because it indicates a good management of all components of The Travel Value Chain, where there is a good collaboration between the aeronautical and non-aeronautical business. This creates a more streamline airport experience, where the many different parts play together, and where the traveller does not experiencing any critical lacks along the way. This is believed to help with the long-term profitability, as it is believed to create a positive image of the airport, and potentially bring more travellers e.g. if an airline wants to open new routes.

The high traveller satisfaction with CPH Airport furthermore seems important, due to the limited alternatives that a lot of travellers have for choosing another airport. A low satisfaction would be critical, as the travellers would be more or less forced to use an airport they didn't like. That could for instance hurt the image of CPH Airport and the long-term amount of passengers.

### **Innovation**

Another performance measurement that is relevant to examine for CPH Airport is the company's approach to innovation. This seems to be an area where the airport has another strength, when looking at how the company is trying to keep up with the development.

CPH Airport has for instance received an award, from experts at Air Transport Research Society (ATRS), for being one of the most effectively have used new technology (CPH Airport, Europas mest effektive lufthavn ligger i København, 2016).

A quote from the COO at CPH Airport illustrates the focus on developing digital solution: *"Our strategy are very much based on digital solutions, automation and utilization of the vast amounts of data we collect"* (ibid.).

This has created a more efficient airport, where different processes have been innovated. An example is check-in and baggage drop, which most travellers in CPH Airport today do themselves because of the automated solutions (ibid.).

One way CPH Airport work with innovation is for example the estimated 100,000 interviews yearly with travellers, which give valuable insight about the travellers and their needs (ibid.).

The focus on and success with innovation creates a stronger competitive position, as it for instance can optimize the business partners operating in the airport. An example is how CPH Airport has optimized the security to better match the needs and day-to-day operations of the companies in the airport.

It reduced the number of times that in particular handling company and airline employees pass through checkpoints, saving them millions of kroner (ibid.).

This makes it a more lucrative airport to place operations, which is a strength that can attract airlines, stores etc. However, the partnership can, as mentioned earlier, quickly create a challenge for the innovation. Because an innovation that help for one group of partners, might be contradicting with interests of other partners. That could for instance be if a new initiative was trying to increase the sales of food and beverages in the airport, then it is be contradicting with the airlines that try to sell it on-board the plane.

### **6.6.2 Competitive advantage – Use of digital solutions**

At last it is interesting to examine what is believed to be one of CPH Airport's main competitive advantages.

It relates to the part above about innovation, as the competitive advantage is believed to be the airports use of

digital solution. It is a big part of the CPH Airport's strategy as the COO says, and the award from ATRS indicates that it is something the airport is superior at.

The VRIN criteria by Jay Barney will be used to assess if the use of digital solution provide the basis for a competitive advantage.

### **V – value**

First of all the use of digital solutions seems to address an important opportunity regarding today's travellers. They have become more used to travelling and are used to moving around an airport, which means they are demanding flexibility and more opportunities to manage their journey themselves (CPH Airport Annual Report 2015, 2016, p. 24). As it says in the annual report "*...they (the travellers) want more self-service and more digitalization of airport processes*" (CPH Airport Annual Report 2015, 2016, p. 23).

It furthermore addresses the opportunity to optimize the processes in the airport, in order to make them more efficient. The increased efficiency can both cut cost, as well as create a better travel experience. As the COO says it "*The self-service solutions save the airlines staff costs while also increasing traveller satisfaction*" (CPH Airport, Europas mest effektive lufthavn ligger i København, 2016).

The digital solution is as mentioned above something the travellers' desire, and clearly seems to create value for them. Self-service passengers are generally more satisfied than passengers that are not self-serving, where the satisfaction score is 91 vs. 86 on a scale of 0-100 (CPH Airport Annual Report 2015, 2016, p. 29).

It also seems valuable from a cost perspective, as CPH Airport describes the digitalization as a key element of optimizing operations in the airport (CPH Airport Annual Report 2015, 2016, p. 24). The implantation of the digital solutions does of course cost something, but it is believed to create bigger savings. An example is how a optimization of the security area, ended up saving them millions of kroner for partners operating in CPH Airport (CPH Airport, Europas mest effektive lufthavn ligger i København, 2016).

### **R – rarity**

The value of the digital solutions means that a lot of competing airports seem to have the same focus.

Nothing is for instance preventing an airport from investing in the same digital solutions, such as self check-in machines etc.

That harms the rarity of digital solutions and as a competitive advantage for CPH Airport, because it is not based on a unique resource, which would have made it more rare.

However, what seems more rare is CPH Airport's capability to use and manage the digital solutions. Because one thing is to invest in the same technology, but not everyone can implement it in an optimal way. As the

COO from CPH Airport says *“We maintain a very large, complex operation, yet we manage to do so using fewer employees than our peers”* (CPH Airport, Europas mest effektive lufthavn ligger i København, 2016). This illustrates that not all airports can use digital solutions as effectively, or have the same capabilities to be on the same level as CPH Airport. The award from ATRS for most efficient airport in Europe also indicate that it CPH Airport holds a unique capability using digital solutions.

### **I – inimitability**

The optimal use of digital solutions requires the right competencies, as indicated above. CPH Airport says a big part of the success with the digitalization, is due to the workforce of skilled and independent people (ibid.). The workforce is typically something that makes a competence more fragile, as the people can stop or even move to the competitors (Johnson, Whittington & Scholes, 2011, Ch. 3). The digital solutions are on the other hand also based on internal linkages, where a lot of different elements have to function together. That is seen for instance seen in the Travel Value chain, and that makes it harder to imitate the capabilities behind the digital solutions. This means that it is not impossible to imitate the competencies over time, for instance by hiring the right people. But the complexity of internal linkages makes each airport a unique case, which can't just be duplicated directly to another airport.

### **N – non-substitutability**

It is hard to see what should substitute the use digital solutions, as analogue solutions for instance don't seem to be a threat for digital solutions. What potentially could be substituted is the capability behind a digital solution, meaning that new way to use the digital solution outperforms the current way CPH Airport uses it. That could for instance be if all check-in was moving to an app, which would make the self check-in machines redundant.

This means that the use of digital solutions are valuable, and that the competencies behind using the digital solutions are rare at CPH Airport's level.

They would be hard to imitate do to the complexity, but it is not impossible. It is hard to imagine a substitute to the competencies, but some ways of using the digital solutions could become redundant.

In total it is believed that the use digital solutions is a relative strong competitive advantage when assessing it with the VRIN framework.

## **6.7 Conclusion of the analysis.**

The external and internal analysis of CPH Airport has been conducted in order to answer the problem statement. It has lead to a number of findings that are essential for how the business model behind the non-aeronautical business can be optimized.

The SWOT model below sums up in the most crucial findings, regarding the internal strengths (S) and weaknesses (W), as well as the external opportunities (O) and threats (T).

S	W
<ul style="list-style-type: none"> <li>• CPH Airport use and management of digital solutions gives a relative strong competitive advantage.</li> <li>• CPH Airport is good at innovation, and improving processes.</li> <li>• A strong financial performance.</li> </ul>	<ul style="list-style-type: none"> <li>• CPH Airports focus on partnerships can create big challenge and complicate initiatives.</li> <li>• The non-aeronautical business has not been digitized as much the aeronautical business.</li> </ul>
O	T
<ul style="list-style-type: none"> <li>• The identified segment seems to have a time buffer they want to fill out in the airport.</li> <li>• People generally travel more frequently.</li> <li>• New technology → new opportunities for digitizing, automation and customization.</li> <li>• Locked in effect for the travelers after the security check → the traveller is forced to stay in the airport until departure.</li> <li>• High entry barriers → create a more stable number of airports competing.</li> </ul>	<ul style="list-style-type: none"> <li>• The identified segment is currently a challenge for the non-aeronautical business → wants to be efficient, independent and don't dedicate much time for shopping.</li> <li>• The identified segment experiences an imbalance between price and quality + they are relative price sensitive.</li> <li>• Some shopping offers in CPH Airport can be substituted by the increasing online sale.</li> <li>• Politics can challenge the adoption of new initiatives in CPH Airport.</li> </ul>

**Figure 30 - CPH Airport's SWOT matrix (own creation)**

The analysis has first of all identified a specific segment that is relevant, for optimizing the non-aeronautical business. The segment has characteristics that are challenging for non-aeronautical business, such as wanting to be independent, go through efficiently, do not dedicate time for comprehensive shopping, and feel there is an imbalance between price and quality. However, there also seem to be characteristics that make the segment more accessible such as, they travel more often, and have a time buffer they want to fill out. This creates the basis for improving the Fit between the value proposition that CPH Airport offers and the segment.

CPH Airport has been rewarded for its use of digital solutions, and for being the most efficient airport in Europe. The airport has managed to innovate many processes over time, where especially the development in technology has been used for digitizing the airport. CPH Airport furthermore has a strong financial performance, which enable future investments in innovation and development among other things. However, the non-aeronautical business seems less digitized compared to the aeronautical business, which therefore seems like an area that the innovation in CPH Airport can focus on for the future. An important weakness to be aware for future innovation is how CPH Airport's partnerships can complicate new projects, as there are many different interests involved. Another unique aspect that can complicate new initiatives in CPH Airport is politics, as political agreement sometimes can be necessary before an initiative can be completed.

Overall, the intensity of the industry's competition is believed to be low to moderate, when looking at the non-aeronautical part of the airport industry.

There are high entry barriers for starting up an airport, which creates a more stable number of airports competing. A lot of retailers are very interested in being located in the airport, which gives an important supplier less bargaining power. Furthermore, the customers are forced to stay in the airport until departure, which weakens their bargaining power if they want to purchase something. However, a big threat for the non-aeronautical business is examined to come from online shopping, where especially the younger people, are shopping more online. Some suppliers also seem to be harder to replace, as they play a more crucial role for the daily operation of the non-aeronautical business, which increases their bargaining power.

The following part of the thesis will, based on the analysis, examine and discuss what strategic initiatives that can to optimize the business model for the non-aeronautical business.

## **7. Strategic initiatives and Discussion**

The discussion is the part of the thesis where the problem statement is more directly tried answered. A solution to the addressed problem will be based on the finding in the analysis. The problem statement of this thesis is the following:

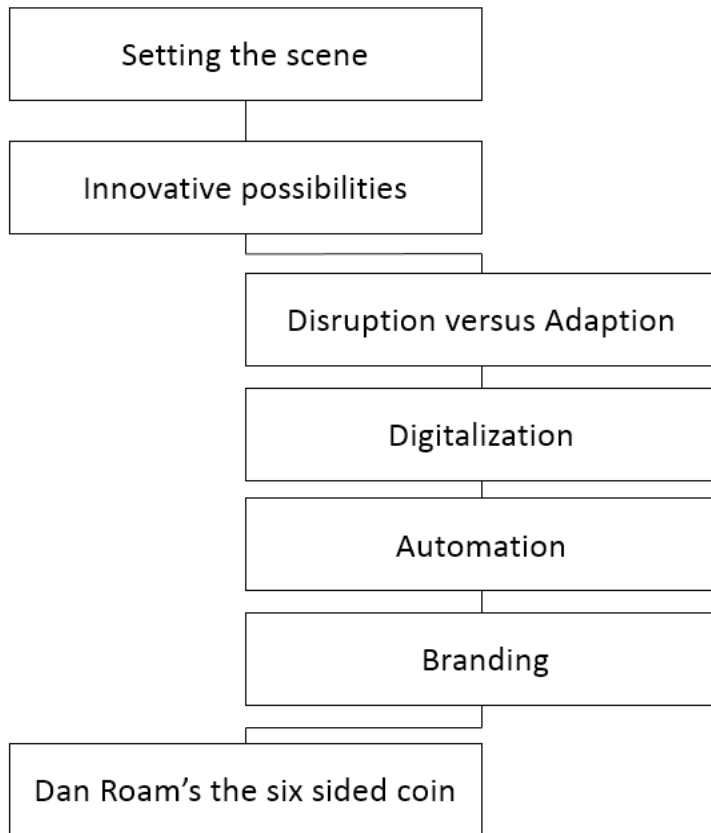
### ***How can CPH Airport optimize its business model for its non-aeronautical business?***

Because this thesis has business modelling as the main theoretical approach, it might be assumed that it would be necessary to make an entire business model canvas for CPH Airport's non-aeronautical business. However, since CPH Airport operates a business model with multiple fits and a specific customer segment has been found, the focus will be on optimizing the Fit to the segment.

It may be argued that business model parts such as key activities and customer relationships are changed when the Fit for a specific customer segment is examined, but key partners, cost structure, revenue streams and channels will likely remain the same for all customers. A change in customer segments does not automatically call for a change in the entire business model structure.

The conducted customer segmentation helps narrowing down the many different customers of CPH Airport, to find a useful relevant customer segment. Listing the products and services in the value proposition, made it possible to see the specific Fit for the segment. With the essential analysis of CPH Airport's way to form their business, there comes a possibility to further examine the external and internal factors affecting the company and the relevant segment. Those subjects were highlighted in a PEST analysis, Porter's five forces and an internal analysis.

The discussion will present the possibilities and arguments of how CPH Airport's non-aeronautical business can be optimized. Breaks for innovation, and which management divisions that have to take action will also be presented. Below is a model describing the structure of the discussion.



**Figure 31 - Structure of the discussion (own creation)**

## **7.1 Innovating of the offerings**

David A. Aaker and Damien McLoughlin operate with a number of different strategic approaches, which can be used for developing a business (Aaker & McLoughlin, 2007, p. 194-195). One of those is defined as energizing the existing business, which strategically can be done in different ways. Using strategic innovation where the company focuses on improving the product and customer experience through innovation (ibid.) is one of the main approaches.

We believe this to be the ideal approach for optimizing the non-aeronautical business, as it combines the elements from the SWOT matrix in a favourable way. This means that a focus on strategic innovation is believed to be the best way of matching the internal strengths and weaknesses, with the external opportunities and threats.

Strategic innovation is one of CPH Airport's core strengths, together with the airport's use and management of digital solutions. These strengths are believed to create the basis for optimizing the threat from the

identified segment, which currently a challenge for the non-aeronautical business, and improve the Fit between the segment and the company.

Another reason for focusing on strategic innovation is that CPH Airport has a strong financial performance, which can be used to invest in the in new technology etc. It is a way to approach the new opportunities, which the technology development creates. Furthermore, it means that focusing on strategic innovation also is a way to approach the weakness of the non-aeronautical business being less digitized.

We believe that focussing on optimizing the non-aeronautical business through strategic innovation is a suiting strategic approach, due to how it matches the operation of CPH Airport.

CPH Airport executes a business strategy that relies on expansion and innovation. Better offerings, efficiency and infrastructure for the travellers can generate better revenue for CPH Airport, than if they only focused on cutting down to their core business deliver the minimum service. They are not a cost saving business, where revenue is found by saving as much as possible on the production of the products and services it delivers. CPH Airport is in an aviation market where a national customer need is always present, but they compete globally.

Furthermore, it is important to remember that there are other important segments, than just the identified segment, which have a different type of behaviour and other needs. This means that innovation focusing on offerings, which are relevant for the identified segment; still allow the operation of e.g. parking and the hotel, which is more essential for other segments. However, when optimizing through strategic innovation, there is the threat of how CPH Airport's partnerships can challenge projects and processes. That could for instance be if an innovation initiative goes against the interest of a partner, which then could try to prevent the initiative.

## **7.2 Disruption versus Adaptation**

Talking about innovation opens up for the debate about disruption. Companies may have to disrupt their own business model to be able to follow market trends and their competitors. Disruption is a destruction process that makes way for new products and services to become the main offerings. CPH Airport is not in at a place in their strategic process, where there is a need for a total reinvention of their non-aeronautical business model. Customer numbers are not decreasing, and CPH Airport can use their locked-in effect to make sure travellers are spending money. However, creating a completely new experience in the shopping center for the traveller comes with cost and uncertainty. The foundation on how the non-aeronautical business runs is solid. Different tenants operate at the airport, the airport collects rent and the tenant collects income from purchases. Changing that can deeply affect the cost structure and revenue streams of the business model. It will not make sense for instance if CPH Airport skipped having physical shops and only had virtual shops,

where only virtual products could be purchased. That is not what the traveller desires. The same goes for if the airport shopping center transforms into a fitness gym, because the travellers seek relaxing areas.

The innovative possibilities for CPH Airport are within adaption. Existing products and services can be improved and new implementations can enter, adapting to the market trends, but without compromising the existing business model. The business remains the same and still delivers its core values to the customer. For adaption to properly happen, the company must either already have the competencies to produce and deliver the implementations. If the competences are not already in the company, they can be hired or bought from elsewhere or delivered through partnerships.

### **7.3 Digitalization**

Digitizing the non-aeronautical business is believed to be crucial, order to create a stronger Fit with the chosen segment.

Findings from the analysis show that the non-aeronautical business is less digitized, compared to the aeronautical business, which seem critical in relation to the chosen segment. They especially want efficiency, and appreciate the automated and digital solutions found in the aeronautical business. Therefore, CPH Airport should use its strength regarding digital solutions and innovation, in order to digitize the non-aeronautical business experience for the segment. This is believed to create a stronger Fit, as it is believed to meet the segment's customer job about being efficient and independent. It also helps CPH Airport digitizing the travel value chain, which the analysis shows is a key interest area for the airport.

The use of beacon technology is our suggestion for a product innovation that can digitize the non-aeronautical business. It is a Bluetooth transmitter that sends a signal that other devices such as smartphones can pick up (Kontakt.io, What is a beacon, 2017). It can be used for many different purposes, where one of the main one's is to create an interaction (ibid.). The typical way of creating the interaction is by sending a notification, when the person is close enough to the transmitter. That could for instance be a food or beverage from a café near the person.

This means that the push notifications can reminded the traveller of relevant offers, at the right time and at the right place in the airport.

The pictures below illustrate how the beacon technology basically works, where a transmitter is located in any type of store, and then sends an offer to a person's smartphone.



**Figure 32 - Beacons (Kontakt.io, What is a beacon, 2017) & (Chatterbuzzmedia, Beacon marketing, 2017)**

The main reason why this will optimize the non-aeronautical business, relates to how the technology fit the characteristics of the chosen segment. It is a way to get the attention of the segment that is characterized by being efficient and independent. It will remind them of certain store offers, without requiring them to enter the place, and they can quickly decide if they find the offers relevant.

Therefore, it also addresses the challenge about the chosen segment, not really dedicating time for more comprehensive shopping. It will encourage them spend money in the buffer time they have, by trying to tempt them, but without complicating their travel.

The ease of using beacon seems to be another reason that makes it seem ideal to the chosen segment. The use of beacon technology has been described in the following way: *“The technology is essentially invisible and can work without the mobile consumer’s having to do anything”* (Harvard Business Review, How beacons are changing the shopping experience, 2014). The traveller only has to agree in advance, and then start to receive notifications. This is ideal for the segment, as it is efficient, and is not demanding a lot of time to set up.

Another benefit for the segment is how the beacon technology allows independency. The traveller can for instance on his/her own decide if the notification is relevant, without interfering with a sales person.

Therefore it allows the segment to still travel efficiently through the airport.

### **7.3.1 The content**

Something that is important to discuss with this innovation is the content send to the travellers. One could argue that it is just a tool to bombard the travellers with notifications, once the permission has been given. A scenario could be that all the stores start sending notifications, without considering what other stores do. Each store just perceives the permission as an opportunity to interact with the traveller. All the stores will send out many notifications, so that the competing stores do not get an advantage.

This means that one of the main arguments against implementing the technology is that it creates a lot of noise for the travellers. This noise could then end up having a harmful impact on the non-aeronautical business. This is because the notifications become annoying, which then will decrease the interest in the non-aeronautical offer.

However, this scenario seems possible to avoid, by focusing on the control that the travellers hold. The traveller needs the feeling of being in control while going through the airports shopping area. This means that customization is believed to be a central aspect of implementing beacon. Letting the customer choose, which product categories or stores they wish to be notified about, could for instance be one way to do it. This is already a possibility with the current beacon technology (Emplate, Shoppingcentre og Cityforeninger, 2017). It will make it a feasible way for the traveller to be more in control with his or her decisions at the airport. It will help the travellers to select amongst the relevant offerings, and it is therefore believed that beacons won't result in uncontrollable noise for the travellers.

### **7.3.2 The use of data and privacy**

Another aspect that it is important to discuss is the use and privacy of the data collected through beacons. It is on the one hand a great tool for CPH Airport to collect data about the travellers. It can tell what route the traveller takes through the airport, what offers different travellers use etc. Associate professor Per Østergaard Jacobsen from Copenhagen Business School (CBS) has described the use of beacon technology as *"A simple and easy solution, which gives valuable information about customer behavior"* (Emplate, Shoppingcentre og Cityforeninger, 2017). The great data source that the beacon technology can become is believed to be one of the key benefits of it. It not only gives a deeper understanding of the travellers, and enables more relevant offers to be sent to them. Furthermore, it also seems to help with the internal management of the space in the airport. For instance it seems to make it easier for CPH Airport to identify the busiest areas/stores in the airport when fully implemented. That could help identifying if the rent should be adjusted in certain places e.g. if a place is a lot busier than expected and the rent therefore could be higher.

However, there seems to be a risk associated with collecting all this data, and that is the security of the data. The implementation of beacon technology will not result in any optimization of the non-aeronautical business, if the travellers are too concerned about what the data will be used for. One could argue that the concern is too great for the travellers, and that they won't desire to use the beacon technology. A study shows that 62 percent of the Danes either greatly or to some degree are concerned about private companies collecting private data about them (Dansk-IT, Ni ud af ti tror de bliver overvåget, 2015).

It is expected that some travellers will not want any data collected about them, due to the concern about their privacy. However, a majority is believed to see it as a useful tool, which can be a gain for them. Especially

by communicating how they have to give permission, that they will be in control, and that it will give them relevant offers. It is for instance important to communicate that the traveller is the “owner” of the data collected, and that it can be deleted if they desire it. It is furthermore important to stress how it is beneficial for the travellers; such the beacons will help sending more relevant and interesting offers.

### **7.3.3 The innovation depends on the partnerships**

Another aspect that is important to discuss is the implementation of the beacon technology. The innovation seems ideal, as it is a way for CPH Airport to take advantage of the core competence, about using digital solution. However, one could argue that the partnerships could prevent the implementation. This is because it is necessary to get the stores on board, before the innovation can become a reality. CPH Airport can coordinate the project, but it depends on the stores’ willingness to use beacons. If they reject the idea, then no one will for instance send notifications, which will limit the value that the travellers get from signing up. One argument for why the stores would reject the innovation could be that it is not a part of their current strategy. This is believed to be a potential problem for implementing beacons, because it can make it harder for the stores to see how to implement it or how it creates value.

Therefore, it is important to sell the idea to the stores in the airport, by telling how it can be beneficial, and how it can be done. A key selling point for the stores is believed to be how beacons merge a physical store with technology. Like associate professor Jacobsen says “*...an innovative solution to one of the greatest challenges for retailers – a new form of advertisement that can create generate more traffic in a store*” (Emplate, Shoppingcentre og Cityforeninger, 2017). Within this, there also lies a possibility for new shops to become relevant for the traveller. A notification can be a unique way for a store to get the attention from the travellers.

## **7.4 Automation**

Automation of the non-aeronautical business is believed to be another area, which can create a stronger Fit with the chosen segment.

Findings from analysis show that the automated solutions are much appreciated by the segment. However, they mainly concern the aeronautical business, such as automated check in. This creates an opportunity for CPH Airport, where it can try to automate the non-aeronautical business experience. This is believed to further strengthen the existing Fit that has been identified, between the segment and automated solutions. An automation of the non-aeronautical business is believed to fit the characteristics of the segment about being efficient and independent.

Automated retail machines are the suggested innovation, which CPH Airport should try to develop in order to automate the non-aeronautical business. An example of an automated retail machine is seen on the picture

below. They are designed so that consumers can purchase products on their own, and can be placed almost anywhere. They are typically equipped with a touchscreen interface, and an automated robotic dispensing technology, which deliver the purchased product (Plexus, Automated Retail Solutions, 2017).



**Figure 33 - An automated retail machine (Zoomsystems, Clients, 2014)**

The innovation is first of all believed to optimize non-aeronautical business by creating a stronger Fit with the segment. This is believed to create an increased will to do shopping, since it first of all is an independent way to shop.

The technology allows the travellers to do the shopping on their own, by getting the product with just a few clicks. The inter-personal relations will be cut, but that seems to fit well with the segment, as findings show they prioritize independency over personal service. This is believed to make shopping of some items, such as food & beverages and electronics, seem more tempting, as it is something they can control completely.

The automated retail machines are also believed to deliver a quicker service, which fits well with the segments desire to be efficient. They can immediately get the product on the go, and without having to interact with anyone. The quickness of the services is also believed to make it seem less stressful, which is another important customer job that the automation can help solve.

Another way the innovation optimizes the non-aeronautical business, is that they can be located almost anywhere. This creates an opportunity to have more selling outlets, which presumably will increase the sales in the airport. It can for instance be used to create sales in less populated areas of the CPH Airport. Here the machine can be a simple and cheaper solution, as it will not require sales personnel etc. Furthermore, the machines are open 24/7, which is another optimization in the non-aeronautical business, as it can create sales revenue at night when the stores are closed.

#### **7.4.1 A new way of selling**

It is a big structural change to automate a business. One concern behind the initiative is that it could create a more boring airport, where many stores could chose to only sell through self-automated machines. That

could be because of the advantages that the machines can give retailers. They can cut down on labour cost, expand opening hours, reduce the risk of theft and need a smaller space. It would for instance mean no browsing in stores, as everything will be limited to what's in the machine.

This is believed to be a negative consequence for the segment, as they want to have something to do with their buffer time. One could furthermore argue that the automated retail machines are threatening rental income for CPH Airport. This is because of how they require less space, and is not requiring a store location. This would make the innovation a threat to the existing business model, and therefore also an irresponsible initiative.

However, this scenario seems unlikely, as the analysis shows that the airport is a lucrative space for most retailers. Airport stores seem to be great showrooms for a lot of brands, and therefore not something they will replace with a automated machine. It is two completely different shopping experiences, and it is important to remember that findings show other segments highly value shopping in CPH Airport. Therefore, the automated machines could be a supplement to the existing stores, instead of a replacement. It is a way to specifically address the behaviour of the identified segment, without changing the traditional stores, which offers a more traditional customer service.

A kiosk could for instance use it as quick self-service solution, which would hold most popular items. This would allow the traveller to either quickly purchase the essential on their own, or going to the store for more traditional shopping. This is seen as an advantage for the retailer, as it will have two different types of outlets, which match different needs from the segments. Furthermore, CPH Airport would still have the rental income, and the automated retail machines are therefore not believed to be an irresponsible initiative.

#### **7.4.2 What products to offer**

Another aspect to discuss is what products the machines should offer, and the readiness of the travellers to use them.

The use of automated machines would have to be discussed with each store, as they operate independently of each other in the airport. It raises the question of which stores to address, since it does not seem equally relevant to all stores. Some offers just don't seem to work with automated machines, for instance purchasing clothes. This is believed to be something that most people want to try and return easily, which is not possible with the automated machines. Therefore, not all stores should be addressed with the initiative, but only those stores that have products that match the concept of the automated machines. This is considered to be stores with products that are one size fits all, not too expensive, and that do not require personal assistance.

One size fits all is important, because it should make the buyers less concerned about returning the product, as they know they will fit. The price level is important, since it could seem scary to pay a lot of money without for instance holding the product. A fear could be that the machine fails to hand out the product, and

there is no assistance, which creates a stressful situation. The product should be standardized, so that the consumer can decide what to purchase with help, since the machines do not offer any personal assistance. One product category that seems to fulfill these three criteria is food and beverages to go. This could for instance be either be a quick checkout solution outside the store, with the most sold products that travellers quickly can purchase on the go. It could also be an instore solution in the TAX FREE area. For instance selling the perfumes in the automated machine, after the traveller have tried enough in the store.

It can be questioned if CPH Airport should allow brands without a store in the airport to have an automated machine at the place. On the one hand it is a way to offer a broader selection to the travellers, which is an optimization for the travellers. The increase in outlets will create a greater competition, which could lead to better offers for the travellers. However, this increased competition is assumed to upset the existing stores in the CPH Airport.

The electronics store Capi would probably get upset if Elgiganten were allowed to sell different types of products in a machine, such as headphones at different price levels.

It could be seen as unfair competition, as Capi has to pay for rent, labour in the store etc., while Elgiganten would not have the same expenses. Therefore, it is important that the advantages that automated machines create are thought through. It might be beneficial for the travellers, but might potentially also harm the business environment in the airport, where some stores get upset about uneven competition in CPH Airport.

One solution for this is believed to be only to allowing the existing stores in CPH Airport to have automated retail machines. This will make sure that all operators of the machines compete on a similar basis, and should avoid confrontations with stores in the airport.

However, it is important to remember that it is up to CPH Airport to assess what is the most optimal for the non-aeronautical business. This means worrying about what creates the best revenue stream for CPH Airport, and not what is optimal for one store. Nevertheless making it lucrative for stores to do business in CPH Airport is seen as crucial for CPH Airport, since it affects how much rent that can be charged.

This is why a slower implementation would be good at the beginning. This allows seeing how travellers, and especially the chosen segment, perceive the machines and will not disrupt the current business in CPH Airport too much. Then over time, it can be considered if external retailers should be included.

## **7.5 CPH Advantage**

Digitalization is believed to be key for optimizing the non-aeronautical business. Therefore, it is interesting to discuss CPH Advantage, which is one of the current attempts to digitize the non-aeronautical business.

It is an initiative that currently is struggling, as described earlier in the thesis. It is only a proportion of the CPH Advantage members, who are attracted by its offers. An explanation for this seems to lay in the characteristics of the different segments. The identified segment does for instance not seem to fit the concept of CPH Advantage. The point system just doesn't seem to create a customer gain, as it is not meeting the segment's needs of being efficient and independent. Therefore, there seems to exist a lack of Fit between CPH Advantage and the relevant segment.

One could argue that it is important to remember that other segments exist, and that they respond more positively to CPH Advantage. It is a loyalty program that is not made for the efficient travellers in mind, unlike the suggested innovations in this thesis. However, what generally is believed as critical about CPH Advantage is that it builds on a typical earn and burn concept. This concept does not seem to consider the business context that CPH Airport creates.

The points system is not believed to be relevant for most travellers, because the points seem too hard to collect. A person would have to travel very often, and purchase a lot in the airport, in order to collect points. In comparison, the Danish retailer Matas has an app-based loyalty program with a similar point system. This has turned into a great success, and it was in 2016 awarded the best loyalty program in Scandinavia (Matas, Matas hædret for kundeklub, 2016).

The big difference between the two programs is believed to be the relevance of the points. People can shop in a Matas store a lot easier and more often, compared to shop in the airport. It is valuable for the customer to get points for the products they use everyday. On the other hand the purchase frequency in the airport is just too low for a lot of people, which makes collecting points irrelevant. It is difficult to say if CPH Advantage should stop its point system, since we do not have full information about the program.

What is more interesting to examine is the digital platform that CPH Advantage creates. It could be used to implement the beacon technology. That requires more technical knowledge to know how this specifically can be done, and if it creates any technical problems. However, the following will discuss how CPH Advantage could work together with beacon technology.

CPH Advantage has already been launched, and it is collaborating with most of the stores in the airport. This means that there already is a contact to the stores, which is a benefit for developing the initiative. This will make it easier to contact the stores, and convince them to join the initiative.

Another benefit is that it CPH Advantage creates an opt-in mechanism, where the user sign up and give permission to receive offers through beacons. Furthermore, it creates a platform where each customer can manage his or her account e.g. what type of notifications they want to receive. This is especially important,

because customization is believed to be crucial for avoiding the beacon technology to create noise for the user.

It can be argued that the incorporation of beacons in CPH Advantage is too different from its concept. This could for instance lead to a concern that other CPH Advantage users would find the beacon initiative disturbing, or very irrelevant. The current users are especially believed to be the experience segment, which was examined in the customer analysis chapter, and is characterized by prioritizing shopping in the airport. However, this concern does not seem relevant. The beacon technology is believed to enhance CPH Advantage for more than just the chosen efficiency segment. It could for instance create a curiosity among those, as beacons become a way for them to discover the airport shops' offers. Therefore, the beacon technology seems to be a way to improve the offerings of CPH Advantage.

## **7.6 Brands in CPH Airport**

The identified imbalance between price and quality that the segment experience, is a crucial to address for optimizing the non-aeronautical business. It is a customer pain that reflect dissatisfaction among the segment, and that is believed to be harmful for creating a stronger fit between CPH Airport and the segment. The optimization is believed to be possible through product innovation, which is about understanding unmet needs of the customers, in order to improve the market offering (Aaker & McLoughlin, 2007, p. 195).

The needed product innovation for addressing imbalance between price and quality is believed to be an increased emphasis of brand offerings in the airports value proposition. CPH Airport needs to ensure that it offers brands in the airport can deliver a quality that is worth the money, which customers generally feel they receive a good experience from.

This means that CPH Airport should focus on establishing and developing well known brands in the airport, which are associated with quality, instead of for instance establishing no-name places, such as the existing buffet area etc.

Findings from the analysis indicate that it is really critical, when the segment purchases something they feel is relatively expensive, and it then does not fulfill the expectations.

Findings furthermore show that well-know brands such as Starbucks, Joe and the juice etc. are believed to help prevent these situations from happening. This is believed to be because the brands create a greater predictability about what to expect, as people know the brands and what they stand for. It thereby allows the customer to better assess the balance between the price paid and quality expected.

The intention behind the initiative is to create a stronger fit, by trying to accommodate the experienced customer pain. This is done by, trying to make the segment feel there is greater predictability about the quality, and a greater value from the money spent.

This will then optimize the non-aeronautical business, as the segment is believed to feel less reluctant about spending money in the branded places, and feel there is less of a gap between price and quality.

It is believed to be important not to give in on price, by creating offerings with a lower price point. It would have serious consequences for the non-aeronautical business, and not believed to be the right way to optimize CPH Airport's non-aeronautical business. It is something that will be elaborated later on.

The relevancy of the brands is first of all something that is important to be aware of, when emphasizing brand offers in CPH Airport. This means that the brands have to go well with the characteristics of the segment, such as efficiency and not too expensive. Therefore, the focus will be on food and beverages offerings, which can be bought and consumed easily on the go, instead of e.g. expensive clothing brands. This is supported by the findings, which indicate that certain things are just not relevant for the segment when being in the airport.

One could of course argue that the goal with emphasizing brands in the airport then should be to change the segments purchasing habits, so they e.g. start buying clothes. However, the analysis just show that it doesn't fit their mind-set in the airport, and it seems to go against their core characteristic as an efficiency traveller. Therefore, the focus on brands should for the chosen segment concern food and beverages offerings, which are relatively affordable, and can be bought and consumed more easily.

The focus on food and beverages also seem like a very important focus area for CPH Airport, as it is a product category that cannot be purchased online, but instead has to be consumed in the airport. This means that it is not threatened by the increasing online sale, which has been identified among the chosen segment. Furthermore, food and beverages also seem to be an essential area to focus on, as the findings indicate it is an area where the imbalance between price and quality quickly can arise.

The control that CPH Airport has in regard to the products that the customers end up buying is essential to understand, for why branded offerings are seen as a solution. The airport is not directly in control of the quality of the food or beverage, which instead is controlled by the individual stores in the airport. This means that one essential way for CPH Airport to ensure that the offered value proposition matches price and quality is by controlling which stores are operating in the airport. Therefore, getting well-know brands with a certain quality level become a way for CPH Airport to improve the experienced quality, and help creating a Fit between value proposition and the segment.

It is difficult to say exactly which food and beverage brands that should be taken in, since that requires more data about the traveller's preferences. CPH Airport conducts more than 100,000 customer surveys each year,

which then are used to develop the store offerings in the airport, among other things (CPH Airport Annual Report 2015, 2016, p. 29).

### **7.6.1 Adjusting quality instead of price**

The experienced imbalance between price and quality is believed to basically have two solutions for optimization, where either one of the two variables are adjusted.

One-way is to emphasize the brand offerings in the airport, which the customers associate with quality products. This means not lowering the price point, but rather to ensure that the quality is on point and predictable for the customers, in order to make price and quality match.

The alternative would be to have store offerings with lower prices, which should fix the perceived gap between price and quality, as the lower prices should lower the expectations for the quality.

One of the main reasons for focusing on brands and the quality, instead of offering a lower price level, is because of the scope of CPH Airport business.

Offering food and beverages at a lower price point seems like the quick fix, when it comes to fixing the experienced gap between price and quality, as well as increasing the satisfaction of the segment quickly. The segment is relatively price sensitive, and is therefore believed to appreciate offers with lower prices, as well as feeling less concerned about the quality when they pay less.

However, this is also believed to be a short-sighted initiative, which is not optimal for optimizing the non-aeronautical business in CPH Airport.

It would first of all not take advantage of the locked-in effect, which occurs in airports after the security check, where the travellers have to stay in a certain area of the airport. It might seem a bit cynical, but it is a unique opportunity for non-aeronautical business, which low prices would not take advantage of.

Findings from the primary data for instance shows that the majority of the respondents are not concerned with saving money when being in CPH Airport (see Appendix 8). Furthermore, statements from the focus group support that they worry less about their spending in the airport, because they are in a “vacation mode” where saving money is less important (Focus group, 2017, min. 19:50).

Therefore, it is believed to be best to focus on the quality of the offerings, instead trying to offer a low price. The segment seems willing to spend some money, as long as the quality is worth the money. The brands can help them lower their guards, by making them feel more sure about the quality to expect from their money. It is about taking advantage of the fact that the travellers don’t really have any alternative for food and beverages, by not offering anything cheap, but instead with something tempting they would like to buy when they are locked-in.

Furthermore, it is important to be aware of the other segments in the airport.

Lowering the price might solve the segments customer pain regarding price a quality, however it is not believed to be a good solution financially.

The identified segment is not believed to be the biggest spenders in CPH Airport, as 48.9 percent spend between DKK 51-150 and 42.4 percent spend between DKK 1-50 (see figure 25). Therefore, it is important to not lower the price level to satisfy one segment, as there are others who are believed to be willing to spend more money. This dilemma can be explained by the consumer surplus. If there for instance is a café with a considerably lower price, then it opens for the opportunity that lot of travellers would go there, and thereby not pay the higher price they otherwise would have been willing to pay. Therefore, it is important to keep the price level, as it is believed to create an overall small consumer surplus, while the identified customer segment still seem willing to spend money, as long as the price matches the quality.

### **7.6.2 Bargaining power**

The bargaining power of suppliers is something that is relevant to discuss, when increasing the emphasis of brand offerings in the airport. The bargaining power of the suppliers for the non-aeronautical business is currently believed to be low to moderate, but one could argue that the initiative would change that. This is because the larger brands become more essential for the operation of the non-aeronautical business, as they will be responsible for more of the business in the airport. An example of that is Starbucks that today has three stores in CPH Airport (CPH Airport, TAX FREE & shops, 2017).

This means that if Starbucks decide to leave the airport, e.g. due to a disagreement with CPH Airport, then it is three rental spaces that have to be replaced, instead of one place. Therefore, the more stores one brand gets in the airport; the better is the bargaining power of the brand, as it is believed to be harder to replace.

One could fear that the initiative worsen the weakness that CPH Airport has from it partnerships. If a brand over time becomes the key partner for non-aeronautical, then it potentially could create an equivalent situation as seen in the aeronautical business. An example to support this view could be that a strong brand with a lot of stores could complicate new initiatives, e.g. as getting new brands to the airport. This is a bit like when SAS can complicate the development of the aeronautical business, e.g. the DKK 20 billion expansion of CPH Airport.

However, it is important to remember that the airport has been analyzed to be a lucrative space for most retailers, which generally gives CPH Airport a strong bargaining power. This for instance makes it seem less likely that a brand would just leave the airport, as it will leave the window open for a competitor to enter CPH Airport. This means that the concerns are not believed to be too big, or something that CPH Airport cannot control, especially if they are aware of the composition of brands in the airport.

## 7.7 The linkage between the aeronautical and non-aeronautical business

An important finding drawn from the analysis is how the non-aeronautical business is linked to the aeronautical business. This is important to shed light on, as elements related to the aeronautical business can affect the suggested initiatives for optimizing the non-aeronautical business.

The DKK 20 billion expansion of CPH Airport is especially important to bring up in that regard. It seems likely to create some stressful situations for the segment. CPH Airport have said that the expansion will affect the travellers, for instance when it is in the passenger area between finger A and B (CPH Airport, *To byggerier til 1,2 milliarder kr. skal skabe mere plads til passagerer og fly*, 2017). Another area that is affected by the expansion is the security check, where delays are expected to occur while building (Politiken, *Ombygning i Københavns lufthavn kan give trængsel i sikkerhedskontrollen*, 2017). This is especially believed to be stressful for the chosen segment, as it will be hard to go through the airport as efficiently as before.

Stress among the travellers seems to both have negative consequences for the individual traveller, and especially for the performance of the non-aeronautical business.

It is an unpleasant mental state for the travellers that they wish to avoid. What especially seem to make stress feel unpleasant, when traveling through an airport, is that if you miss the flight then the ticket is lost. This translates directly to the very harmful effect that stressed travellers have on the non-aeronautical business. Findings from the analysis show that stress prevents any interest in engaging with the non-aeronautical offers. As Interviewee 2 states: *“A stressed passenger rushes straight to stare at an information monitor and nothing else”* (Interviewee 2, 2017 min. 14:50). This means that stress can make all other innovations to improve the non-aeronautical business irrelevant. The segment is not interested in checking an app about where to eat, if they are stressed about getting through the airport in time.

This shows that it is important to understand how the aeronautical and non-aeronautical business is connected. Even though the focus of this thesis might be on the non-aeronautical business, then the suggested initiatives are still affected by elements of aeronautical business.

However, it is important to say that the expansion of CPH Airport is a necessary expansion, as it is perceived as a long-term solution for creating a less stressful travel through CPH Airport. As there has been mentioned in the analysis, a massive increase in the number of travellers in CPH Airport, and that is only expected to keep increasing (CPH Airport Annual Report 2016, 2017, p. 21). Therefore, it is believed to be the right initiative that will improve the travel experience, and create a less stressful travel once it is done.

It is important for CPH Airport are aware of the potential negative effect it has on the non-aeronautical business, and that it makes an optimization in relation to the chosen segment harder, when looking at the short-term.

## **7.8 Dan Roam's good-luck coin**

Dan Roam's good-luck coin and its six sides, as described in figure 8, will now be used to sum up the discussion (Roam, 2009, p. 65). The framework will give a possibility to see which types of strategic issues CPH Airport can run into in optimizing the Fit for the relevant customer segment. The managers that holds the responsibility in the process will also be mentioned. It will make it possible to further discuss, whether the strategic choices that are suggested in this thesis are the right pathway to follow.

### **Who and what**

First, the responsibility structure for CPH Airport's management must be set, so each executive knows his or hers role in implementing the suggested implementations.

For CPH Airport to implement the optimization possibilities, the management has to get acceptance from the executive management and higher up the hierarchy. CPH Airport's CEO Thomas Woldbye is the individual who comes up with the strategic guideline the company has to follow, and the one who reports to and gets acceptance by the board and owners. He is the essential link between the organization and the owners. By being the only member of the executive management level of CPH Airport, he has a huge responsibility in getting strategic initiatives implemented in the organization, and needs to get the owners' accept of them. Also, if he does not accept a strategic initiative, it will most likely not be presented to the owners or implemented in the company.

The chief customer officer Henrik Peter Jørgensen has the responsibility of keeping all of CPH Airport's external relations in check. In other words, he must make sure that the customers and partners are happy with the company. He is an essential figure in keeping a good status for the company amongst the external partners. It is up to him to act if a customer is unhappy with a new initiative. The CFO then has to see if the company has the funds to meet the customer's and partner's demands. He has to check if the investments and strategies initiatives are profitable. He can shut funding down for a project, if it is not seen as benefitting CPH Airport. A project can also be shut down by the CFO if it hurts one of the airport's key partners financially.

The chief commercial officer is the one who more directly has to sell CPH Airport's products and services to the partners, when it comes to both B2B and B2C. He is an important figure in both selling the ideas to the relevant customer segment and the shops at the airport. The CRM-manager reports to him. Regarding CPH Advantage, e-commerce and beacons, it is up to the CTO to make sure that the technologies can comply with

the airport's IT-systems. A good cooperation between the CTO and CCO is essential in getting the digitalization process of the airport to be a success. The IT-systems must work, but they also need to be properly marketed so the travellers can see the benefits of them.

A different aspect for CPH Airport in distribution of the responsibility is that they depend highly on their partners. It is up to the individual shop whether they want something implemented on their own area. That brings up a barrier the management has to cross to fulfill the airport's desired strategy. If the airport owned all of its shop, it would have better control over the design and offerings of the shopping area.

### **How much**

With the managerial framework presented, CPH Airport's strategic issues and possibilities can now be taken into discussion.

First of all, CPH Airport's management has a strong economic foundation of financial capabilities to invest in growth and innovation. CPH Airport had a net profit of close to 1.3 billion Danish kroner in 2016 (CPH Airport Annual Report 2016, 2017, p. 13). Within the profit, there is a surplus to invest and expand the non-aeronautical business. Their 20 billion Danish kroner expansion in their Terminal 3 is a proof of the company's investment possibilities. The parts of the non-aeronautical business this thesis focuses on is a small part of the company's business. Changing structures in the shops and the TAX FREE area will not highly affect the other parts of the non-aeronautical business and the aeronautical. The aeronautical business is the biggest income source for CPH Airport (CPH Airport Annual Report 2016, 2017, p. 36). It will most likely remain the same if for instance the airport's e-commerce design was changed. It is up to the company's CFO too see if they have sufficient funding for different initiatives.

### **When**

The most urgent problems to fix for CPH Airport for the relevant customer segment, is to change their view of the match between price and quality of the offers and make their time "buffer" more active. The relevant traveller wants to be active, while at the same time he or she does not want to spend too much. Attractiveness needs to be implemented in the shopping area of the airport, and the digital services that interacts with it. The suggested implementations for optimization need to be profitable for both CPH Airport's own and their shop tenants' business models.

### **Where**

It is always a question whether a company is moving in the right direction, when implementing a new strategy. Following the customer-directed strategy they introduced in 2010, CPH Airport has experienced a growth in profits and customer satisfaction (CPH Airport, New Benefit Programme, 2011). Based on our findings, the chosen relevant customer segment seeks improvements in CPH Airport's shopping area. The

relevant customer segment's characteristics and behaviour are found in a large part of the demographic going through the airport (CPH Airport Annual Report 2016, 2017, p. 28).

### **How**

As mentioned in "How much", changes in the airport's shopping areas, which is under non-aeronautical business, will not have a huge effect on the income from the aeronautical business. CPH Airport has to cater for the customer groups that bring in the highest revenues to the company.

A current change is taking place in CPH Airport's aeronautical business is a factor that may affect the customer experience of the relevant traveller.

Expansions and developments in Copenhagen Airport's Terminal 3 will provide some tighter space and longer lines for the travellers (Politiken, Ombygning i Københavns lufthavn kan give trængsel i sikkerhedskontrollen, 2017). This may have a negative effect on the customer satisfaction in the development period, as travellers could experience the prioritized infrastructure-quality is declining. Tighter spaces and longer waiting times can also give the travellers the sense of stress they are trying to avoid. The suggested implementations will be affected by the development period of the expansion. Travellers will not get through the airport at the speed they desire, IT-equipment might experience technical difficulties and services might be hard to offer before after the new terminal is finished. It is up to CPH Airport to brand the development to be a sign of a positive future for the airport with new possibilities, so the travellers not only get the experience of being annoyed of the current situation.

### **Why**

The suggestions for optimization in this thesis, is within the analytic conclusion that CPH Airport is a well-driven company. Optimization is suggested in the B2C areas the company already focus on. It is believed that these areas may be improved, without the changes hurting the airport's core business and its relationships with its aeronautical and non-aeronautical partners. CPH Airport can implement strategic innovation, without having to destruct its current business structures. The effects the suggested implementation can have on other user types and travellers in the airport will be further discussed in the next chapter.

## 8. Further research

To broaden the research of this thesis, the strategic innovations suggestion's effect on the other user types could be an object for examination.

An interesting perspective would be to examine how CPH Airport's three other user types will react to the initiatives aimed for the efficient traveller's behaviour. Other users' travel value chain could be interrupted by the digitalization suggestions presented in this paper. For instance, beacons might be not pleasant for the experience travellers, who seek human interaction to guide them through the airport's shopping area.

Another interesting aspect for further research could be to work with the other user types.

This could examine how CPH Airport could optimize the Fit, regarding how the characteristics of other segments could be accommodated.

To further analyze the perspective of how different users and markets of CPH Airport are affected by strategic innovation initiatives, Derek F. Abell's theory of strategic windows can be a research framework. Abell believes that only a company that is flexible, and seeks answers in its forever-changing environment can create an organization that uncovers opportunities in the market (Abell, 1978). Those opportunities are what he calls strategic windows. They only appear when there is a proper fit between the market and the organization's competences (ibid.). In that sense, Alexander Osterwalder's Fit between a company and a customer segment arises when a strategic window is open. Abell could be a supplement to Osterwalder and business modelling.

The management of CPH Airport's current success with their strategic formula is due to how they have analyze their market, competitors and users. Through that, they found the market trends they had to follow to stay at the top of the competition.

Abell identifies four major factors that influence a change in a market environment (ibid.). Those four are emergence of new market space and demand, disruptive technologies, shifts in user patterns and changes in channels and distributors.

All of Abell's factors are some the management of CPH Airport has had to act upon within the last couple of years. Implementation of strategic innovation initiatives has been the way for them to cope with the change.

## 9. Conclusion

This thesis examines how the business model for CPH Airport's non-aeronautical business can be optimized. The number of air transport passengers has increased rapidly over the years. This is especially interesting for the non-aeronautical business of an airport, as it creates the basis for selling more in airport stores, higher demand for parking etc. CPH Airport emphasizes this importance of the growing number of passengers, and the non-aeronautical business, which it states as key drivers its current success. However, the non-aeronautical business also seems challenging CPH Airport, since for instance the revenue has decreased per traveller in the TAX FREE area and other stores. Therefore, it is essential to have a strategic focus on optimizing the offered value proposition in relation to the needs of the travellers, in order to optimize the non-aeronautical business.

Alexander Osterwalder's business model theory is used as a guideline to examine the relationship between CPH Airport's products and services and its customer segments. The strategic market management framework developed by David A. Aaker and Damien McLoughlin is implemented. This covers the external opportunities and threats, as well as internal strengths and weaknesses.

Strategic initiatives for the airport to implement to its business are suggested in this thesis. Dan Roam's good-luck coin is presented to give an overview of which executives that has the responsibility to implement the initiatives. This gives CPH Airport a possibility to act on this thesis' findings.

The thesis is based on the following problem statement *"How can CPH Airport optimize its business model for its non-aeronautical business?"*. A number of research questions have been added to answer the question.

The recent strategic choices of CPH Airport's management show to have given the company a strong financial stability. In 2016, Copenhagen Airport set a new passenger record with around 29 million passengers. The year's net profit was 1259 million Danish kroner, which is a 16.0 percent increase from the year before. The non-aeronautical revenue increased 2.7 percent less than the aeronautical. CPH Airport's shopping center and TAX FREE area shop brings in the highest non-aeronautical earnings in total for the company. However, they have not increased as much as the other non-aeronautical business areas recently.

The analysis of the external threats and opportunities for CPH Airport shows a number of key factors, which are relevant for optimizing the non-aeronautical business. It shows that the development in technology lead to new opportunities, which can digitize and automate the non-aeronautical business. It is at the same time important to be aware of the political regulations and interference, as it can create challenges for new initiatives in airports.

The competitiveness of the industry for airports' non-aeronautical business is analyzed to be low to moderate. There are high entry barriers that give a limit number of competitors, a lot of retailers want to be located in airports, and the customers are "trapped" after entering the security check. However, there is a threat from online shopping, as it can substitute the need for shopping in airports, and some suppliers can harder to replace.

The external analysis also shows that a specific customer segment creates an opportunity to optimize the non-aeronautical business. This segment is defined as the efficiency traveller, which overall is characterized by wanting to go through the airport efficiently, being independent, and relative price sensitive. It is a large segment, that is believed to make up between 25-35 percent of the travellers in CPH Airport, and is expected to grow more in the future. Other customer segments also exist, but the chosen segment is examined to have the greatest potential for the scope of the problem statement.

The characteristics of the segment create challenges for the non-aeronautical business. This for instance means they don't dedicate time for more comprehensive shopping in the airport. Another critical aspect is that the segment experiences a customer pain, as they experience a gap between price paid and quality received in CPH Airport. These are the challenges that create an opportunity for optimizing the non-aeronautical business.

The optimization should be done by focusing on creating a stronger Fit, by developing the offered value proposition to match the specific needs of the chosen segment.

This means focusing on the digitization and automation of the airport, in order to allow the segments to be more efficient and independent. The analysis shows that the non-aeronautical business has been less digitized, compared to the aeronautical business.

The experienced mismatch between price and quality in CPH Airport means that offering brands become important. It is a way to help the segment with what quality to expect, and thereby help the solving the customer pain.

An important customer job for the segment to be aware of is that they do not want to feel stressed when travelling. Stress is identified to prevent willingness to shop, as it will make travellers focused on just getting to the plane on time.

Less stress creates a time "buffer", which the segment wants to fill out with activities such as shopping. However, it is important the shopping does not compromise their other needs e.g. being efficient. Products like long restaurant stays and trying expensive clothes becomes irrelevant then.

CPH Airport has internal resources that can help the company to optimize the non-aeronautical business for its customers, but it has to be aware of those of its own weaknesses that can hurt the process.

It is a weakness for CPH Airport that the company depends on its partnerships, which quickly can complicate the implementation of new initiatives. Conflicts can for instance arise, if a suggested initiative interferes negatively with a partner's strategy.

CPH Airport's keen focus on strategic innovation creates a strength for the airport, as it creates a more efficient and streamline airport. A successful use and management of digitizing the airport's services, is seen as one of the airport's main competitive advantages.

Three strategic innovation initiatives for CPH Airport to implement are suggested. Beacon technology is suggested as a product innovation for digitizing the non-aeronautical business. It gives push notifications that reminds the traveller of relevant offers at the airport. The product's instant messaging helps to get the attention of the chosen segment, and still allows for a more efficient path through the airport.

Findings of the analysis show that automation of services is much appreciated by the efficiency traveller. For CPH Airport to automate its non-aeronautical business, automated retail machines can be implemented. The travellers can then conduct shopping of their own and not depend on any store employee. The machines can be placed almost anywhere at the airport, and create a basis for more sales outlets.

The need of product innovation is essential to address in order to address the efficiency traveller's customer pain of experience an imbalance between price and quality at the airport. Well-known shop brands are believed to help prevent these situations from happening. They create a greater predictability about what the traveller can expect of his or hers purchase.

Overall, our assessment of how CPH Airport can optimize its non-aeronautical business shows that it needs to differentiate between its customer segments. The efficiency traveller is a segment that is identified as ideal for optimization. This can be done by improving the Fit between the offered value proposition, and the needs of the segment. The task for the airport's management is to create offerings that suits the segment's need of a more efficient, digital and automated journey, with recognizable brands. This creates a basis for an optimized non-aeronautical business of CPH Airport, which should lead to an increased sale per traveller.

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# Appendix

## Appendix 1

### Air transport, passengers carried

International Civil Aviation Organization, Civil Aviation Statistics of the World and ICAO staff estimates.

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## Appendix 2

### Spørgeskema om Københavns Lufthavn

Vi er to CBS studerende som skriver Speciale om Københavns Lufthavne A/S. I den forbindelse er vi interesseret i at høre din mening om at være rejsende i Københavns Lufthavn.

Det vil cirka tage X minutter at udfylde skemaet. Dataindsamlingen er anonym, og vi vil være meget taknemmelige for din hjælp.

1. Hvornår har du sidst foretaget en rejse fra Københavns Lufthavn?
2. Hvor mange gange rejser du typisk om året fra Københavns Lufthavn?
3. Hvilken af de følgende nedenstående rejsende afspejler dig bedst?



**4. Hvor enig er du følgende udsagn, som rejsende i Københavns Lufthavn (På en skala fra 1-5)?**

- Det er vigtigt for mig at få personlig betjening/assistance
- Det er vigtigt for mig at jeg kan gøre tingene selv
- Det er vigtigt for mig at gå butikker før jeg går til gate
- Det er vigtigt for mig at jeg kan være underholdt i tiden op til flyafgangen
- Det er vigtigt for mig at jeg kan slappe af før flyafgangen
- Det er vigtigt for mig at ikke at bruge penge i tiden før flyafgangen
- Det er vigtigt for mig at jeg kan spare tid, og komme hurtigt igennem lufthavnen
- Det er vigtigt for mig at finde de bedste tilbud i lufthavnens butikker
- Det er vigtigt for mig at der er et bredt udvalg af butikker/spisesteder

**5. Hvad lægger du vægt på når du er i Københavns Lufthavn (På en skala fra 1-5)?**

- Afslapning
- Få en oplevelse
- Selvforkælelse
- Shoppe
- Spare penge
- At komme hurtigt igennem

**6. Hvor enig er du i de følgende to udsagn (På en skala fra 1-5)?**

- Opholdet i lufthavnen er en spændende del af selve rejsen/ferien
- Opholdet i lufthavnen er en del som skal overstås hurtigst muligt

**7. Ser du forbedringsmuligheder i følgende områder af Københavns Lufthavn (På en skala fra 1-5)?**

- TAX FREE området
- Udvalg af butikker
- Parkering
- Hilton Hotellet ved Københavns Lufthavn

**8. I hvor høj grad er du enig i følgende udsagn (På en skala fra 1-5)?**

- Pris og kvalitet hænger sammen, på det der udbydes i Københavns Lufthavn
- Prisniveauet i Københavns Lufthavn er generelt for højt

**9. Din overordnede tilfredshed som rejsende i Københavns Lufthavn (På en skala fra 1-5)?**

**10. Hvor meget handler du typisk ind for når du er i Københavns Lufthavn?**

**11. Demografi**

- Køn
- Alder
- Bopæl (samt udland)
- Stilling

**Appendix 3**

CPH Airport calculates their return on assets a little differently. They use a formula with operating profit over loss as a percentage of average operating assets to calculate the return on assets (CPH Airport, Definitions of key ratios, 2015). The calculation is as follows:

$$(\text{EBIT 2016}/((\text{Total assets 2016}-\text{Financial investments 2016}-\text{Cash at end of period 2016})))\cdot 100$$

They calculate with the entire numbers, and not the shortened ones. Therefore, the framework will not give the exact same percentage as presented in the annual report. The method the company use is not the usual calculation method, where it is the net income over total assets (Steensen, 2001, p. 22). The reason why CPH Airport use this method, where they are deducting financial expenses, is that the company wants the comprehensive income statement to be more separated from the overall performance (CPH Airport Annual Report 2016, 2017, p. 68). The comprehensive income shows their return on investments

**Appendix 4**

8. godt nu har vi talt lidt, så vi tager lige en lille øvelse. (MOTIVER)

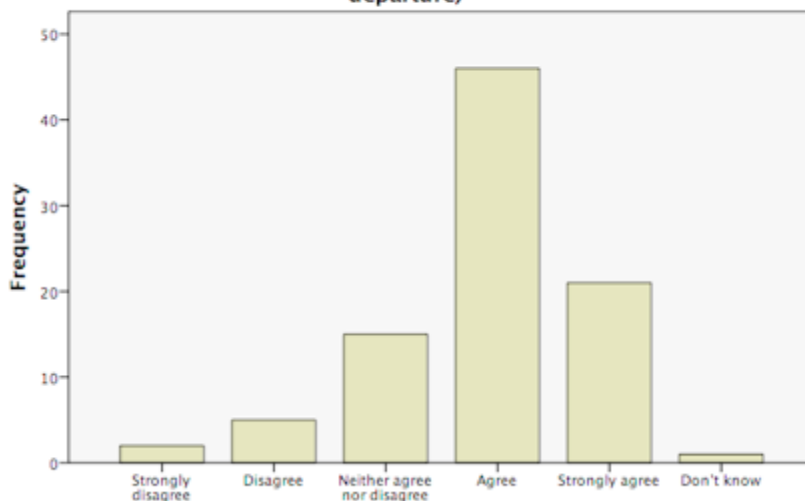
I får udleveret 10 udsagn , hvor i skal vælge de 3 som i syntes er vigtigst når i befinder jer i lufthavnen.

Det vigtigste må i gerne markere med et 1 tal, det andet vigtigste med et 2 tal og det tredje vigtigste med et 3 tal.

- Det er vigtigt for mig at få personlig betjening / assistance
- Det er vigtigt for mig at jeg kan gøre tingene selv, og behøver ikke assistance
- Det er vigtigt for mig at gå butikker før jeg går til gaten.
- Det er vigtigt for mig at jeg kan være underholdt i tiden op til flyafgangen
- Det er vigtigt for mig at jeg kan slappe af før flyafgangen.
- Det er vigtigt for mig at ikke at bruge penge i tiden før flyafgangen.
- Det er vigtigt for mig at jeg kan spare tid, og komme hurtigt igennem lufthavnen
- Det er vigtigt for mig at finde de bedste tilbud i lufthavens butikker
- Det er vigtigt for mig at kunne arbejde og/eller være produktiv før flyafgangen
- Det er vigtigt for mig at der er et bredt udvalg af butikker / spisesteder

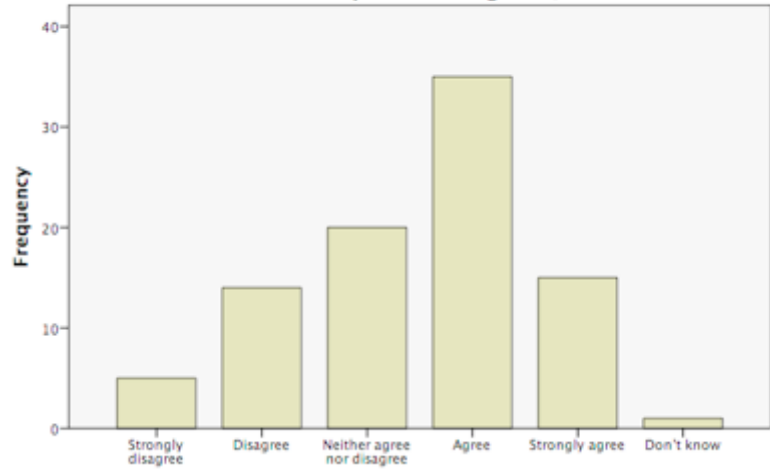
## Appendix 5

To what extend do you agree with the following statement about being a traveller in CPH Airport (It is important that I can feel relaxed before departure)



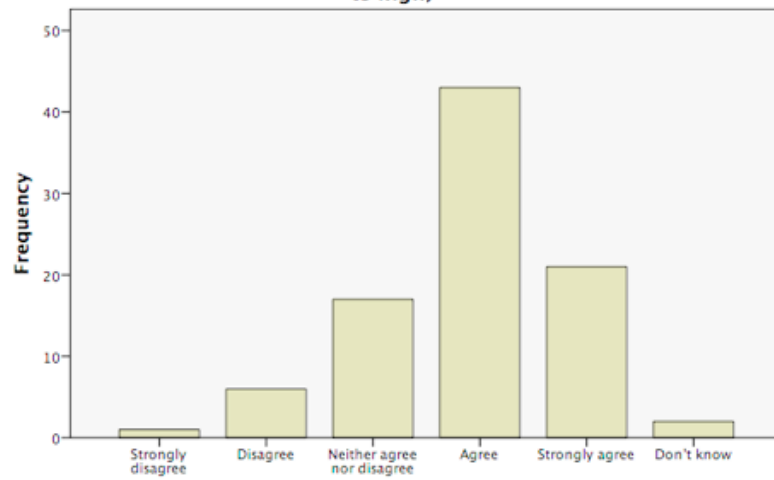
Appendix 6

To what extent do you agree with the following statement about being a traveller in CPH Airport (It is important for me that there is a wide selection of stores and places serving food)



Appendix 7

To what extent do you agree with the following statement about being a traveller in CPH Airport (The price level in Copenhagen Airport is generally to high)



## Appendix 8

What do you prioritize when you are in CPH Airport? (Saving money)

