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The Effect of Customer-based Brand Equity on Willingness to Pay Premium: A comparison between low-cost and flag airlines

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Master in Marketing

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September, 2023

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Abstrato

Esta dissertação examina o impacto de CBBE na WPP dos passageiros para bilhetes de avião, comparando companhias aéreas de baixo custo e de bandeira. A pesquisa é motivada pela natureza competitiva da indústria e pela necessidade de compreender as preferências dos passageiros, concentrando-se na imagem da marca, no reconhecimento da marca e nos atributos do serviço como variáveis-chave que influenciam CBBE. Os dados recolhidos de 489 viajantes foram analisados através de PLS-SEM e MGA, gerando duas análises quantitativas: primeiro o modelo foi analisado para companhias aéreas em geral, de seguida foi realizada uma análise multigrupo de forma a perceber como se comporta o modelo perante faixas de preço. Os resultados comprovam a influência das variáveis escolhidas tanto em CBBE quanto WPP, e revelam distinção entre companhias aéreas de baixo custo e de bandeira. Esta pesquisa contribui para a literatura ao ampliar a aplicação de CBBE aos serviços, especialmente no setor aéreo, e ainda por aumentar o conhecimento existente sobre WPP na indústria de serviços. Além disso, o uso da segmentação por faixas de preço em companhias aéreas oferece ideias acionáveis para a gestão. Em conclusão, esta dissertação acresce ao conhecimento existente sobre CBBE, proporcionando implicações valiosas na gestão das companhias aéreas, e orientando estratégias personalizadas para diferentes faixas de preço.

Keywords: Customer-based brand equity; Willingness to pay premium; Airline industry; Brand image; Brand awareness; Service attributes

JEL Classification System: M31 Marketing, L93 Air Transportation

Abstract

This dissertation examines the impact of CBBE on passengers' WPP for airline tickets, comparing low-cost and flag airlines. The research is prompted by the competitive nature of the industry and the need to comprehend passenger preferences, focusing on brand image, brand awareness, and service attributes as key variables influencing CBBE. The survey data collected from 489 recent travelers was analyzed through PLS-SEM and MGA, generating two quantitative analyses: first the model was analyzed for airlines in general, secondly a multi-group analysis was performed to understand how the model behaves through price tiers. The findings indicate the significant influence of the chosen variables on both CBBE and WPP. A distinguishing factor lies in the differentiation between low-cost and flag airlines, revealing differing impacts on CBBE and WPP. This research contributes to branding literature by expanding CBBE's application to the services, especially in the airline sector. It also builds on existing knowledge of WPP's importance in service industries. Moreover, the use of segmentation for airline price tiers offers actionable insights for management strategies. In conclusion, this dissertation augments the knowledge of CBBE, providing valuable implications for airlines management, guiding brand tailored strategies to increase passengers' willingness to invest in services for different price tiers.

Keywords: Customer-based brand equity; Willingness to pay premium; Airline industry; Brand image; Brand awareness; Service attributes

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Acronyms

CBBE: Customer-based brand equity

WPP: Willingness to pay premium

RQ: Research question

PLS-SEM: Partial least squares – structural equation modelling

PLS-MGA: Partial least squares - multi-group analysis

MGA: Multi-group analysis

CR: Composite reliability

AVE: average variance extracted

HTMT: heterotrait-monotrait

VIF: Variance inflation factor

IPMA: importance-performance map analysis

CMB: common method bias

1. Introduction

In 2019, almost 6 million flights departed from Europe (Pordata, 2022). Almost 39 million if we look at global level (Statista, 2023). The desire to see the world taken away by the pandemic rose the excitement to get back to travelling, helping the industry get back on its feet after terrible losses. Now that flights are being re-established after the Covid-19 pandemic, these numbers are increasing, making the airline industry grow worldwide again. This industry, as we all know, is very competitive. With so many flight routes to choose from, so many schedules and different flight conditions, it becomes vital to understand what passengers value, what makes them choose their flights, and what makes them willing to pay more for the service. To understand this, we first need to focus on how to measure the value customers attribute to a brand/service, which brings us to customer-based brand equity.

Customer-based brand equity (CBBE) reflects the added value of a brand's name compared to an identical competitor's offer (Farquhar, 1989). A brand is said to have positive CBBE when customers react more positively to its marketing stimuli than to their competitors' (Keller, 1993). We can find different approaches to CBBE in the literature. However, for this research, we choose to test brand image (Keller, 1993) (Mourad et al., 2011), brand awareness (Aaker, 1991; Keller, 1993; Mourad et al., 2011) and service attributes (Mourad et al., 2011) impact on CBBE due to their perceived importance in the airline industry. One of the goals for management when investing in performance increases for these variables is to see it impact willingness to pay a premium price, whose impact has also been studied by authors such as Malarvizhi et al., (2022) and Chatzipanagiotou et al., (2019).

Although there is some research on CBBE, its application in service areas is still scarce and open to exploration. For service industries, there is usually more risk adjacent to the purchase (Mitchell & Greated, 1993; Murray & Schlacter, 1990) due to the lack of physical product and its heterogeneity, making the customers more inclined to choose based on the value they attribute to the brand. This makes CBBE a crucial topic in service industries, and the airline industry is no exception. In literature it is not consensual what variables most influence CBBE, allowing for some space to test new ideas. In addition, despite all research on the influence of CBBE on purchase intention, the relation still needs to be explored regarding willingness to pay premium (WPP). This opens the path to new research connecting CBBE and WPP. Finally, considering the aviation industry, there are two separate groups: low-cost airlines and flag airlines. Due to their differences in service level, and the scarce literature on the different impacts of CBBE for different price tier services, this is also a topic to explore and where we can arrive at some interesting findings about this difference, such as the higher impact of constructs for one of the price tiers, and vice-versa.

With these research gaps in mind, this paper aims to explore two crucial research topics. First, we will focus on understanding the relationship between brand awareness, service attributes and brand image with CBBE and its impact on WPP applied to the airline industry, addressing research question one (RQ1). Then, the focus will be on understanding how the model differs between price tiers, in this case, low-cost and flag airlines, to apprehend the conclusions it brings for management.

RQ1: What variables contribute to customer-based brand equity for airline companies, and what is their impact on passengers' willingness to pay premium for plane tickets?

RQ2: Is the influence of those variables on willingness to pay premium different for low-cost airlines and flag airlines?
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To do so, we conducted a quantitative PLS-SEM analyses and a quantitative MGA through the same questionnaire, where 489 respondents who travelled recently were incentivized to answer about an airline company of their choice. Our findings suggest that all chosen variables influence CBBE and WPP, apart from brand awareness, whose impact on WPP was not proven significant. Through IPMA, it was visible which variables have more impact on WPP and which variables perform better in the model, leading us to conclude that CBBE has high performance, however, has the lowest performance, making it the most crucial variables for management to invest in, since it will bring the highest impact. Even though all variables are important, their impact is, as predicted, different between the two price tiers. Through MGA, the model was proven to perform significantly different between the two price-tiers. For flag airline, brand awareness' and service attribute's impact on WPP was not significantly proven, as well as service attributes impact on CBBE. For low-cost airlines, the impact of brand awareness and service attributes were not significantly proven neither on CBBE nor WPP. As for the differences, if for one side for low-cost airlines CBBE's impact on WPP was proven the highest, for flag airlines, brand image showed the highest importance value. However, for both, these two constructs were proven the most important, which agrees with IPMA map for the initial analysis. They also show higher performance values for flag airlines then for low-cost airlines. Thus, this study contributes to marketing research with a validated model of CBBE for the service industry, specifically the airline sector, and as a study of the impact of CBBE's model on WPP for different price tiers.

In line with the aim of the research, this paper starts with a thorough literature review, representing the theoretical background of the study variables, allowing the creation of the research hypothesis and, thus, the conceptual model. Then we focus on the methodology, where the analyses are developed, leading to results interpretation and discussion, with the literature review in mind. Finally, we conclude with the managerial implications and suggestions to enrich future research.

1. Literature review

1.1. Customer-Based Brand Equity

Customer-based brand equity has its origins in brand equity, so to better understand it, first we need to dive into brand equity. Brand equity is a measure of the brand's value, not only for the consumer but also for the company. On the firm's side, brand equity has a financial perspective of what the organization is worth. Higher brand equity can represent lower financial risks, incremental cash flows, higher entry barriers and lower costs in general (De Mooij, 1993, as cited in Mourad et al., 2011). For this dissertation, we will not focus on the financial aspect of brand equity but rather on consumers' perspective of brand equity, which can be conceptualized as customer-based brand equity (Keller, 1993).

Customer-based brand equity represents the added value of a brand to its customers. According to Aaker, 1991, brand equity is a set of intangible assets linked to the brand that adds value to the offered service. For the customer, this added value comes from the desirable attributes of the brand, which are the basis for building an emotional bond (Grapentine & Teas, 1996). We can also see customer-based brand equity as the positive effect it brings on how a consumer reacts to a brand's marketing activities (Keller, 1993). In sum, higher customer-based brand equity translates into a higher perception of brand value for the customer, and it is established when the consumer exhibits brand familiarity and retains favourable, robust, and distinctive brand associations in their memory.

The problem with customer-based brand equity is that its impact variables are not consensual among researchers. In one hand, Aaker (1991) focused on four primary dimensions to define brand equity from the customer perspective. Brand awareness, brand associations, perceived quality, and brand loyalty are at the centre of his research on building the set of assets that constitute CBBE. On the other hand, Keller (1993) defined CBBE as a more straightforward concept, assuming it was influenced mainly by the knowledge structures that form brand image and brand awareness. Keller sees the brand image as the brand associations the consumer holds in memory. Along with brand associations, service attributes were also seen as part of brand image. According to his model, CBBE is a multidimensional structure since there is not a specific number of measures that can capture its essence. These two central models of CBBE have similarities, making it imperative to study the common variables of brand awareness and brand image.

Focusing now on Chatzipanagiotou et al., (2019), he has a more recent approach to be considered, describing CBBE as a process. The process is based on creating value for the customer through the brand itself in a sequential way and based on three blocks: brand building block (BBB), brand understanding block (BUB) and brand relationship block (BRB). This perspective collects in BBB variables related to the essence of the brand. It combines imagery and functional attributes. The focus

of this first block is to create solid foundations for the brand through brand quality, competitive advantages, brand personality, brand heritage and nostalgic elements of the brand. In BUB, the goal is to allow customers to understand the brand and its foundations. Thus, it includes variables such as brand awareness, associations, reputation, and self-connection. Finally, BRB refers to variables that facilitate a relationship between the brand and the customers, such as brand trust, relevance, intimacy, and partnership quality. The idea of this model is that first, the foundations of the brand are created, and only then can customers understand the brand. Once they understand the brand, it is easier for them to create a relationship. Finally, once the relation is set, the customer attributes value to the brand. Thus, CBBE is generated. This model also defends some variables already studied in the previous models, such as brand awareness and brand associations.

Considering the different models studied, and the goals of this dissertation, this research proposal will focus on understanding brand image and brand awareness. Besides, building on existing models, the variable service attributes will also be studied independently from other variables, as it is seen to be of high influence for service areas. Thus, this dissertation will study brand awareness, brand image and service attributes as influential for customer-based brand equity.

Chatzipanagiotou et al., (2019), states that CBBE points to many positive outcomes such as brand preference, positive word of mouth, (re)purchase intention, brand loyalty and acceptance of a price premium, which leads this proposal also to study willingness to pay premium for airline companies as a customer-based brand equity outcome.

1.2. Brand Image

According to Keller, (2002) brand image can be described as the consumer's perceptions about a specific brand, created by the brand associations he holds in memory. Thus, brand associations are responsible for a customer's image of a brand, and their strength, uniqueness and favourability drive a positive brand image, also impacting CBBE (Keller, 1993). Brand associations can be explained through three essential components: brand attributes, brand benefits, and brand attitudes.

Brand attributes consider the service's features, representing everything the customers perceive as being involved in the service offering. They can range from service-related (e.g. features of the service) to non-service-related (e.g. display of information about the service). Brand benefits, on the other hand, relate to the added value each customer associates with the service. Finally, brand attitudes are the evaluation of the service, they often are what drives consumer behaviour (Keller, 1993).

Furthermore, brand image can also be defined as the thoughts, feelings, and attitudes of a customer for a specific brand (Kotler, 2001, cited in Anwar et al., 2011). Brand image differentiates a

brand from its competitors, which helps customers understand their needs and wants regarding the brand (Anwar et al., 2011). Consequently, a more positive brand image leads to more favorable customer attitudes towards the brand (Aghekyan-Simonian et al., 2012).

The significance of brand image in customer decision-making cannot be overstated. Customers often lean towards services with established and positive brand image because it is easier to trust a known brand (Schiffman, et al., 2000, cited in Isyanto et al., 2020). Hence, brand image creates value for the customer experience. This said, it is no surprise that multiple authors, including Keller, (1993), identify brand image as a cornerstone of customer-based brand equity due to its influence on customers' perceptions of the brand. Thus, we can hypothesize that it also applies to the aviation industry, with the following relation:

H1a: Brand Image positively impacts Customer-Based Brand Equity in the aviation sector.

Nonetheless, brand image extends beyond CBBE. As the business environment got more competitive, brand image became a critical success factor, especially in service industries (Huei et al., 2014) such as the airline industry. A superior brand image allows the company to hold and/or improve its market positioning, helping to attract and retain customers (Kim et al., 2008). Brand image has shown to influence customers' attitudes towards the brand; it has proven to impact crucial key performance indicators such as satisfaction, loyalty, and trust (Benhardy et al., 2020), which help reduce perceived purchase risks.

Aghekyan-Simonian et al., (2012) also defends that brand image positively influences purchase intentions by reducing the perceived risk and positively affecting customers' impressions of service attributes, leading to higher price perception. Many authors studied brand image's impact on purchase intention with different purposes and sectors in mind, making this relation a well-studied one (Aghekyan-Simonian et al., 2012b; Benhardy et al., 2020; Lien et al., 2015; Wang & Tsai, 2014). Therefore, if brand image positively influences purchase intention and can lead to higher price perceptions in service industries, we can hypothesize that brand image positively influences willingness to pay premium, specifically to the airline industry, studied in this dissertation.

H1b: Brand Image positively Willingness to Pay Premium in the aviation industry.

1.3. Service Attributes

Service attributes incorporates a broad spectrum of elements defining the service experience. These attributes enclose everything that a service provider offers to its customers, whether tangible or intangible, that contributes to the overall perception of the service. Tangible attributes are related to

physical elements such as facilities appearance, personnel, and the overall service environment. (Nguyen et al., 2018). These tangible attributes can be observed by the customer and play a crucial role when it comes to first impressions. On the other hand, intangible attributes are not related to the physical aspect of the service. They involve other factors such as the perceived quality of service, guarantees, after-sales services and price (Mourad et al., 2011). Intangible service attributes are usually tied to emotional and psychological aspects of the experience, enabling the creation of long-lasting impressions. In sum, service attributes respect every feature of the service that customers encounter or engage with, both tangible and intangible. The impact of these attributes significantly shapes customer perceptions, impacting their behaviour. Some specific service attributes studied for transportation industries include travel times, convenience, reliability, and comfort (Ben-akiva et al., 1985, cited in Lunke et al., 2021). When studying public transportation service quality, also described route characteristics, promotion (which relates to the information about the service available) and complaints management as important service attributes (Lunke et al., 2021).

Each day, passengers have a greater pool of airline companies to choose from, making them more experienced and in search of higher levels of service. This translates into clients being more willing to switch airlines if they are not satisfied with the provided service (Halpern, 2022). Service attributes are crucial to create high levels of service: if the airline has the right service attributes and they are well executed, service levels increase. If passengers demand higher service levels, it means they value these service attributes, making this variable important for an airline company to build brand value. The indicated brings us back to the concept of CBBE. As already defended by Mourad et al., (2011) for the higher education industry, service attributes can be seen to influence brand equity. Thus, we propose service attributes can be interpreted as an independent variable when influencing CBBE and WPP, due to its high value for service industries, and that its influence also applies to the airline industry, following the proposed hypothesis:

H2a: Service Attributes positively impacts Customer-Based Brand Equity in the aviation sector.

Understanding consumers' willingness to pay for improved services is crucial for devising effective strategies, developing new services, and pricing them competitively in the market (Miller et al., 2011). A key aspect in delivering enhanced service lies in the realm of service attributes, as they play a crucial role in shaping customers' perceptions of a brand, particularly through emotional interpretation (Özcan & Elçi, 2020). Service attributes are built upon the foundation of perceived service quality, a factor that has been consistently linked to positively influencing behavioral intentions such purchase decisions (Cronin et al., 2000; Petrick, 2004).

By prioritizing the enhancement of service attributes, airline companies engage in a competitive quest for overall superiority over their competitors, with the ultimate goal of justifying premium pricing strategies. Consequently, this model introduces the following hypothesis to investigate whether the strategy of focusing on service attributes to command premium prices offers strategic advantages to airline companies:

H2b: Service Attributes positively impacts Willingness to Pay Premium in the aviation sector.

1.4.Brand Awareness

Brand awareness represents the extent to which a potential customer can recognize a brand as part of its specific service category (Aaker, 1991) with enough detail to purchase it (Kakkos et al., 2015). Keller (1993) divided brand awareness into two parameters: brand recall and brand recognition, both relating to the strength a brand has in customers' memory, and the tendency of which a brand name comes to mind.

Diving into brand recognition, this term refers to customers' recognition of the brand when exposed to it. It requires customers to recognize correctly that they have heard about the brand (Keller, 1993). Brand recall, however, requires customers to generate the brand name themselves. It requires a customer to remember the brand when given a cue, such as the category or the need it fulfils (Keller, 1993). The importance of these two concepts is relative, and it depends on multiple factor, one of them the purchase decision process. Specific to the airline industry, we can focus on two situations: if the choice of flight is made through online flight search websites or travel agencies, brand recognition might have a higher impact, since it is crucial that the customer recognizes the airline company when the name shows up. However, brand recall has a more significant influence if the choice is made on specific airline websites since it implies the customer knows the airline name during the search, as he needs to look for a specific airline website.

Brand awareness is an essential step in building brand value, being that to choose a brand, first a customer must be aware of it and its services (Gartner & Ruzzier, 2011). It is influential in building customer-based brand equity since only if customers are aware of the brand and the category in which it operates, can they attribute value to it. Thus, we propose the following hypothesis:

H3a: Brand Awareness positively impacts Customer-Based Brand Equity in the aviation sector.

Brand awareness holds particular significance in high-involvement purchases, such as airline tickets, as customers tend to engage in more extensive research and informed decision-making processes. When customers demonstrate a high level of brand awareness, it means they are familiar

with the brand, ultimately reducing their perception of risk associated with the purchase. This improved brand awareness empowers customers to make confident decisions, especially in scenarios where objective assessments offer limited guidance (Lin, 2008).

Research by Radder & Huang (2008) highlights that brands with higher recall or recognition are more likely to be preferred or chosen by consumers. The well-established relationship between brand awareness and purchase intention is evident. However, investigating its connection with willingness to pay a premium adds a new dimension. Thus, within the context of the airline industry, we propose the following hypothesis:

H3b: Brand Awareness positively impacts Willingness to Pay Premium in the aviation sector.

1.5. Willingness to pay premium

Purchase intention is one of the most studied variables regarding consumers' purchase behaviours, and it represents the likelihood of the customer purchasing the service (Wang & Tsai, 2014). It does not translate directly into sales but rather into the intention of buying. The greater the purchase intention is, the lower the chance of the customer changing to a competitor service (Benhardy et al., 2020). Despite purchase intention being the most studied, other vital variables predict purchase-related behaviours, such as repurchase intention and willingness to pay premium. Repurchase intention represents the future intention of purchasing from the same brand/company again (Istanbulluoglu & Sakman, 2022; Yasri et al., 2020), it represents customers' intentions of engaging in further purchases, and so it is an excellent measure of customers' satisfaction with the brand, which makes it essential for marketers to study. Regardless of the importance of purchase intention and repurchase intentions, for this dissertation, we chose to focus on willingness to pay premium, given its importance and relation with customer-based brand equity.

The ability to charge a premium price is one that every brand pursues. Willingness to pay premium represents a client's disposition to pay a premium price for a brand's service (Casidy & Wymer, 2016), it represents the strength of a brand in the industry (Augusto & Torres, 2018). A brand scores high on willingness to pay premium when its customers are willing to pay more for their service than for a similar one (Aaker, 1996). It is essential to understand that willingness to pay premium is a relative measure, meaning that it is relevant even for low-cost brands, since customers can be willing to pay more for a low-cost brand than others (Anselmsson et al., 2014).

This variable is thought to have a central place in branding theories (Anselmsson et al., 2014). Some researchers demonstrated that consumers are willing to pay higher prices for brands they perceive as being of higher value (Aaker, 1991; Porral et al., 2013) and that brand equity influences

willingness to pay a premium price for a brand (Aaker, 1996; Arvidsson, 2006), others stated that customers are willing to pay a price premium if a brand offers unique benefits (Priem, 2007). Thus, willingness to pay premium was the chosen variable to incorporate in this research, as there seems to be a connection between the model variables and willingness to pay premium as the outcome. Considering everything stated in the literature review above, we can also view CBBE as a mediator between the initial variables and willingness to pay premium. Hence, we can hypothesize the following:

H4: Customer-Based Brand Equity positively impacts Willingness to Pay Premium in the aviation sector.

H5: Customer-Based Brand Equity serves as a mediator between Brand Image and Willingness to Pay Premium.

H6: Customer-Based Brand Equity serves as a mediator between Service Attributes and Willingness to Pay Premium.

H7: Customer-Based Brand Equity serves as a mediator between Brand Awareness and Willingness to Pay Premium.

1.6. Understanding brand price tiers for airline companies

For a long time, competition in the marketplace has been defined based on the notion of brand price tiers (Blattberg & Wisniewski, 1989). The aviation industry is no different, it is built for different clients, with different budgets, looking for different service levels. Brand price tiers do not only relate to price differences. Brands in different price tiers also have different quality levels, they can differ in terms of marketing strategies and cost elements (Sivakumar, 2000). For airline companies, it can translate into the service experience offered, such as the service attributes included. We can clearly define two price tiers in this market: low-cost airlines and flag airlines. In the lower tier, we place airlines with typically lower prices and fewer service attributes, where the focus is on offering the central service, the flight, and not the experience and additional commodities of flying. For the higher tier, flag airlines, the focus is not only on the flight itself but also on everything else involved in the service, which translates into a higher ticket price.

The nature of inter-tier competition has become an exciting area for researchers, however, we must remember that different tiers also compete against themselves in unique ways and are compared among similar substitutes (Sivakumar, 2000). As price is a central variable when defining price tiers, and price sensibility changes for different tiers, we begin to question whether the study variables will have the same effect on willingness to pay premium in low-cost airlines and flag airlines. If we think of the study variables, how they are perceived by the customer can also change when thinking of airlines

in different price tiers. The value given to a service can alternate according to the price tier in which the airline is placed. Therefore, in this dissertation, we decided first to study the model for the total market to understand how it behaves for the industry, then focus on understanding if there are differences between the models for both price tiers and how it changes management strategies applied to each of them.

2. Conceptual model

The conceptual framework of this dissertation for customer-based brand equity's influence on willingness to pay premium is based on the model of brand equity created by Keller, (1993). However, there is an added variable introduced based on the literature review, and with the aviation industry in mind, which is service attributes. This variable is thought to be of high importance for service industries due to its impact on customer's perceptions of the brand and their willingness to switch if not satisfied (Halpern, 2022).

This study sets customer-based brand equity as a central variable, since it is the core theme of the dissertation. The model studies the antecedents of CBBE, and willingness to pay premium as one of its favourable outcomes. The study starts with the variables of brand image, brand awareness, and service attributes, that lead to customer-based brand equity. These represent the study's independent variables, which will impact willingness to pay premium for a flight, the dependent variable. The idea is to study if the initial variables are significantly important to build CBBE, and if favourable results in these constructs and, thus, in CBBE, help increase willingness to pay premium for plane tickets.

First, with hypotheses H1a, H2a and H3a, respectively, we pretend to test if the three variables respectively: brand image, service attributes and brand awareness, positively influence customer-based brand equity in the aviation sector. With H1b, H2b, H3b and H4, respectively, we pretend to test if brand image, service attributes, brand awareness and customer-based brand equity affect willingness to pay premium in the aviation sector.

Besides these hypotheses, and since CBBE is the central variable, it was also important to think of this construct as a moderator. If the three initial variables of brand image, service attributes and brand awareness influence CBBE, and CBBE is assumed to impact WPP, then it is expected that the variables impact WPP through CBBE, meaning this variable would also serve as a moderator for this conceptual model. Thus, through H5, H6 and H7 we will study CBBE as a moderator for WPP between, respectively, brand image, service attributes and brand awareness.

If we performed only the analysis of the model for the airline industry, it would already be of interest for literature. However, thinking further on how the industry works and how competition is set for airlines, we found a new topic of interest. The airline industry is marked by two specific brand price tiers: low-cost and flag airlines. We believe the model will perform differently between these two groups, so we will study the different performances for each of them, trying to understand how they behave and what the most significant differences between the two price tiers are. This will allow us to take interpret and apply different strategies for different airline price tiers.

This model, thus, fits the objectives stated for this dissertation, to understand the relation between CBBE and its antecedents, and the relation between CBBE and willingness to pay premium, and to understand if and how the model performs differently low-cost airlines and flag airlines.

Below is the conceptual model used for the present dissertation, as well as the already mentioned hypothesis:

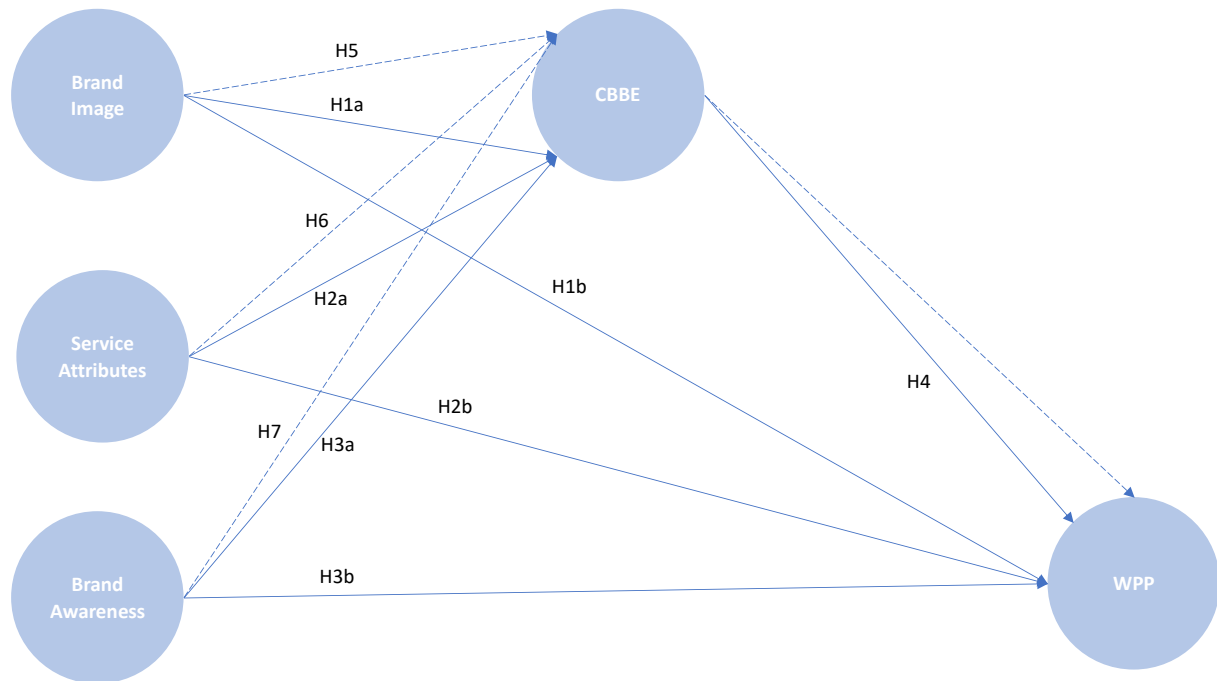


Figure 2.1: Research model to test customer-based brand equity in the aviation sector

H1a: Brand Image positively impacts Customer-Based Brand Equity in the aviation sector.

H1b: Brand Image positively impacts Willingness to Pay Premium in the aviation industry.

H2a: Service Attributes positively impacts Customer-Based Brand Equity in the aviation sector.

H2b: Service Attributes positively impacts Willingness to Pay Premium in the aviation sector.

H3a: Brand Awareness positively impacts Customer-Based Brand Equity in the aviation sector.

H3b: Brand Awareness positively impacts Willingness to Pay Premium in the aviation sector.

H4: Customer-Based Brand Equity positively impacts Willingness to Pay Premium in the aviation sector.

H5: Customer-Based Brand Equity serves as a mediator between Brand Image and Willingness to Pay Premium.

H6: Customer-Based Brand Equity serves as a mediator between Service Attributes and Willingness to Pay Premium.

H7: Customer-Based Brand Equity serves as a mediator between Brand Awareness and Willingness to Pay Premium.

3. Methodology

The study of this dissertation was constructed based on two analyses: Quantitative analysis I and II, in pursuance of both research questions stated in the introduction. The data collection and sample were the same, as was the model.

Planning this study, it was important to focus on how the questionnaire applied could minimize common method bias (CMB). CMB occurs when a part of the study's variance is due to the methods used and not the model itself (Jordan & Troth, 2020). To ensure CMB is minimized for this research, we followed some procedural strategies such as giving the respondents research purpose and instructions for the questionnaire and removing common scale properties by using different types of liker-type scales (Jordan & Troth, 2020).

Thinking of the initially stated research questions, each of the quantitative analysis intends to bring some new insights for one of them, in order to reach the goal of this dissertation. The quantitative analysis performed are as follow:

Quantitative analysis I – partial least squares structural equation modeling (PLS-SEM): The goal of the first analysis is to give an answer to research question one and understand how the variables of the model impact each other. This analysis was created through SmartPLS 3 (Ringle et al., 2015), which allowed us to study what variables had a more significant impact on CBBE and on WPP, as well as the impact of CBBE on WPP. It also granted us with a better understanding of CBBE as a mediator between the initial variables and WPP. This analysis helped to understand the model's behaviour for airline companies, disregarding brand price tiers.

Quantitative analysis II – multi-group analysis (MGA): To address research question two, the questionnaire responses were divided in two groups according to the airline company they were about, either it was a low-cost airline or a flag airline (attachment A). By performing a multi-group analysis in SmartPLS 3 software (Ringle et al., 2015), it was possible first to understand the model behave differently between price tiers, and then to gather some findings on the differences of the model's performance between airline price tiers, in order to understand if the managerial implication the model brings are different depending on either if the airline is a low-cost or a flag airline.

3.1.Data collection and sample

As the target population, this quantitative study addressed people who travelled by plane in the last 24 months in order to collect opinions about airline companies from clients who use the service more regularly. The sample for the study was obtained through convenience sampling, a non-probability sampling method (Aghekyan-Simonian et al., 2012b; Malarvizhi et al., 2022; Sarkar et al., 2021), as an online-based questionnaire (attachment B) disseminated through social media profiles and groups

related to travelling. In the interest of developing and disseminating the questionnaire, a three-step approach was used. First, the questionnaire was constructed based on the literature review with validated scales. Then, it was reviewed by the dissertation supervisor to ensure it met the initial goals of the study. Finally, it was pilot tested by close respondents to clarify any doubts the questions might leave in the target population. It was later disseminated to the general population.

To ensure only answers from the mentioned target were taken into consideration, the first question excluded people who have not travelled by plane in the last 24 months. Thus, from a sample of 577 respondents, 489 were taken into consideration for this research, translating into an 84.7% effective response rate.

Amongst valid responses, 79.8% were female, and more than 80% were from the age groups 25-44 and 45-65, each of them with more than 40% of the responses. When it comes to education, the majority completed a bachelor's degree (52,6%), and 36,6% had incomes between 10 000€ and 20 000€. More information on demographics is presented in Table 3.1.

Table 3.1: Demographic information of respondents

N = 489	Demographic	%
Gender	Female	79,8%
	Male	20,3%
	Other	0,0%
Age	< 18	0,0%
	18-24	11,5%
	25-44	41,5%
	45-64	41,9%
	65+	5,1%
Education	< 9º grade	0,0%
	9º grade	1,8%
	12º grade	17,8%
	Bachelor	52,6%
	Master	27,6%
Yearly	No income	7,6%
Income	< 10 000€	7,8%
	10 000€ - 20 000€	36,6%
	20 000€ - 30 000€	24,3%
	30 000€ - 40 000€	9,2%
	40 000€ - 50 000€	7,6%

> 50 000€

7,0%

3.2.Variables

All variables of this study were measured through existing and validated scales (attachment B), except for service attributes, which, due to the airline industry's unique specifications, were constructed based on exploratory research. For the variable service attributes, we focused on the specificities of the airline industry and on the attributes that allow us to distinguish between different airline companies and could give us insights into differences between low-cost and flag airlines. Thus, we proceeded to stipulate the following measure items based on the corresponding service attributes in the literature.

Table 3.2: Service attributes measure items

Measure Item	Service Attributes
This airline company attributes seats together	Comfort (Ben-akiva et al., 1985, cited in Lunke et al., 2021)
The flight from this company includes a travel suitcase	Convenience (Ben-akiva et al., 1985, cited in Lunke et al., 2021)
This airline company provides in-flight meals	Comfort (Ben-akiva et al., 1985, cited in Lunke et al., 2021)
This airline company allows for online check-in without problems	Convenience (Ben-akiva et al., 1985, cited in Lunke et al., 2021)
This airline company has a good selection of flight timelines	Route characteristics (Eboli & Mazzulla, 2007)
This airline company offers after-sales customer service	After-sales service (Mourad et al., 2011)

As for the remaining variables, brand image and CBBE were measured through a scale of six and three validated items, respectively, adapted from Chatzipanagiotou et al., (2019). Brand awareness was measured with four items adapted from Loureiro, 2013. As for willingness to pay premium, three items were adapted from Augusto & Torres, 2018; Chatzipanagiotou et al., (2019); Netemeyer et al., (2004). Finally, for service attributes, a mix of service attributes described for the transportation sector (Eboli & Mazzulla, 2007; Ben-Akiva et al., 1985, cited in Lunke et al., 2021; Mourad et al., 2011) were used to create six items specific for the airline industry. Brand image, CBBE and willingness to pay premium were all measured through an agreement seven-point likert-type scale

with strongly disagree at the minimum (1) and strongly agree at the utmost (7). For brand awareness, an agreement five-point likert-type scale was used, with strongly disagree (1) and strongly agree (5) as the borders. Service attributes, however, was measured through a frequency five-point likert-type scale with never (1) and always (5) as the extremes.

3.3. Statistical Analysis

3.3.1. Quantitative analysis I

The method used to test our conceptual model was the structured equation model (SEM), more concretely, the partial least squares method (PLS-SEM). This method allows us to estimate cause-effect relations between latent variables in path models, using SmartPLS 3 software (Ringle et al., 2015). First, we evaluated the validity and reliability of the analysis, more precisely, the relation between the latent variables and their respective measures (measurement model). Then, we assessed the relation between the latent variables (structural model).

Focusing first on analysing the validity and reliability of the measurement model, we will evaluate individual indicators of reliability, internal consistency reliability, convergent validity and finally, discriminant validity of the loadings (Hair et al., 2017). According to the results, all loadings showed a standardized factor above 0.6 (Table 3.3), with minimum value of 0.698, except for service attributes 1 and 2, which were removed from the analysis since they did not achieve a standardized factor of 0.6. For the loadings with standardized factor higher than 0.6, they all proved to be significant with $p < 0.001$ (Table 3.4, column 6), passing as individual indicators of reliability according to Hair et al., (2017).

Table 3.3: Standardized factors of loadings

	Brand_Aware_	Brand_Im	CBBE	Service_Att_	WPP
Brand_Aware_1	0,700				
Brand_Aware_2	0,842				
Brand_Aware_3	0,885				
Brand_Aware_4	0,698				
Brand_Im_1		0,773			
Brand_Im_2		0,772			
Brand_Im_3		0,709			
Brand_Im_4		0,818			
Brand_Im_5		0,759			
Brand_Im_6		0,736			
CBBE_1			0,903		
CBBE_2			0,905		
CBBE_3			0,854		
Service_Att_3				0,752	
Service_Att_4				0,807	

Service_Att_5	0,719
Service_Att_6	0,778
WPP_1	0,736
WPP_2	0,917
WPP_3	0,905

Table 3.4: Significance of loadings

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Brand_Aware_1 <- Brand_Aware_	0,700	0,689	0,082	8,513	0,000
Brand_Aware_2 <- Brand_Aware_	0,842	0,834	0,046	18,426	0,000
Brand_Aware_3 <- Brand_Aware_	0,885	0,878	0,038	23,109	0,000
Brand_Aware_4 <- Brand_Aware_	0,698	0,696	0,071	9,767	0,000
Brand_Im_1 <- Brand_Im	0,773	0,773	0,024	32,790	0,000
Brand_Im_2 <- Brand_Im	0,772	0,772	0,023	33,907	0,000
Brand_Im_3 <- Brand_Im	0,709	0,709	0,026	27,242	0,000
Brand_Im_4 <- Brand_Im	0,818	0,818	0,019	42,837	0,000
Brand_Im_5 <- Brand_Im	0,759	0,759	0,026	29,058	0,000
Brand_Im_6 <- Brand_Im	0,736	0,736	0,026	28,721	0,000
CBBE_1 <- CBBE	0,903	0,903	0,010	93,111	0,000
CBBE_2 <- CBBE	0,905	0,905	0,011	82,128	0,000
CBBE_3 <- CBBE	0,854	0,854	0,018	46,259	0,000
Service_Att_3 <- Service_Att_	0,752	0,752	0,025	30,140	0,000
Service_Att_4 <- Service_Att_	0,807	0,806	0,020	39,891	0,000
Service_Att_5 <- Service_Att_	0,719	0,718	0,027	26,588	0,000
Service_Att_6 <- Service_Att_	0,778	0,777	0,023	34,157	0,000
WPP_1 <- WPP	0,736	0,736	0,025	29,349	0,000
WPP_2 <- WPP	0,917	0,916	0,008	109,233	0,000
WPP_3 <- WPP	0,905	0,905	0,011	86,080	0,000

To confirm convergent validity three factors had to be verified. First, all factors were identified as positive and significant (individual indicators of reliability). Then, we observed all CR (composite reliability) are higher than 0.7 (

Table 3.5) (Hair et al., 2017). Last, as table 4 shows, average variance extracted (AVE) for all constructs is higher than 0.5 (Bagozzi & Yi, 1988 cited in Dias et al., 2020). Thus, convergent validity was confirmed.

We can also confirm internal consistency reliability looking at the values of Cronbach alpha and CR (composite reliability) which are all above the value of 0.7 (Hair et al., 2017) in

Table 3.5.

Lastly, to confirm discriminant validity two approaches were followed. First, according to Fornell and Larcker criteria, the square root of AVE (placed in the diagonal of

Table 3.5 in bold) for every construct should be bigger than its correlation with any other construct (Fornell & Larcker, 1981) which we can see is met. Then, following heterotrait-monotrait ratio (HTMT) criteria we see ratios below the conservative threshold of 0.85 (

Table 3.5, below the diagonal values) (Hair et al., 2017), proving this criterion is followed, and thus, discriminant validity, is confirmed.

Table 3.5: Cronbach alpha, composite reliability, average variance extracted, correlations, and discriminant validity checks

Latent Variables	Cronbach's alpha	CR	(AVE)	1	2	3	4	5
(1)Brand_Awar	0,789	0,864	0,617	0,7855	0,1665	0,1697	0,0745	0,1447
(2) Brand_Im	0,855	0,892	0,5810	0,1284	0,7622	0,6810	0,7014	0,6767
(3) CBBE	0,866	0,918	0,7890	0,1430	0,5903	0,8883	0,5922	0,8228
(4) Service_Att	0,764	0,849	0,5850	-0,0034	0,5881	0,4899	0,7649	0,6110
(5) WPP	0,813	0,891	0,7330	0,1164	0,5628	0,6941	0,4942	0,8562

Note: CR - composite reliability; AVE – average variance extracted; In bold are the square roots of AVE. Above diagonal are HTMT ratios and below are the correlations between constructs.

With the measurement model evaluated, we can proceed to the analysis of the structural model. However, first we need to check for collinearity by verifying if VIF (variance inflation factor) values are lower than 5 (Hair et al., 2017). For the model in question, VIF values are between 1 and 1.9, so we can state the values indicate no collinearity and proceed to the structural model analysis (Table 3.6).

Table 3.6: VIF values for endogenous variables

	Brand_Aware_	Brand_Im	CBBE	Service_Att_	WPP
Brand_Aware_			1,027		1,039
Brand_Im			1,570		1,892
CBBE					1,631
Service_Att_			1,544		1,629
WPP					

We can now focus on the assessment of magnitude and significance of the structural path coefficients by analysing the R² magnitude and the Stone-Geisser Q² of the endogenous variables (Table 3.7). Looking at the magnitude of R² for the endogenous variables (determination coefficient), both CBBE and willingness to pay premium have higher than 10% values (Falk & Miller, 1992), respectively 38,7% and 52,9%, predicting the model's accuracy. If we look at Stone-Geisser's Q², which measures the relevance of the endogenous variables, we have values above zero (Hair et al., 2017) for

both CBBE and willingness to pay premium (0.375 and 0.350 respectively), predicting the model's relevance. We can now believe the model and respective variables are of quality and proceed to test the hypothesis.

Table 3.7: R^2 and Stone-Geisser Q^2 of endogenous variables

	R^2	Q^2
CBBE	0,387	0,375
WPP	0,529	0,350

In order to test the hypothesis, we need to look at both the structural model assessment (Table 3.8) and the bootstrap results for indirect effects (Table 3.9). Through these two tables we will later use P values to understand if the model hypothesis can be proven to significantly impact according to this study. Furthermore, an importance-performance map analysis (Figure 3.1) will also be used with the goal of gaining more insights on the model's behaviour and its managerial implications. This analysis enables us to understand which variables perform better on the model, and which are of highest importance when it comes to impacting WPP.

Table 3.8: Structural model assessment

	Original sample (β)	Standard deviation	T statistics	P values
Brand_Aware_ -> CBBE	0,087	0,037	2,341	0,019
Brand_Aware_ -> WPP	0,020	0,034	0,601	0,548
Brand_Im -> CBBE	0,445	0,044	10,077	0,000
Brand_Im -> WPP	0,170	0,047	3,605	0,000
CBBE -> WPP	0,523	0,037	14,184	0,000
Service_Att_ -> CBBE	0,229	0,046	5,023	0,000
Service_Att_ -> WPP	0,138	0,039	3,525	0,000

Table 3.9: Bootstrap results for indirect effects

	Original sample (β)	Standard deviation	T statistics	P values
Brand_Aware_-> CBBE -> WPP	0,045	0,020	2,293	0,022
Brand_Im -> CBBE -> WPP	0,233	0,029	7,999	0,000
Service_Att_-> CBBE -> WPP	0,120	0,025	4,767	0,000

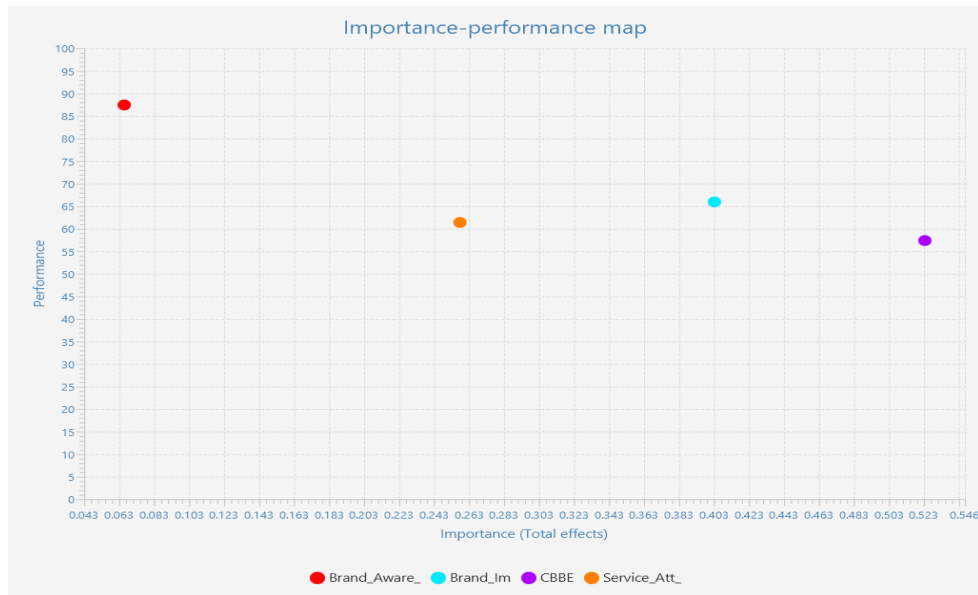


Figure 3.1: Importance-performance map analysis

3.3.2. Quantitative analysis II: Multigroup analysis

For the second quantitative analysis the goal is to understand if the differences on the model's behaviour are different between price tiers, and for that, PLS-MGA was performed. In order to interpret the multi-group analysis results, we first need to test the validity and reliability of the measurement model divided in two groups: low-cost airlines and flag airlines. Testing first individual indicators of reliability, we know that standardized factors remain the same as in the previous analysis, however, we now need to evaluate their significance for both low-cost airlines and flag airlines. For flag airlines group all loadings were significant at $p < 0.001$, except for service attributes_1 and service attributes_2 which we already couldn't prove significant in quantitative analysis I (Table 3.10). The same applies for low-cost airlines, except for one of the loadings which was only significant at $p < 0,05$, brand awareness_1 (Table 3.11). This concludes that according Hair et al., 2017, they serve as individual indicators of reliability for both groups. We can also state convergent validity, internal consistency reliability and discriminant validity are confirmed according to Table 3.3 above in quantitative analysis I. Moving now to the analysis of the structural model, following results of quantitative analysis I, we concluded the model and respective variables are of quality and we can proceed to test the hypothesis.

Table 3.10: Significance of loadings for flag airlines group

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ($ O/STDEV $)	P values
Brand_Aware_1 <- Brand_Aware_	0,691	0,688	0,050	13,846	0,000
Brand_Aware_2 <- Brand_Aware_	0,846	0,843	0,027	30,965	0,000

Brand_Aware_3 <- Brand_Aware_	0,892	0,890	0,017	52,415	0,000
Brand_Aware_4 <- Brand_Aware_	0,682	0,682	0,057	11,858	0,000
Brand_Im_1 <- Brand_Im	0,808	0,808	0,024	33,182	0,000
Brand_Im_2 <- Brand_Im	0,829	0,828	0,022	37,433	0,000
Brand_Im_3 <- Brand_Im	0,781	0,781	0,032	24,743	0,000
Brand_Im_4 <- Brand_Im	0,810	0,810	0,026	31,749	0,000
Brand_Im_5 <- Brand_Im	0,867	0,867	0,016	52,563	0,000
Brand_Im_6 <- Brand_Im	0,776	0,775	0,028	28,019	0,000
CBBE_1 <- CBBE	0,912	0,912	0,012	73,826	0,000
CBBE_2 <- CBBE	0,904	0,904	0,014	65,486	0,000
CBBE_3 <- CBBE	0,888	0,888	0,017	53,715	0,000
Service_Att_3 <- Service_Att_	0,807	0,806	0,030	27,120	0,000
Service_Att_4 <- Service_Att_	0,727	0,723	0,046	15,681	0,000
Service_Att_5 <- Service_Att_	0,618	0,616	0,053	11,737	0,000
Service_Att_6 <- Service_Att_	0,705	0,703	0,045	15,662	0,000
WPP_1 <- WPP	0,880	0,880	0,012	72,748	0,000
WPP_2 <- WPP	0,915	0,915	0,011	80,092	0,000
WPP_3 <- WPP	0,915	0,915	0,011	83,073	0,000

Table 3.11: Significance of loadings for low-cost airlines group

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Brand_Aware_1 <- Brand_Aware_	0,697	0,672	0,227	3,076	0,002
Brand_Aware_2 <- Brand_Aware_	0,846	0,803	0,137	6,186	0,000
Brand_Aware_3 <- Brand_Aware_	0,872	0,835	0,133	6,572	0,000
Brand_Aware_4 <- Brand_Aware_	0,738	0,702	0,168	4,399	0,000
Brand_Im_1 <- Brand_Im	0,725	0,720	0,063	11,573	0,000
Brand_Im_2 <- Brand_Im	0,707	0,700	0,060	11,876	0,000
Brand_Im_3 <- Brand_Im	0,644	0,644	0,060	10,825	0,000
Brand_Im_4 <- Brand_Im	0,853	0,853	0,021	40,987	0,000
Brand_Im_5 <- Brand_Im	0,457	0,451	0,099	4,622	0,000
Brand_Im_6 <- Brand_Im	0,604	0,595	0,078	7,709	0,000
CBBE_1 <- CBBE	0,873	0,872	0,020	43,857	0,000
CBBE_2 <- CBBE	0,890	0,889	0,023	38,022	0,000
CBBE_3 <- CBBE	0,744	0,744	0,057	12,983	0,000
Service_Att_3 <- Service_Att_	0,784	0,780	0,059	13,198	0,000
Service_Att_4 <- Service_Att_	0,790	0,780	0,047	16,761	0,000
Service_Att_5 <- Service_Att_	0,664	0,652	0,075	8,899	0,000
Service_Att_6 <- Service_Att_	0,552	0,543	0,112	4,919	0,000

WPP_1 <- WPP	0,595	0,591	0,068	8,736	0,000
WPP_2 <- WPP	0,878	0,876	0,027	33,090	0,000
WPP_3 <- WPP	0,835	0,835	0,040	21,100	0,000

As for MGA results, the hypothesis tests performed to understand if there are significant differences in terms of behaviour in the model for the two price tiers studied are compiled in Table 3.12 and Table 3.13. Through the last column of 2-tailed p-values, in which we can see hypothesis is performing significantly different between low-cost and flag airlines ($p < 0.001$) for all hypothesis, we can take conclusions on the difference's significance.

Table 3.12: PLS-MGA path coefficient bootstrap MGA

	Difference (Flag - Low)	1-tailed (Flag vs Low) p-value	2-tailed (Flag vs Low) p-value
Brand_Aware_ -> CBBE	0,346	1,000	0,000
Brand_Aware_ -> WPP	0,154	1,000	0,000
Brand_Im -> CBBE	0,326	1,000	0,000
Brand_Im -> WPP	-0,031	1,000	0,000
CBBE -> WPP	-0,032	1,000	0,000
Service_Att_ -> CBBE	-0,194	1,000	0,000
Service_Att_ -> WPP	0,054	1,000	0,000

Table 3.13: PLS-MGA total indirect effects bootstrapping MGA

	Difference (Flag - Low)	1-tailed (Flag vs Low) p-value	2-tailed (Flag vs Low) p-value
Brand_Aware_ ->CBBE -> WPP	0,221	1,000	0,000
Brand_Im -> CBBE -> WPP	0,187	1,000	0,000
Service_Att_ -> CBBE ->WPP	-0,122	1,000	0,000

Furthermore, as it is not enough to understand the model behaves differently between price tiers, deeper research was conducted to understand how the model performs in each of the price tier groups. In order to make management decisions based on airline price tiers, in Table 3.14 and Table 3.15 we can evaluate the model hypothesis for flag airlines, and in Table 3.16 and Table 3.17 we can evaluate the model hypothesis for low-cost airlines through the p values.

Table 3.14: Structural assessment for flag airlines

	Original sample (β)	Standard deviation	T statistics	P values
Brand_Aware_ -> CBBE	0,186	0,044	4,248	0,000
Brand_Aware_ -> WPP	0,031	0,042	0,750	0,454
Brand_Im -> CBBE	0,605	0,060	10,061	0,000
Brand_Im -> WPP	0,231	0,074	3,110	0,002
CBBE -> WPP	0,516	0,055	9,340	0,000
Service_Att_ -> CBBE	0,027	0,063	0,420	0,675

Service_Att_ -> WPP	0,054	0,060	0,900	0,368
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Table 3.15: Bootstrap results for indirect effects for flag airlines

	Original sample (β)	Standard deviation	T statistics	P values
Brand_Aware_ -> CBBE -> WPP	0,096	0,025	3,902	0,000
Brand_Im -> CBBE -> WPP	0,313	0,044	7,100	0,000
Service_Att_ -> CBBE -> WPP	0,014	0,033	0,417	0,677

Table 3.16: Structural model assessment for low-cost airlines

	Original sample (β)	Standard deviation	T statistics	P values
Brand_Aware_ -> CBBE	-0,096	0,085	1,125	0,261
Brand_Aware_ -> WPP	-0,115	0,073	1,574	0,116
Brand_Im -> CBBE	0,374	0,073	5,093	0,000
Brand_Im -> WPP	0,173	0,076	2,270	0,023
CBBE -> WPP	0,498	0,056	8,848	0,000
Service_Att_ -> CBBE	0,105	0,090	1,161	0,246
Service_Att_ -> WPP	0,053	0,075	0,713	0,476

Table 3.17: Bootstrap results for indirect effects for low-cost airlines

	Original sample (β)	Standard deviation	T statistics	P values
Brand_Aware_ -> CBBE -> WPP	-0,048	0,043	1,101	0,271
Brand_Im -> CBBE -> WPP	0,186	0,042	4,480	0,000
Service_Att_ -> CBBE -> WPP	0,052	0,046	1,136	0,256

Lastly, but not less important, we also conducted an importance-performance map analysis both for flag airlines and low-cost airlines. In both cases, we performed the analysis for the constructs and for the questionnaire items. We can analyse IPMA for flag airlines constructs and items, respectively in Figure 3.2 and Figure 3.3. For low-cost airlines, IPMA for constructs and for the items is represented, respectively, in Figure 3.4 and Figure 3.5.

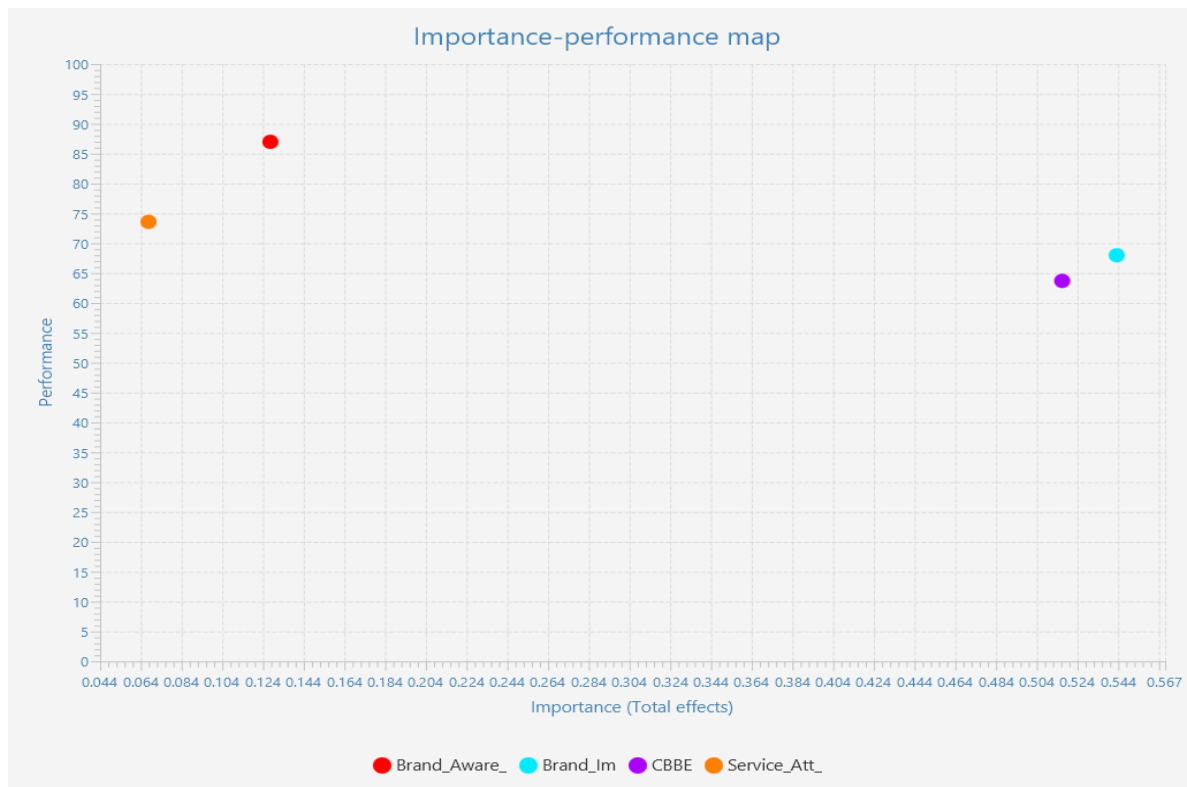


Figure 3.2: Importance-performance map analysis for flag constructs

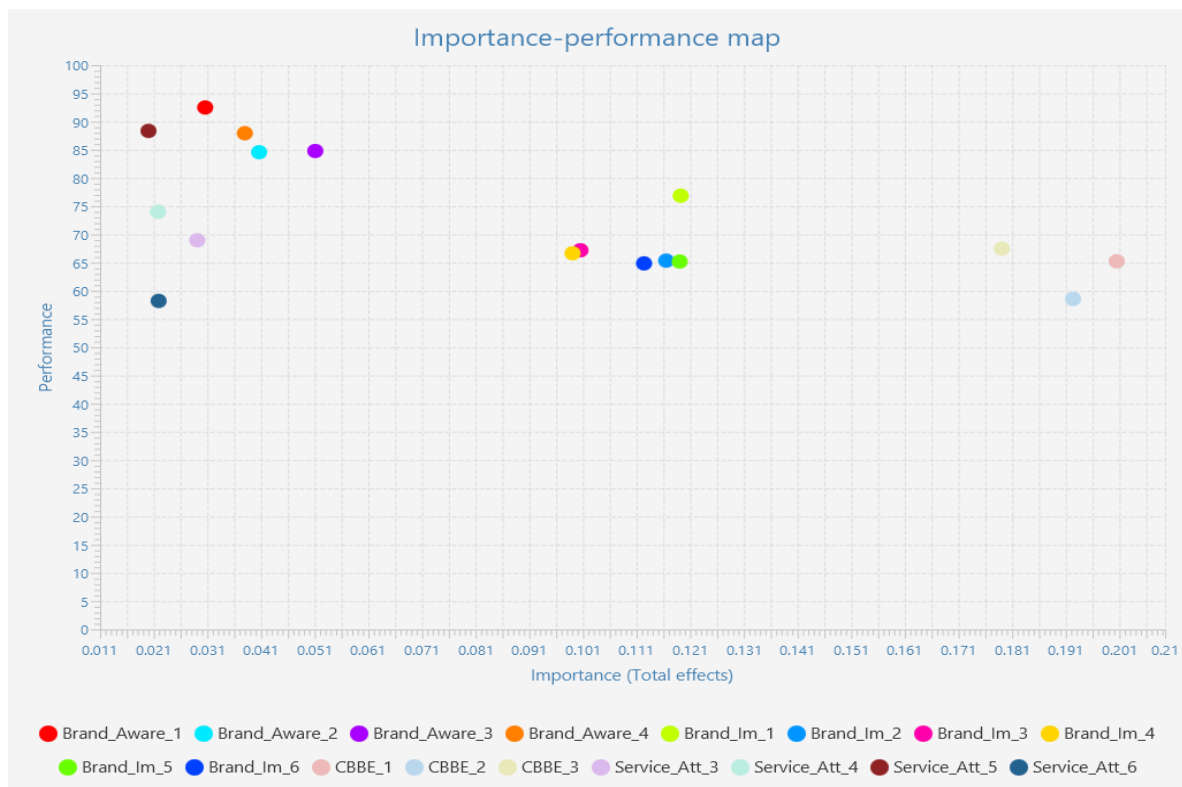


Figure 3.3: Importance-performance map analysis for flag items

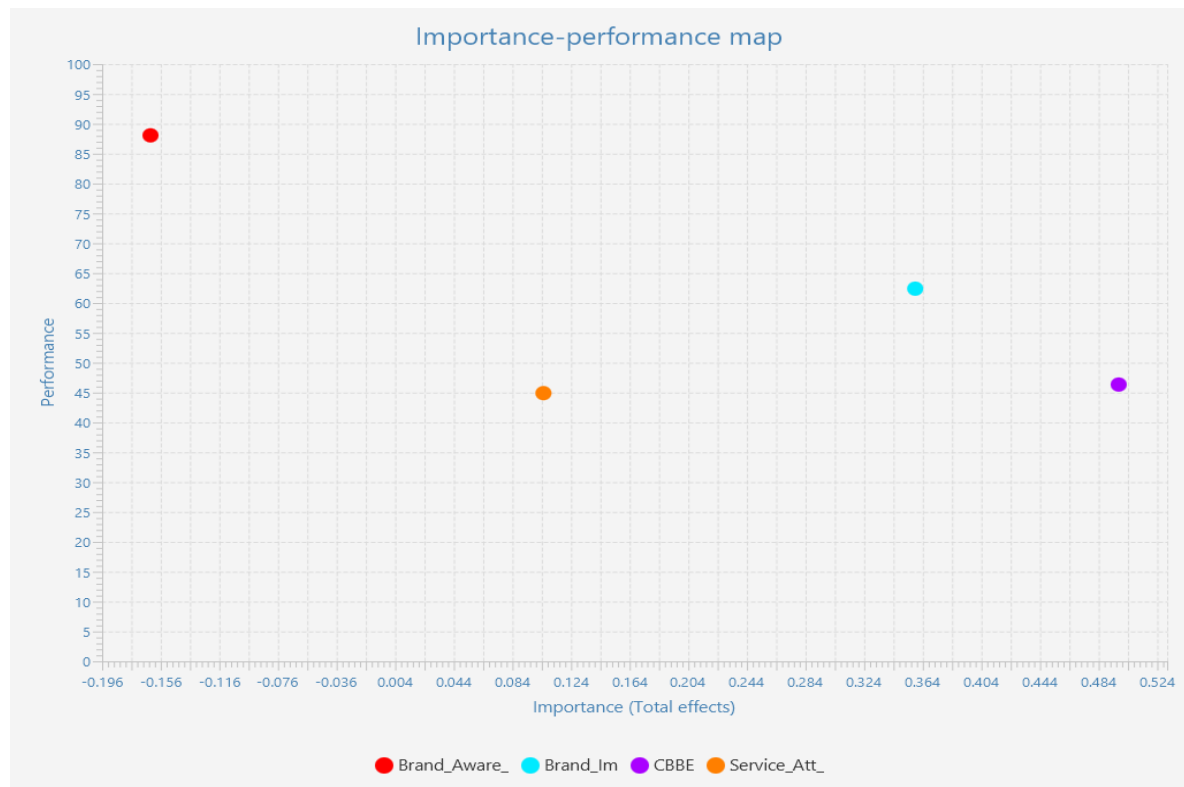


Figure 3.4: Importance-performance map analysis for low-cost constructs

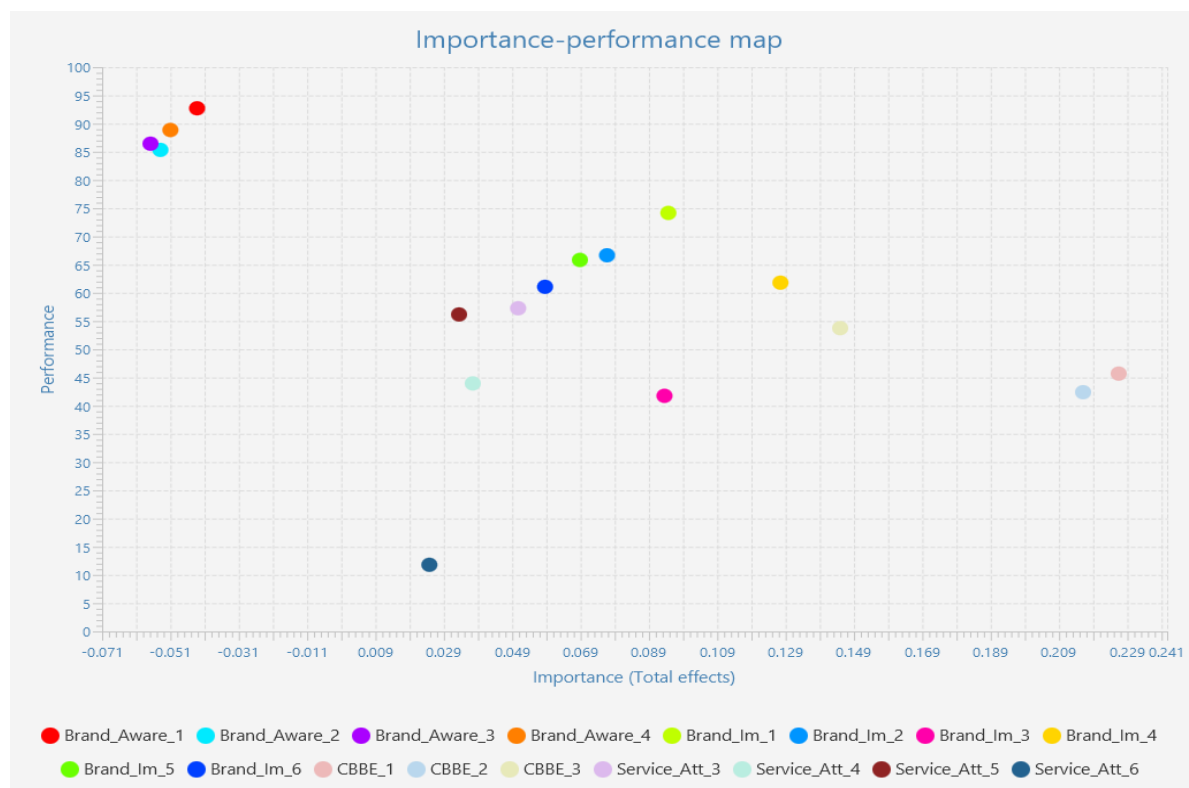


Figure 3.5: Importance-performance map analysis for low-cost items

4. Results

4.1. Quantitative analysis I

Knowing now that the model and respective hypothesis are of quality, we can proceed with the results analysis for quantitative analysis I, by focusing first on Table 3.8. Looking at Table 3.8, we take into consideration the β value, which translates the impact of the first variable in the second one, and the P value, which proves if one variable is significant to estimate the second variable. Thus, looking at the variable, we see that brand awareness ($\beta=0.087$, $p < 0.05$), brand image ($\beta=0.445$, $p < 0.001$) and service attributes ($\beta=0.229$, $p < 0.001$) positively and significantly impact CBBE, supporting H3a, H1a and H2a respectively. We can also see that brand image ($\beta=0.170$, $p < 0.001$) and service attributes ($\beta=0.138$, $p < 0.001$) positively and significantly influence willingness to pay premium directly, holding evidence to accept H1b and H2b as valid hypothesis. However, the same does not apply for brand awareness ($\beta=0.020$, n.s.) in which there is no evidence to support its impact on willingness to pay premium, so H3b is not validated through this analysis. Finally, we can also conclude that CBBE positively and significantly impacts willingness to pay premium in the aviation sector ($\beta=0.523$, $p < 0.001$) with the highest β , thus, the highest influence in WPP, providing evidence for H4.

For this model, it was also crucial to test if CBBE serves as a mediator between each of the initial variables and willingness to pay premium. For that, we followed Hair et al., 2017, and used bootstrapping procedure to test if the indirect effects via CBBE as a mediator are significant. In Table 3.9 we can find the stated mediating effects results. According to Table 3.9, CBBE serves as a mediator between WPP and all initial variables: brand image ($\beta=0.233$, $p < 0.05$); service attributes ($\beta=0.120$, $p < 0.001$); and brand awareness ($\beta=0.045$, $p < 0.001$), validating H5, H6 and H7. Since the biggest β value is 0.233, it means that CBBE has a bigger influence as a mediator between brand image and WPP.

Another important analysis to perform in this model is PLS-IPMA (importance-performance map analysis), allowing us to further enrich our PLS-SEM analysis. IPMA focuses not only on path coefficients (importance dimension) from PLS-SEM but also takes into consideration the average value of the latent variables (performance dimension) (Ringle & Sarstedt, 2016). PLS-IPMA helps researchers identify the areas of action: variables with high importance but a low performance, where an improvement in performance in practical terms will have a greater result for the endogenous variables (Ringle & Sarstedt, 2016).

Analysing IPMA we see that all variables have a good performance values when influencing willingness to pay premium, however, they have very different values for importance, which represents the total effect on WPP. We see brand awareness as having the highest performance but the lowest importance, meaning that it's not the most crucial area for management to invest in order

to increase WPP, since its performance increase won't have as much impact on it as on the other constructs. On the other hand, CBBE would be a good area to invest, being that it has the lowest performance but the highest importance, so investing on CBBE performance would have the biggest increase on WPP.

4.2. Quantitative analysis II: MGA

The second quantitative analysis was structured having in mind that the airline industry is divided in two very different price-tiers: low-cost airlines and flag airlines. The interest of this research is to understand if the model has significantly different effects between price tiers and understand what variables could be most important for each segment of the industry to invest in.

First, the focus is on understanding if there the model performs significantly different between price tiers, and for that, we will use PLS-MGA (Multi-Group Analysis). This method is a non-parametric test of significance which allows us to test if the differences between groups are significant (Henseler et al., 2009). Looking at Table 3.12, the difference between groups is significant ($p < 0.001$) for the impact of brand awareness, brand image and service attributes in both CBBE and WPP and is also significant for the impact of CBBE in WPP. This supports evidence that for H1a, H1b, H2a, H2b, H3a, H3b and H4 there are significant differences between low-cost airlines and flag airlines. Through Table 3.12, we can also conclude that the impact of brand awareness on both CBEE and WPP is more important for flag airlines than low-cost airlines (difference flag - low > 0), which goes in line with was stated before, since there was no evidence found for brand awareness to influence CBBE and WPP in low-cost airlines. Another interesting conclusion to draw from Table 3.12 is that although brand image's impact on CBBE is more important in flag companies (difference flag - low > 0), brand image's impact on WPP is more important for low-cost airlines difference flag - low < 0), as well as CBBE's impact on WPP (difference flag - low < 0), which could be interesting to further study.

If we consider indirect effects, we can also evaluate if the differences are significant between groups when we use CBBE as a mediator between the initial variables and WPP (Table 3.13). Looking at the results it is confirmed that there are significant differences between groups for all initial variables: brand awareness, brand image and service attributes ($p < 0.001$), validating H5, H6 and H7 different performances between price tiers. We can also add that CBBE has more effect as a mediator between both brand awareness and brand image on WPP for flag airlines (difference flag - low > 0).

With this in mind, we can also study the model for each group in order to understand how the variables behave for each of them. Starting with flag airline groups (Table 3.14), we can state brand awareness ($\beta=0.186$, $p < 0.001$) and brand image ($\beta=0.605$, $p < 0.001$) both significantly and positively impact CBEE, supporting H3a and H1a. We can also conclude brand image ($\beta=231$, $p < 0.05$) and CBBE

($\beta=0.516$, $p < 0.001$) positively and significantly impact WPP, supporting evidence for both H1b and H4. However, the same does not apply for service attributes whose impact on CBBE ($\beta=0.027$, n.s.) and WPP ($\beta=0.054$, n.s.) is not supported by the analysis. H2a and H2b are not supported by evidence for flag airlines. For H3b there is also no evidence to support it, since brand awareness' positive impact on WPP was not proven ($\beta=0.031$, n.s.). Looking at β values, we can conclude that brand image is the variable with most impact on CBBE ($\beta=0.605$) and CBBE is the variable with most impact on WPP ($\beta=0.516$) for flag airlines.

Looking now at indirect effects present in Table 3.15, we have evidence to support both H7 and H5 since CBBE has proven to be a significant mediator between brand awareness and WPP ($\beta=0.096$, $p < 0.001$); and between brand image and WPP ($\beta=0.313$, $p < 0.001$). However, for service attributes ($\beta=0.014$, n.s.) the same does not apply; there is no evidence to support CBBE as a mediator between service attributes and WPP and so we did not find support for H6.

When diving into low-cost airlines, the scenery is a bit different. With Table 3.16 in mind, we see that there is no support for brand awareness' influence in the model, neither in CBBE nor on WPP, as well as for service attributes. Even if we use CBBE as a mediator between these variables and WPP (Table 3.17), we can still not find evidence to support the hypothesis involved. This translates into having no evidence to support H2a, H2b, H3a, H3b, H6 and H7 in the low-cost airlines group. However, we have evidence that supports both H1a and H1b based on brand image's positive and significant impact on CBBE ($\beta=0.374$, $p < 0.001$) and on WPP ($\beta=0.173$, $p < 0.001$). We also have evidence to state CBBE impacts positively and significantly WPP ($\beta=0.498$, $p < 0.05$) supporting H4. As for indirect effects, we found evidence of CBBE's importance as a mediator between brand image and WPP ($\beta=0.186$, $p < 0.001$), supporting H5.

Moreover, we have understood the model behaves different between tiers is not enough, and we evaluated the model for both groups, however we can also enrich the analysis by looking the importance-performance map analysis created, which will help take further conclusions on the importance and the performance of the constructs for both groups.

Looking first at IPMA for flag airlines constructs (Figure 3.2) we can identify brand image as the most important construct, followed by CBBE. However, if we look at performance levels, CBBE has the lowest performance, followed by brand image. Thus, having the most importance for impacting WPP but the lowest performance, it indicates CBBE and brand image are the most valuable for management in flag airlines to invest in, as they will bring the best outcomes. Let's now dive deeper, looking into IPMA for flag airline items from the questionnaire (Figure 3.3). Even though brand image was the most important construct, if we look at the questionnaire items, the three items for CBBE appear as the clear winners when it comes to importance, however in the lower end when it comes to performance.

If we bring back the three items we have: CBBE_1 *Even if another airline company has the same features, I would prefer to buy this brand*, with an importance value of 0,201; CBBE_2 *If there is another airline company as good as this, I prefer to buy this brand*, with an importance value of 0,193; and CBBE_3 *If another airline company is not different from this in any way, it seems smarter to purchase from this one*, with an importance value of 0,179. These items all represent the value of the brand for the customer, and increasing the performance of these items would mean the customer would be more prompt to choose one airline over its competitions, which is one of the most valuable aspects for any company. This implicates CBBE should be a clear focus for flag airlines if they want to increase passenger's willingness to pay premium.

Switching now for low-cost airlines, but still focusing on importance-performance map analysis, in Figure 3.4 we can conclude that for low-cost airlines, the construct with most importance is CBBE, followed by brand image. We can already see a difference between flag airlines and low-cost airlines, as there was a switch between the two most important constructs. Even though CBBE has more importance than brand image for low-cost airlines, it still shows lower levels of performance, as in the flag airlines map, making it an important improvement area for low-cost airlines management as well. Furthermore, we can see that for low-cost airlines, service attributes comes before brand awareness in importance, which did not happen for flag airlines. Brand awareness shows a negative importance value for low-cost airlines, which goes in line with what was already stated of brand awareness not being proved to significantly and positively impact WPP nor CBBE for low-cost airlines. Thus, we can assume that brand awareness is more important for flag airlines. In Figure 3.5 we can analyse importance-performance map for low-cost airline items. Here we can clearly see that the two most contributively items are both for CBBE (CBBE_1 with an importance value of 0,227 and CBBE_2 with and importance value of 0,216), which were also the most important for flag airlines. Thus, can take the same conclusion that also for low-cost airlines, CBBE should be a clear focus to increase passenger's willingness to pay premium.

5. Discussion

Having in mind the data already analysed, it's now important to draw conclusions from that data. Starting with brand awareness, a significant and positive relation was identified between brand awareness and customer-based brand equity in the aviation industry. This association had already been modelled by many authors who studied brand awareness as a central variable in building CBBE (Aaker, 1991; Chatzipanagiotou et al., 2019; Keller, 1993). This positive relation also goes in line with the research of Gartner & Ruzzier, (2011) who studied brand awareness impact on brand equity for tourism destinations. However, this study tested the implications of this relation focusing on airline companies. If we look at brand awareness' effect on willingness to pay premium, findings from the study in the airline industry were not enough to conclude a significant and positive effect, thus, contrary to what was proposed based on the literature review, deeper studies on this relation would have to be made to prove it for the airline industry.

Furthermore, a significant relation was also identified between service attributes and CBBE, and between service attributes and willingness to pay premium. This variable had not yet been studied as independent when building a CBBE model, however its importance and meaning has been well studied by many researchers (Halpern, 2022; Mourad et al., 2011), including in transportation sectors (Eboli & Mazzulla, 2007; Lunke et al., 2021). As for its influence on WPP, it goes in line with some other researchers' studies of service attributes influence on variables such as purchase intention (Cronin et al., 2000; Petrick, 2004). Thus, this study builds on evidence from previous research and adds service attributes as an important variable when building CBBE and WPP for airline companies.

Additionally, the relation amongst CBBE and WPP was also found to be significantly positive, proving that CBBE influences the price a customer is willing to pay for an airline airplane ticket. The influence between CBBE and other purchase related variables such as purchase intention, (re)purchase intention and acceptance of a price premium had already been appointed (Chatzipanagiotou et al., 2019). Being purchase intention the most studied variable of them, it was important to put other variables into perspective, adding value with this study by proving CBBE also influences WPP, specifically for airline companies.

Looking now at the different price tiers defined for this study: flag and low-cost airlines we can also take some interesting conclusions. Many authors already studied that competition is defined based on different price tiers and that marketing strategies differ between price tiers (Blattberg & Wisniewski, 1989; Sivakumar, 2000). One of the goals for this dissertation was to understand if the model behaved differently between price tiers, which was proven. If the models behaves differently, it means that marketers need to be careful when constructing marketing strategies. This study proves that a marketing or management activity can behave differently and generate different results when

applied to a low-cost or a flag airline, adding value to existing research on this subject. If we take the example of brand awareness' relationship with CBBE in both groups, even though it was proven to influence CBBE positively and significantly for flag airlines, the same does not apply for low-cost airlines, since its significant influence could not be proven with this study. This can indicate that for flag airlines, it is more important to invest in brand awareness than for low-cost airlines. This is also visible through IPMA results. However, it does not mean brand awareness will not affect CBBE for low-cost airlines, since it was proven significant for the general model. It serves only as an indication of the variations that can exist between both price tiers. Moreover, through this dissertation it was also identified that for flag airlines, brand image was the most influential for increasing passenger's willingness to pay more for a ticket, however, for low-cost airlines, it is CBBE which has the biggest influence. When it comes to its performance, there is coherence between price tiers, given that for both, CBBE shows a lower performance level than brand image. CBBE's lower performance levels represent an opportunity for airlines to invest in, either low-cost or flag, with the goal of increasing willingness to pay more for a ticket. These conclusions are crucial when making managerial decisions.

5.1.Brand image's decisive impact on CBBE and WPP for the airline industry

Brand image is a well-studied variable, whose positive influence on CBBE was already studied by many authors (Keller, 1993; Mourad et al., 2011). Furthermore, it's impact on purchase-related variables is also very broad research topic (Aghekyan-Simonian et al., 2012b; Benhardy et al., 2020; Lien et al., 2015; Malarvizhi et al., 2022; Wang & Tsai, 2014). Our study has reaffirmed this positive, and robust, relationship between brand image, CBBE, and WPP, firmly establishing its relevance within the airline industry.

This finding brings out a critical point for airline companies: dedicating resources to improving brand image will translate into visible effects on the value consumers place in the service and, thus, on the value they are willing to pay for the ticket, both for low-cost and flag airlines.

Upon reviewing this analysis within the context of two distinct price tiers, it is observable that brand image was the only variable from the model, apart from CBBE, whose impact was proven significantly positive on CBBE and WPP for both low-cost and flag airlines. This imposes brand image as a crucial variable in this model, specifically for the airline industry. If we look at the importance-performance map analysis for the general model (Figure 3.1), we see brand image as having the most importance for the model, apart from CBBE, as well as having the second highest performance level, meaning that increasing brand image performance, although not easy due to its already high value, is one of the most valuable actions, since it will have one of the biggest impact on WPP. If we look at the individual IPMA for flag and for low-cost airlines, brand image construct keeps its major importance

for both, having even a bigger impact on WPP than CBBE for flag companies. This proves brand image's crucial aspect, and it translates into a necessity for airlines to build on their image, creating a relation with the customers. This will allow them to charge a higher price for the same service. The more positive the airline brand image is, the more prone the customer will be to accept a higher price and still want to purchase that airline ticket over other options.

In essence, this dissertation supports existing evidence from different authors, placing brand image as a decisive construct when it comes to both costumer-based brand equity and willingness to pay premium, across different price tiers, while extending this understanding to the airline industry.

5.2.The key role of CBBE as a mediator in the airline industry

Customer-based brand equity is the central variable of this study, since it is theorized that brand image, brand awareness and service attributes influence willingness to pay premium through the mechanism of CBBE. Confirming this, CBBE has not only been demonstrated to exert a direct positive impact on willingness to pay a premium (Aaker, 1991; Arvidsson, 2006; Porral et al., 2013), but also to operate as a mediator.

However, when considering the two distinct price tier groups established in this study, a nuanced picture emerges. We could not find significant evidence to state CBBE as a mediator between service attributes and WPP for either group. This aligns with our previous findings, where the influence of service attributes on both CBBE and willingness to pay a premium was not statistically confirmed in either tier. Similarly, the evidence did not convincingly support CBBE acting as a mediator between brand awareness and willingness to pay a premium for low-cost airlines. This is consistent with earlier discussion which found that brand awareness did not significantly impact CBBE or WPP for this price tier.

Although the full impact of CBBE as a mediator could not be proven through price tiers, if we look at the initial study, we can see this variable can make a significant difference for airline companies. The same applies when studying the model for either price tier, as CBBE is the most important in impacting WPP for low-cost airlines, and second most important for flag companies, making it a crucial variable to pay attention and invest in. It serves not only as a mediator, but also has a direct effect for airlines in the price they can apply to their tickets. Willingness to pay premium is a crucial variable for managers to take into considerations, and as we could see through this model, CBBE is a very import variable to take into consideration when willingness to pay premium serves as a key performance indicator for management.

6. Conclusions and recommendations

6.1.Theoretical contributions / applications

The present dissertation contributes to the existing literature in many ways, bringing some exciting new areas of investigation. First, it contributes to the existing literature on customer-based brand equity (Aaker, 1991; Chatzipanagiotou et al., 2019; Keller, 1993) bringing a new influence variable of service attributes to light and creating more evidence for brand image and brand awareness' influence. Furthermore, it extends the boundaries of CBBE's research by venturing into relatively unexplored territory, service industries, especially for the airline sector.

Moreover, this dissertation also adds to the current literature by studying CBBE's model with willingness to pay premium as the outcome. Some other purchase-related variables have already been studied as an outcome of the study variables (Benhardy et al., 2020; Chatzipanagiotou et al., 2019; Lien et al., 2015; Wang & Tsai, 2014); however, willingness to pay premium is a less studied area, particularly when applied to service sectors, even more, when segmenting to the airline sector. This research seeks to bridge this gap.

In addition, the present dissertation also shares new insights into how different price tiers have inequalities when it comes to the CBBE model's behaviour. This opens existing research to further enrichment on these differences and their implications for management. Many authors have studied brand price tiers (Blattberg & Wisniewski, 1989; Sivakumar, 2000), theorizing about the differences between competing inside and outside a price tier. This study proves different price tiers should invest in different aspects to have better return, and that has an impact on how they compete inside and outside their price tier. Thus, the study builds on their research by proving that price tiers should be considered when it comes to the constructs influence on WPP, as they should impact management strategies. It builds upon these foundational insights to clarify the need for tailored management strategies, by investing in different aspects of the brand.

6.2.Managerial implications

The model developed for this dissertation is of high value for making managerial decisions for airline companies. Each airline company certainly has its own key performance indicators and business models, however, being able to translate the high value of a ticket to the consumer is no doubt a concern to them all. With this in mind, the study model brings substantial insights to help airline company managers make business and marketing decisions, by enlightening on where to invest for different airlines.

To begin, the model provides a visual representation of the importance and the impact of brand awareness, service attributes and brand image on customer-based brand equity and willingness to pay a premium price, which were proved by the analysis. This implies that investing in improving customers' perception of the airline regarding brand awareness, brand image, service attributes, and customer-based brand equity will impact their perception of the airline's value and, consequently, their willingness to pay a premium price for a flight ticket. Thus, the study defines key areas for airlines to invest in order to increase willingness to pay premium for a ticket. WPP is a crucial key performance indicator, and to keep its good performance, it is necessary to pay close attention to the mentioned variables, as they are essential but also very volatile.

Another important managerial take on this dissertation is that brand awareness, brand image, service attributes and customer-based brand equity are all important in enhancing willingness to pay a premium. According to the analysis disregarding price tiers, CBBE is the variable for which the increase in performance will have the most significant impact on WPP. Besides, due to its low performance value, it makes it a key area for management to invest in. When looking just at flag airlines, we see brand image as the construct with most impact on WPP, followed by CBBE. For low-cost airlines, CBBE is the most important, followed by brand image, as in the initial model. We can see there was a switch in the importance parameter. Still, this means that CBBE is one of the best areas to invest in, along with brand image, and that price tiers should be taken into consideration when choosing where to invest. As we already saw, the model behaves differently between the flag and low-cost airlines. There is a clear differentiation for management when pondering where to invest. Each airline should invest in areas where the expected return is higher.

Moreover, brand awareness is the study variable with the lowest impact on WPP, having however the highest performance. This means that increasing customers' perception of the airline's brand awareness will result in the lowest outcome for WPP from the study variables, if we disregard the price tiers. Besides, since it already shows a high performance, investing in increasing it would not be easy. Although all variables of the model are crucial to invest in, as they all proved its importance on the model, CBBE and brand image should be set as priorities.

In conclusion, this model highlights areas for management to invest in increasing willingness to pay a premium price for an airplane ticket. And not only that, but it also shows some differences between the flag and low-cost airlines, allowing management to make better decisions.

6.3.Limitations and future research

The first topic that can be seen as a limitation is the questionnaire distribution used for the quantitative analysis. The questionnaire was distributed online via social media, which could implicate some bias in

the respondent group because they were somehow connected to the initial social media profile. Thus, for extended research on the topic, it would be positive to distribute to a broader target through various touch points. Additionally, qualitative research such as focus groups and interviews could be held to dive deeper into the understanding of the specific service area, on how the customers perceive different airlines and how the airlines perceive the customer.

Second, as stated throughout this dissertation, the model was proven to behave significantly differently between the two price tiers. However, some of the relations proven for the general model could not be proven between the different tiers. This constitutes a study limitation because we could not clearly study the model's behavioural differences for each price tier. Thus, this opens a door for more profound research on the specificities of CBBE's impact on WPP for different price tiers. This is important for airline companies and can also be studied for other service price tiers. From further research, it will be possible to find new important insights for making management decisions specific for each price tier inside different service areas.

Moreover, looking at the model variables, we can indicate service attributes as allowing for more profound research, mainly when applied to the airline industry. Even though the variable was proven to influence the model significantly, two out of the six questionnaire metrics for the variable were not proven to have an impact and so were not used for the analysis. This opens space for more exploration on the topic, aiming to understand what the customer concedes is most important as service attributes in the airline industries to measure the variable more accurately. Besides, the questionnaire metrics used were perfected for airline industries, meaning they could be bettered for other service areas in general. The questionnaire metrics must be revised before being applied to new areas.

This brings us to the last topic of future research, in which studies could be made to understand if and how the model can be applied to other service areas and product sectors. Willingness to pay a premium is a valuable key performance indicator across sectors, making this dissertation model essential to be tested in sectors apart from the airline industry. This will bring new insights into the importance of customer-based brand equity across sectors.

7. Bibliography

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8. Attachments

Attachment A: Categorization of airlines by group

Airlines	Low-cost Airlines		Flag Airlines	
	Aerowings		Air France	
	World2Fly		British Airways	
	EasyJet		Emirates	
	Ryanair		Cathay Pacific	
	WizzAir		Luxair	
	Iberia		KLM Royal Dutch Airlines	
	United Airlines		Lufthansa	
	Transavia		Qatar Airways	
	Azores Airlines		Swiss International Air Lines	
	PLAY Airlines		TAP Air Portugal	
	Air Europa		Brussels Airlines	
	STP Airways		Royal Air Maroc	
	LATAM Airlines		Scandinavian Airlines	
			Finnair	
			Turkish Airlines	

Attachment B: Questionnaire items and authors

Variable	Item Name	Measurement Items	Scale	Author
Brand Image	Brand_Im_1	This airline company has favorable associations	Seven-point likert-type scale.	(Chatzipanagiotou et al., 2019)
	Brand_Im_2	It's clear what this airline company stands for	1- Strongly disagree	
	Brand_Im_3	This airline company has status	2- Disagree	
	Brand_Im_4	This airline company has a good reputation	3- Somewhat disagree	
	Brand_Im_5	This airline company has a distinct personality	4- Neutral	
	Brand_Im_6	I can describe this airline company with adjective I use to describe a person	5- Somewhat agree	
Service Attributes	Service_Att_1	This airline company attributes seats together	6- Agree	
	Service_Att_2	The flight from this company includes a travel suitcase	7- Strongly Agree	
	Service_Att_3	This airline company provides in-flight meals	Five-point likert-type scale.	
	Service_Att_4	This airline company allows for online check-in without problems	1- Never	
	Service_Att_5	This airline company has a good selection of flight timelines	2- Rarely	
			3- Sometimes	
			4- Often	
			5- Always	

	Service_Att_6	This airline company offers after-sales customer service		
Brand Awareness	Brand_Aware_1	I have heard of this airline company	Five-point likert-type scale.	(Loureiro, 2013)
	Brand_Aware_2	I am quite familiar with this airline company	1- Strongly disagree 2- Disagree	
	Brand_Aware_3	I can quickly recall the symbol or logo of x	3- Neutral 4- Agree	
	Brand_Aware_4	I can recognize this airline company among others	5- Strongly Agree	
CBBE	CBBE_1	Even if another airline company has the same features, I would prefer to buy this brand	Seven-point likert-type scale. 1- Strongly disagree	(Chatzipanagiotou et al., 2019)
	CBBE_2	If there is another airline company as good as this, I prefer to buy this brand	2- Disagree 3- Somewhat disagree	
	CBBE_3	If another airline company is not different from this in any way, it seems smarter to purchase from this one	4- Neutral 5- Somewhat agree 6- Agree 7- Strongly Agree	
Willingness to Pay Premium	WPP_1	The price of this airline company would have to go up quite a bit before I would switch to another brand in the category	Seven-point likert-type scale. 1- Strongly disagree	(Chatzipanagiotou et al., 2019) (Netemeyer et al., 2004)
	WPP_2	I am willing to pay a higher price for this airline company than for others in this category	2- Disagree 3- Somewhat disagree 4- Neutral	
		WPP_3	I prefer to purchase from this airline company even if another brand advertises a lower price	5- Somewhat agree 6- Agree 7- Strongly Agree
Gender			Male	
			Female	
			Other	
Age			18-24	
			25-44	
			45-64	
			65+	
Education			9º ano	
			12º ano	
			Bachelor	
			Master	
Income			Less than 10.000€	
			10.000€ - 20.000€	
			20.001€-30.000€	
			30.001€-40.000€	
			40.001€-50.000€	

		More than 50.000€	
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